Joint Municipal Waste Management Strategy for Cambridgeshire and Peterborough 2008 – 2022

APPENDICES

recycle for Cambridgeshire and Peterborough

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Appendices

Appendix 1

Legislation review

Appendix 1: Legislation review

1 European and National Legislation

1.1 Waste Framework Directive (WFD) 1975

The Waste Framework Directive (WFD) underpins waste management and requires National European Authorities to draw up waste management plans. The plans (strategies) must encourage the prevention and recovery of waste and provide suitable infrastructure for recovery and disposal as per the waste hierarchy. It also includes the appropriate regulatory framework to protect the environment and public health. The WFD sets out basic requirements for waste management licensing control and planning and since refinements also includes the definition of waste and associated waste management terms.

The WDF has been extensively amended and a consolidated and updated version is currently under development, responses by EU member states were submitted in February 2006. The new version of the directive is anticipated to include an updated interpretation of recycling and recovery and incorporate hazardous waste and other Directives within its scope. It is also intended to adopt a Life Cycle Approach within the framework.

RECAP Specific Comment

The WFD requires all national authorities to complete a waste plan / strategy. The waste hierarchy is a concept that all authorities must incorporate within their strategy.

1.2 Amendments to the EC Waste Framework Directive 1975 (75/44/EEC)

The original European legislative framework document for waste management is the Waste Framework Directive (75/442/EEC). It requires national competent authorities to draw up waste management plans. Plans must encourage the prevention and recovery of waste and provide suitable infrastructure for recovery and disposal and the appropriate regulatory framework to protect the environment and public health. The directive sets out basic requirements for waste management licensing control and planning. It also includes the definition of waste and associated waste management terms. This document has been extensively amended and a consolidated and updated version is currently under development, responses by EU member states were submitted in February 2006. An intensive series of Council Working Group meetings were conducted from January to May 2007. At the Environment Council on 28 June 2007, the Council reached political agreement on the proposed revisions to the Waste Framework Directive. The Portuguese Presidency are currently taking the necessary steps to produce the Common Position which is likely to be communicated to the European Parliament in the latter part of 2007[1].

The new version of the directive is anticipated to include an updated interpretation of recycling and recovery and incorporate hazardous waste and other Directives within its scope. It is also intended to adopt a Life Cycle Approach within the framework.

1.3 Environmental Protection Act (EPA) 1990

The EPA 1990 sets out a wide range of environmental legislation and is the primary act that controls the management of waste. Part II of the Act deals with waste management, in particular

The key duties and powers of local authorities are set out in:

- **Section 33** – makes it an offence to treat, keep or dispose of controlled waste without a waste management licence;
- **Section 34** – relates to a statutory Duty of Care for all those who handle and produce waste to ensure that it is managed, recovered and disposed of safely and in accordance with the Duty of Care regulations;

1 http://www.defra.gov.uk/environment/waste/thematicstrat/index.htm

- **Section 34-44** – details specific requirements in relation to the Waste Management Licensing system for waste treatment and disposal facilities; and
- **Sections 41-61** – relates to the responsibilities of waste collection and disposal authorities. A duty for Waste Disposal Authorities (WDAs) to pay recycling credits and provide for one or more places where residents can deposit their household waste free of charge were introduced in this section. Changes to the recycling credit scheme are discussed in section 1.8.1.

1.4 Environmental Protection (Duty of Care) Regulations 1991 (SI 2839) (England and Wales & Scotland) (as amended)

There is a duty of care in respect of waste, placing responsibility for that waste on any person who produces, imports, carries, keeps, treats or disposes of controlled waste, or as a broker has control of such waste. This includes Waste Collection and Waste Disposal Authorities and Unitary Authorities.

The duty of care is designed to be an essentially self-regulating system that is based on good business practice. It places a duty on anyone who in any way has a responsibility for controlled waste to ensure that it is managed properly and recovered or disposed of safely.

These regulations establish a mandatory system of transfer notes, which must be completed when waste is transferred.

RECAP Specific Comment

RECAP should have regard to the duty of care in all waste activities undertaken.

1.5 Local Government Act (Best Value) 1999

The 'Best Value' regime was introduced under the Local Government Act 1999 and became compulsory for all waste collection and disposal authorities from April 2000.

The Act obliges local authorities to secure continuous improvement in the way that they exercise all their functions "having regard to a combination of economy, efficiency and effectiveness".

Best Value Performance Indicators

Following the introduction of Best Value, a set of Best Value Performance Indicators (BVPIs) was devised in 2000/01. BVPIs for waste management included the key indicators of total waste arisings, waste disposal, composting and recycling. Waste collection and disposal authorities must report against the following performance indicators:

- The percentage of total tonnage of household waste recycled (BV82a);
- The percentage of total tonnage of household waste composted (BV82b);
- The percentage of total tonnage of household waste used to recover heat, power and other energy sources (BV82c);
- The percentage of total tonnage of household waste landfilled (BV82d);
- Kg of household waste collected per head (BV84);
- Percentage of residents served by kerbside recycling (BV91);
- Cost of waste collection per household (BV86); and
- Cost of waste disposal per tonne of municipal waste (BV87);

National Indicators

From 1 April 2008, the Department for Communities and Local Government replaced the suite of Best Value Performance Indicators with a rationalised list of 198 National Indicators[2].

2 http://www.communities.gov.uk/localgovernment/performanceframeworkpartnerships/nationalindicators/

The relevant revised indicators are:

- NI 191 Residual household waste per household;
- NI 192 Percentage of household waste sent for reuse, recycling and composting;
- NI 193 Percentage of municipal waste land filled;
- NI 195 Improved street and environmental cleanliness (levels of litter, detritus, graffiti and fly posting); and
- NI 196 Improved street and environmental cleanliness – fly tipping.

In the longer term the Government is also considering the development of a performance indicator on greenhouse gas emissions which would reflect the total emissions for a local authority's waste management activity. It is proposed that this indicator would be National Indicator 186.

RECAP Specific Comment

The existing targets for recycling and composting under the best value performance standards are currently under review at a national level. However the statutory sets (BV82a&b) are currently exceeded by RECAP's strategy targets. Therefore RECAP will work toward their strategy targets and seek to exceed the statutory targets as set out in the strategy, Objective 13.

1.6 Household Waste Recycling Act 2003

The Household Waste Recycling Act (previously known as the Municipal Waste Recycling Bill) was a Private Members Bill introduced by Joan Ruddock MP. The Act makes provision regarding the collection, composting and recycling of household waste.

The Act requires English Waste Collection Authorities to collect at least two recyclable materials from households separate from residual waste by 2010. Councils with particular difficulties in meeting the demands of the legislation could be granted derogation. The provision of 'comparable' recycling facilities, such as a bring bank or civic amenity site within 100 metres of households, could satisfy the Act's requirements.

The key impact is the adherence to the first legislative requirement for local authorities to collect two streams of recyclable materials from the kerbside. In many authorities, and all within the RECAP JSA, this is already happening, however in areas where it is not, further action will be required or derogation sought whilst suitable infrastructure is developed.

RECAP Specific Comment

All authorities in RECAP already comply with this requirement to collect at least two recyclable materials from households. This requirement is also measured under Best Value Performance Indicator BV91.

In addition the RECAP design guide (to be adopted) ensures that new housing developments are supplied with bring site facilities.

1.7 Waste Minimisation Act 1998

The Waste Minimisation Act 1998 enables local authorities throughout the UK (except Northern Ireland) to take steps to minimise the generation of household, commercial or industrial waste. The Act was initiated in 1998 by the Women's Environmental Network. It gives recognition to the fact that local authorities are not just waste collection and disposal authorities, but should be empowered to promote waste minimisation.

The Act was inserted in after section 63 of the Environmental Protection Act 1990 and allows a local authority to "do or arrange for the doing of, anything which in its opinion is necessary or expedient for the purpose of minimising the quantities of controlled waste, or controlled waste of any description, generated in its area".

RECAP Specific Comment

The Act does not place any obligation on authorities to carry out such initiatives or set targets, nor does it allow councils to impose any requirements on businesses or householders in their area. The Act does not compel local authorities to act on waste minimisation but allows either the WDA or WCA to provide funding for waste reduction activity, for instance financial support to a furniture re-use charity. The step change required in waste minimisation activity is unlikely to be driven by this act, which has to some extent been usurped by the more effective financial drivers (e.g. landfill tax and LATS) which strongly incentivise the prevention and minimisation of waste arisings.

However RECAP authorities are currently agreeing and implementing a waste prevention plan for the area and have set targets within this strategy to ensure a drive towards waste prevention and minimisation.

1.8 Waste & Emissions Trading (WET) Act 2003

To meet its national targets for the diversion of Biodegradable Municipal Waste (BMW) from landfill, as set out in the EU Landfill Directive, the Government has chosen a market-based trading mechanism which sets targets for each Waste Disposal Authority (WDA). This 'Landfill Allowance Trading Scheme' (see section 1.10) was introduced as part of the Waste and Emissions Trading Act (WET Act). Each WDA has been allocated a maximum allowance of BMW that it is permitted to dispose of to landfill, which reduces in each year between 1st April 2005 and 2020. Failure to achieve these targets will incur a financial penalty, currently set at £150 per tonne. Councils landfilling less than their allowance can either bank the spare allowances for use in future years to avoid a fine, or it can trade them with councils that may landfill more than their allowance and hence allow the latter to avoid a fine.

The quantity of BMW within municipal waste has been set at 68% in England. This figure is used to calculate the tonnages going to landfill, as determined through the Environment Agency mass balance approach.

Additional provisions of the WET Act include:

- Section 31 – amends the EPA 1990 to allow WDA's in England to give direction to a collection authority to include requirements about the separation of waste that is delivered to the waste disposal authority;
- Section 32 – places a duty on waste authorities in two tier areas in England to have a joint strategy for the management of municipal waste by April 2005. The strategy must be kept under review and authorities must have regard to any guidance given by the secretary of state. There are exemptions for certain high performing authorities and certain two tier authorities who have also met high performance standards in terms of recycling and diversion of waste from landfill; and
- Section 35 – repeals the requirement for waste collection authorities in England and Wales to prepare and publish a waste recycling plan in accordance with EPA Section 49.

RECAP Specific Comment

Both Cambridgeshire County Council and Peterborough City Council must therefore ensure they meet their annual BMW landfill diversion obligations, by reducing the amount of waste sent to landfill or trading in landfill allowances, or they may face a financial penalty. Both councils have plans in place to meet their targets through reducing waste to landfill, and both have policies for trading their excess allowances.

The Partnership also has a duty to produce a joint waste management strategy that is subject to regular review.

1.9 Clean Neighbourhoods and Environment Act 2005

The Clean Neighbourhoods and Environment Bill received Royal Assent in April 2005. The Act introduces a range of new measures to improve the local quality of the environment by giving more powers to the Local Authorities and the Environment Agency as mentioned on the next page:

- Fixed Penalties Notices – The Local Authorities can now issue fixed fines as an alternative to prosecution against anti-social activities concerning litter, dog fouling, graffiti and fly-posting;
- Litter – The Act makes it an offence to drop litter anywhere, including private land and rivers, ponds and lakes. Local Authorities can issue litter clearing notices to businesses and individuals. The Act strengthens existing powers for Local Authorities to issue street litter control notices to businesses;
- Graffiti and fly-posting – Improves powers to Local Authorities to deal with the issue of sale of spray paints to children. Local Authorities can restrict distribution of flyers and hand-outs and recover the cost of removing
  illegal posters;
- Waste – The Act increases penalties and removes the defence of acting under the employer's instruction when dealing with fly-tipping. The Act extends provisions on clear-up to the landowner in absence of the occupier. Failure to produce waste transfer notes and waste carrier registration details can lead to fixed fines for businesses. The Act introduces an effective stop, search and seizure of vehicles used in illegal waste disposal;
- Nuisance and Abandoned Vehicles – The Act gives Local Authorities the power to remove abandoned cars from the streets immediately; and
- Dog Fouling – A new simplified system will enable Local Authorities to deal effectively with dog fouling, ban dogs from designated areas and require dogs to be kept on a lead.

1.9.1 Recycling Credit Scheme

Changes to the recycling credit scheme were recently introduced via the Clean Neighbourhoods and Environment Act 2005 and the Recycling Environmental Protection (Waste Recycling Payments) (England) Regulations 2006.

The key elements of the regulations are that:

- For the 06/07 financial year the value of disposal credits were capped at 05/06 levels and are based on the average cost of the most expensive form of disposal in each WCA area;
- For subsequent financial years the disposal credits will continue to be capped at the levels above but averaged out across a WDA area to provide a single value credit for all WCAs in the area; and
- Any increases will be in line with inflation at 3%. Payments of recycling credits to third parties for recycling and re-use will be calculated on the same basis.

This has introduced a flexibility for WCAs and WDAs to agree alternative arrangements for the payment of credits but which need not follow the regime above unless agreement cannot be reached.

This legislation intends to create a greater incentive for joint working between authorities and enable flexibility in the achievement of LATS obligations. It presents an opportunity for WCA/WDAs to work together.

RECAP Specific Comment

The Clean Neighbourhoods Act is a powerful tool for local authorities, giving them greater control over waste offences. Enforcement of fixed penalty notices should increase general awareness of waste issues. RECAP has already reviewed these issues and is creating RECAP specific policies on these issues under the banner of Enviro-waste crimes.

Changes to the recycling credit scheme should encourage greater joint working amongst two tier authorities, and provide a useful opportunity for enhanced collaboration between RECAP partners.

1.10 Landfill (England and Wales) Regulations 2002

The Landfill Directive (99/21/EC) is implemented in England through the Landfill (England and Wales) Regulations 2002 (SI 1559). The key objective is to improve the waste management practices with regard to landfill disposal.

The key provisions in the Directive are summarised below:

- Prohibition of the co-disposal of hazardous and non-hazardous waste in the same landfill site;
- Categorisation of landfill sites by whether they accept 'inert', 'non -hazardous' or 'hazardous' wastes only;
- Requirement to reduce the quantity of biodegradable waste sent to landfill;
- Ban on landfilling of tyres, hazardous liquids and flammable, corrosive, explosive, oxidising and infectious wastes; and
- Requirement for pre-treatment of waste before it is sent to landfill.

The major impact in terms of municipal waste management is the requirement to reduce the quantities of BMW to landfill by the following targets (using the UK derogation timetable):

- Reduction in tonnage of BMW to landfill by 25% on 1995 levels by 2010;
- Reduction in tonnage of BMW to landfill by 50% on 1995 levels by 2013; and
- Reduction in tonnage of BMW to landfill by 65% on 1995 levels by 2020.

The Landfill Directive is implemented in England and Wales through the Landfill (England and Wales) Regulations 2002 (SI 1559). The regulations set a Waste Acceptance Criteria in order to determine the properties of a waste which are acceptable for landfilling. The criteria are set for inert, hazardous and non-hazardous wastes. In order to fulfil the Waste Acceptance Criteria, a waste must demonstrate that it does not contain substances which leach from the waste in breach of the leaching limit values. If the waste does breach the thresholds, it will require treatment prior to landfilling.

The type of waste treatment required will depend on whether the waste is considered to be inert, hazardous or non-hazardous. Inert waste does not require pre-treatment. According to EA guidance treatment includes physical, thermal, chemical or biological processes. Source segregation of materials also counts as physical treatment. Separation of materials from the household waste stream for recycling activity therefore counts as pre-treatment prior to landfilling. Compaction or baling of material does not.

Other forms of treatment and disposal will be required for waste types which are banned from landfilling and it is likely that the costs of disposal and treatment will increase, as will the requirement for treatment capacity.

RECAP Specific Comment

The Landfill Directive is a key driver for the future management of waste within Cambridgeshire and Peterborough. RECAP must ensure compliance with the requirement to limit the amount of biodegradable waste sent to landfill, the details of which are set out in the next section.

1.11 Landfill Allowance Trading Scheme (England) Regulations 2004

The Landfill Allowance Trading Regulations came into effect on the 1st April 2005. These regulations set out the detail for the operation of the Landfill Allowance Trading Scheme (LATS) and set out strict allowances for English authorities up to the period 2020. They enable authorities to make long-term plans to reduce reliance upon landfill.

Under LATS, each Waste Disposal Authority is allocated a shrinking tonnage allowance for the disposal of biodegradable municipal waste to landfill. Exact tonnages are published for every authority in every year until 2020, with specific target years in 2010, 2013 and 2020. The landfill allowances for biodegradable municipal waste in RECAP are as set out in Table 1. Authorities that landfill more than their allowance could be fined (see below). Authorities that perform well by diverting more biodegradable waste from landfill than their allowance can trade 'spare' allowances with those authorities that may exceed their landfill allowance (and thus incur a fine). WDAs are also able to bank their unused allowances for use in a future year to ensure they are not fined with the exception of the set target years of 2010, 2013 and 2020. Some borrowing from future years is also possible. By this mechanism, those WDAs which invest in alternatives to landfill, like recycling, composting or residual treatment technologies can gain an income from selling surplus allowances to those yet to deliver such facilities.

The penalty for non-compliance with the LATS allowance was set at £150/tonne by the Landfill Allowances and Trading Scheme (England) (Amendment) Regulations 2005 that came into force in May 2005. The government has also reserved the right to pass on any European fine imposed by the European Court of Justice on the UK for missing the Landfill Directive targets onto the local authorities who have exceeded allowable levels.

Cambridgeshire County Council and Peterborough City Council are responsible for their own Landfill Allowance Targets and both have their own LATS strategy set out.

Year	Cambridgeshire Landfill Allowance	Peterborough Landfill Allowance
2005/06	145,772	46,037
2006/07	139,750	44,054
2007/08	131,720	41,409
2008/09	121,683	38,102
2009/10	109,638	34,135
2010/11	97,434	30,335
2011/12	85,230	26,536
2012/13	73,026	22,736
2013/14	69,894	21,761
2014/15	66,761	20,786
2015/16	63,629	19,810
2016/17	60,496	18,835
2017/18	57,364	17,860
2018/19	54,231	16,885
2019/20	51,099	15,909

Table1: RECAP Landfill Allowances (target years highlighted)

RECAP Specific Comment

As compliance with LATS allowances is a key driver for the waste management strategy, an important part of the development of the core strategy is the production of a LATS strategy which considers how Cambridgeshire County Council and Peterborough City Council will specifically meet their LATS obligations in the period up to 2019/20.

1.12 Landfill Tax Regulations 1996

The landfill tax came into effect on the 1st October 1996. It is a specifically targeted levy on the disposal of waste to landfill, introduced by the government to prompt change in UK waste management. The main Objectives of the tax are:

- To ensure that the cost of landfill properly reflects it's environmental impact, and
- To help ensure that UK national policy targets for more sustainable waste management are achieved.

There are two rates of landfill tax:

- A lower rate of £2/tonne for specified inactive or inert wastes (£2.50 from April 2008); and
- A standard rate of £24/tonne is applied to all other wastes for the 2006/07 financial year. In the National Waste Strategy 2007 it was announced that from 2008 the landfill tax will rise by £8/tonne per year up to a value of £48/tonne by 2010/11.

RECAP Specific Comment

All waste disposed to landfill by RECAP is subject to the landfill tax charges set out above. Landfill tax charges are likely to increase further once the £48/tonne mark is reached in 2010/11, and this is a key driver for waste reduction on a national level.

1.13 National Waste Strategy 2007

In May 2007 Defra published the National Waste Strategy for England 2007 (NWS2007). It sets out the core principles of waste management, including the centrality of the "waste hierarchy" which places waste prevention, minimisation and recycling as the priorities for waste management with treatment and then disposal at the base of the hierarchy.

This revised strategy was published as a result of consultation on Waste Strategy 2000 and partly in continuing response to the Landfill Directive which sets stringent targets for diversion of waste from landfill. It also sets national targets to achieve the requirements of the Directive.

The targets outlined in NWS2007[3] that superseded those outlined in National Waste Strategy 2000 are as follows:

- To recycle or compost at least 40% of household waste by 2010;
- To recycle or compost at least 45% of household waste by 2015; and
- To recycle or compost at least 50% of household waste by 2020.

Furthermore, targets aimed at recovering value (including energy) from municipal waste are set as follows:

- To recover value from 53% of municipal waste by 2010;
- To recover value from 67% of municipal waste by 2015; and
- To recover value from 75% of municipal waste by 2020.

In addition to improving recovery rates, the NWS2007 aims to reduce waste arising in the first instance. By 2000 BMW arisings were increasing by around 3% per year; the Strategy aims to lower this significantly by introducing a new target of reducing the amount of household waste not re-used, recycled or composted by 45% by 2020, and Local Authorities are obliged to pursue this aim through campaigns aimed at waste minimisation and prevention.

The NWS2007 clearly links waste management to greenhouse gas emissions and therefore to climate change. The overall impact of the Strategy is expected to lead to an annual net reduction in global greenhouse emissions through waste management of at least 9.3 million tonnes of carbon dioxide equivalent per year compared to 2006. The additional greenhouse gas emission reductions result principally from an increase in diversion of waste from landfill. These benefits will be further increased from waste prevention measures.

The NWS2007 also places a greater focus on waste prevention, via a new target to reduce the amount of household waste not re-used, recycled or composted from over 22.2 million tonnes in 2000 to 15.8 million tonnes in 2010, with an aspiration to reduce it to 12.million tones in 2020.

3 http://www.defra.gov.uk/environment/waste/strategy/strategy07/index.htm

The NWS2007 highlights the potential synergies between municipal and non municipal waste. It states that levels of commercial and industrial waste are expected to fall by 20% by 2010 compared to 2004. The Government in conjunction with the construction industry are considering a target to half the amount of construction, demolition and excavation wastes going to landfill by 2012 as a result of recycling, waste reduction and re-use.

The NWS2007 encourages partnership working between local authorities as well as supporting local businesses to reduce and recycle their waste through more integrated management of different waste streams.

NWS2007 also includes consultations with local authorities and others to establish the best means by which household recycling should be incentivised, with consequent policy announcements forthcoming.

RECAP Specific Comment

NWS2007 sets the policy priorities and direction of travel for waste reduction, recycling and treatment initiatives until 2020, and as such should become the primary national steer for the development of RECAP's waste strategy, themes, objectives, new schemes and infrastructure in the RECAP area.

1.14 End of Life Vehicles Regulations 2003 and End of Life Vehicles (Producer Responsibility) Regulations 2005

The End of Life Vehicles (ELV) Directive (2000/53/EC) is transposed into UK law through the End of Life Vehicles Regulations 2003 and the End of Life Vehicles (Producer Responsibility) Regulations 2005. The Directive aims to reduce the amount of waste produced from ELVs and increase the recycling and recovery of any wastes that do arise.

The Directive sets out measures aimed at the prevention of waste from vehicles and at the reuse, recycling and other forms of recovery of end-of-life vehicles and their components. It aims to reduce the disposal of waste and improve the environmental performance of all those involved in the life cycle of vehicles, especially the operators directly involved in the treatment of end-of-life vehicles.

Owners had to be able to have their complete ELVs accepted by collection systems free of charge, even when they have a negative value, from 1st January 2007 at the latest (earlier in respect of vehicles put on the market on or after 1st July 2002). This has implications for the ELV recovery network which needs to have the capacity to accept, store and treat the ELVs. The legislation also contains targets for the recycling of certain materials from End of Life Vehicles.

RECAP Specific Comment

The regulations do not place a duty on local authorities to provide facilities for dealing with end of life vehicles; instead it will be producers who must provide these facilities, called Authorised Treatment Facilities (ATFs). Local authorities will be able to make use of these facilities for the disposal of abandoned vehicles that they collect. Therefore each of the RECAP authorities must ensure that vehicles are sent to authorised treatment facilities and that the public are aware of this requirement.

1.15 Animal By-Products Regulations (ABPR) 2005

The Animal By-Products Regulations (ABPR) came into force in England on 1 July 2003 and implement EU Regulation 1774/2002. They were updated in 2005.

The regulations impose restrictions on the handling and treatment of waste that contains or potentially contains animal by-products.

The ABPR divides animal by-products into three categories and sets rules for the collection, handling, transport and disposal of animal by-products which include catering waste, former foodstuffs and other animal waste, such as fallen stock.

Category 1 is the highest risk category – including carcases and materials infected, or suspected of being infected, with diseases such as scrapie in sheep or BSE in cattle; the carcasses of zoo and pet animals; Specified Risk Material (SRM) and catering waste from means of international transport.

Category 2 is also high-risk material, and includes diseased animals, animals that die on farms and which do not contain SRM at the point of disposal and animals which are not slaughtered for human consumption.

Category 3 is essentially material which is fit (but not intended) for human consumption and as such includes parts of slaughtered animals, blood, raw milk, fish caught in the open sea, and shells. Permitted disposal methods include treatment in a biogas or composting plant.

RECAP Specific Comment

The most significant aspect that affects recycling and composting is that different controls are placed on composting processes depending on the types of waste being composted. The regulations set out operating temperature and retention times for processes which are related to the waste types being treated.

Any of the partnering authorities who collect organic waste that contains food waste which in turn contain animal by-products (meat) must treat waste through a two stage process, e.g. in-vessel or anaerobic digestion systems. Open windrow facilities are not suitable. Facilities must be operated in accordance with the regulations and must be certified by the State Veterinary Service.

All authorities in the JSA, except Peterborough, send their garden and kitchen waste to one of the two Animal By-product compliant facilities in Waterbeach and Ellington. Peterborough will consider the impact of these regulations and ensure appropriate treatment facilities are in place.

1.16 Hazardous Waste Regulations 2005

In July 2005, new controls on Hazardous Waste came into force in England, Northern Ireland and Wales. The regulations replace the previous Special Waste regime.

This change in UK legislation brought into force the revised European Waste Catalogue (EWC). The EWC has been combined with the Hazardous Waste List (HWL) to provide an extended list of wastes. The list indicates which wastes are classified as hazardous. A waste may be classified as hazardous if it has an 'absolute' entry on the EWC, or if it has an asterisked entry or 'mirror' entry, meaning the waste is only hazardous if it meets certain threshold criteria relating to the nature of the waste.

The key impacts of the regulations include the replacement of the term 'Special Waste' with 'Hazardous Waste', and the likelihood of increased hazardous waste arisings, given that more waste is classified as 'hazardous' than was classified as 'special'. Examples of 'new' hazardous wastes include fluorescent light tubes, televisions and dental amalgam.

RECAP Specific Comment

Where any hazardous waste is collected from the municipal waste stream, in particular at household recycling centres, separate provision must be made for the storage and disposal of these items and waste notification procedures will apply. Where an authority operates a separate collection of hazardous materials from households, the requirements of the hazardous waste regulations will apply to the transfer and storage of these items before final treatment or disposal.

1.17 Ozone Depleting Substances Regulations No.2037/2000

European Council Regulation No. 2037/2000 on substances that deplete the ozone layer, which came into effect in October 2001, requires Member States to remove ozone depleting substances (ODS) (including CFCs and HCFCs) from refrigeration equipment prior to disposal. This recovery is in addition to the 'degassing' of cooling circuits that local authorities have carried out for some time.

This requirement came into force immediately for industrial and commercial appliances and applied to domestic appliances from 1 January 2002. The introduction of these regulations resulted in the development of treatment capacity to remove ozone from refrigeration equipment.

RECAP Specific Comment

Local authorities in the RECAP area are responsible for the collection and handling of items such as fridges and freezers at household recycling centres and in bulky waste collection rounds, therefore they must ensure that any items collected that contain ODS are sent for degassing and appropriate treatment.

1.18 Renewable Obligations Order 2002, as amended

The Renewables Obligations Order is the Government's main mechanism for supporting renewable energy. The Obligation is enforced by an Order (Statutory Instrument) made under the terms of the Utilities Act 2000. The Order was introduced in April 2002 and sets out which forms of energy generation qualify for Renewable Obligation Certificates (ROCs).

The Obligation requires suppliers to source an annually increasing percentage of their sales from renewables. For each megawatt hour of renewable energy generated, a tradable certificate called a Renewables Obligation Certificate (ROC) is issued.

Suppliers can meet their obligation by:

- Acquiring ROCs;
- Paying a buy-out price of £30/megawatt hour; and
- A combination of ROCs and paying a buy-out price.

When a supplier chooses to pay the buy-out price, the money they pay is put into the buy-out fund. At the end of the 12-month Obligation period, the buy-out fund is recycled to ROC holders.

RECAP Specific Comment

Anaerobic digestion and advanced thermal treatment qualify for ROCs under this scheme. Recent revisions (2006) to the scheme have incorporated waste recovery operations that combust over 90% biomass and also Energy from Waste plants that combust waste with 'good quality' Combined Heat and Power (CHP). The revisions increase the range of alternative treatment technologies that qualify for ROCs and should contribute to increasing the financial viability of these options if they are being considered by local authorities as part of long term waste strategy implementation.

Therefore ROCs will be included within the financial plan for Peterborough's option of an incinerator and the potential to convert as a CHP plant. Also Cambridgeshire will have considered the ROCs implications with regard to ownership and the markets for the outputs from the Mechanical Biological Treatment (MBT) facility.

1.19 Producer Responsibility Obligations Regulations 1997

These regulations came into effect in March 1997 and are enforced by the Environment Agency for England and Wales and the Scottish Environmental Protection Agency (SEPA) in Scotland. Their main aim is to increase reuse of packaging where possible, increase the recovery and recycling of packaging waste in the UK and implement the recovery and recycling targets in the EC Directive on Packaging and Packaging Waste 94/62/EC.

The Regulations give substance to 'Producer Responsibility' which is an extension of the polluter pays principle, and is aimed at ensuring that businesses take responsibility for the products they have placed on the market once those products have reached the end of their life. The packaging waste regulations directly affect most UK companies or groups of companies who have a turnover exceeding £2 million and who handle more than 50 tonnes of packaging. These companies must either register with the relevant agency or join a compliance scheme. Current targets have been set up to the end of 2008, when the UK as a whole must recycle 60% of all packaging waste. Materials covered include glass, paper, metals, plastic and wood.

Once a company has registered or joined a compliance scheme it must recycle or reuse the required percentage of its packaging and provide evidence of compliance to the appropriate authority. Businesses whose main activity is "selling" must also carry out consumer information obligations.

In turn the regulatory agency is required to carry out and publish details of the monitoring they have carried out on companies that come under the scheme on a yearly basis. The regulator is also responsible for Non Registration/ Freeloader Monitoring which is carried out to detect those companies who may be obligated under the regulations but have not registered.

RECAP Specific Comment

The packaging regulations do not place a direct responsibility on RECAP local authorities to recycle packaging waste. This responsibility lies with those in the packaging supply chain. However, as the targets imposed on business to recycle packaging waste increase there are likely to be more opportunities for local authorities to work with business to ensure that the amount of packaging waste being recycled increases. Some authorities receive financial support from obligated packaging producers and further funding opportunities may emerge in the future.

1.20 The Waste Incineration (England and Wales) Regulations 2002

The Waste Incineration (England and Wales) Regulations 2002 came into force on 28 December 2002. Together with directions issued at the same time to the Environment Agency and the local authorities, which are the regulators, they transpose the Waste Incineration Directive, 2000/76/EC (WID). The WID incorporates and extends the requirements of the 1989 municipal waste incineration (MWI) Directives (89/429/EEC and 89/369/EEC) and the Hazardous Waste Incineration Directive (94/67/EC), forming a single Directive on waste incineration and repealing those three Directives from 28 December 2005.

The Directive applies to incineration and co-incineration plants that burn waste as defined in the Waste Framework Directive. Such wastes will include municipal waste, clinical waste, hazardous waste, general waste

and waste derived fuels. For the purposes of the WID, "hazardous waste" means a waste identified as such in the European Waste Catalogue.

The Regulations apply to all new and existing incinerators and all installations from 28th December 2005, implementation carried out under the existing Pollution Prevention and Control (PPC) regime.

The Directive sets out technical requirements in terms of operating conditions, emissions limits, monitoring regime and derogation made available, etc.

RECAP Specific Comment

Any RECAP authority that is considering an Incinerator or utilising Refuse Derived Fuel (RDF) needs to ensure that the facility is compliant with the Waste Incineration Regulations under the existing Pollution Prevention and Control (PPC) regime.

1.21 Agricultural Waste Regulations 2006

The Government has extended existing waste management controls to cover agriculture in 2006 under The Waste Management (England and Wales) Regulations 2005, The Agricultural Waste Regulations.

This legislation came into force on 15 May 2006 and seeks to bring agricultural waste regulations in line with all other UK industrial waste controls. Manure is not classed as waste in this instance if it is being used as fertiliser. Farmers will need to either store up their waste for a maximum of twelve months prior to disposal at a licenced site, or apply to the Environment Agency for a landfill permit, licence exemption or waste management licence.

Subject to Environment Agency Licensing approvals, farmers will still be able to let organic waste rot down on their land. Licences will not however be required for by-products of food manufacturing processes such as sugar derivatives as long as they are used for animal feed. Spreading of food manufacturing by-products onto land as fertiliser will require licensing. The disposal of sheep dip and pesticide washings to land will be permitted as long as a groundwater authorisation is obtained.

RECAP Specific Comment

A potential impact of these regulations for RECAP local authorities is that some agricultural waste may end up being diverted into the municipal waste stream. For example farmers may request waste to be collected via council-provided trade collections and additional waste may enter the municipal waste stream through refuse collections from rural domestic properties or at household recycling centres (HRCs). However this trend has not been recognised within the RECAP area.

1.22 Waste Electronic & Electrical Equipment Directive 2002/96/EE

In February 2003, the European Waste Electrical and Electronic Equipment (WEEE) Directive became European law. The Directive was to be implemented in European Member states by August 2004. Collection, treatment and financing systems for WEEE must be in place by September 2005 and the first collection and treatment targets are to be attained by December 2006.

Key requirements of the WEEE Directive include:

- A compulsory household collection by the end of 2006 – a target of 4 kg per household is set and a new target will be set in 2008;
- A compulsory producer responsibility obligation – this ensures that the producers finance the management of consumer electronic and electrical waste;
- Financing – producers are able to use collective or individual financing schemes;
- Measures to decrease the disposal of WEEE by consumers as unsorted municipal waste by the Member States;
- Treatment costs – the cost of treating historical waste to be shared proportionately between producers in the market when the costs arise; and
- Financial guarantees – made by producers (up front) to guard against costs arising from orphan WEEE.

The recent Waste Electrical and Electronic Equipment Regulations 2006 (SI No. 3289) (WEEE Regulations) which came into force in July 2007, bringing the UK into line with Europe's WEEE Directive of 2003 set out responsibilities for producers of EEE and distributors or retailers of EEE. This includes:

- A distributor take-back scheme for retailers, which will establish a Designated Collection Facility (DCF) network;
- Obligatory producer registration;
- A code of practice covering WEEE collection from DCFs;
- Approved treatment facilities which will process WEEE and give evidence to producers on the amount of WEEE received for treatment; and
- Accredited reprocessing facilities that will provide evidence of reprocessing to producers.

The legislation establishes a system of producer responsibility in which manufacturers and importers of electronic goods (producers) take financial responsibility for the UK achieving collection and recycling targets for all WEEE collected separately from the general waste stream.

RECAP Specific Comment

The WEEE regulations do not place a statutory duty on local authorities to collect WEEE products - that duty rests with the producers. However local authorities have an opportunity for collection sites, such as household recycling centres to become DCFs and to collections of WEEE funded by compliance schemes, which have been established to meet producer responsibility. All HRCs in the RECAP area have been registered as DCFs and Cambridgeshire County Council and Peterborough City Council have signed agreements with relevant compliance schemes to ensure that WEEE is collected from these sites.

1.23 PPS 10: Planning and Sustainable Waste Management (July 2005)

National waste planning policy guidance is set out in Planning Policy Statement 10: Planning for Sustainable Waste Management (PPS10). PPS10 sets out the Government's objectives for sustainable waste management; i.e. to protect human health and the environment by producing less waste and by using it as a resource wherever possible. It confirms the importance of the waste hierarchy and sets out criteria for identifying suitable sites or areas for new or enhanced waste management facilities. Waste planning authorities are also required to consider the likely impact of waste development on the local environment and on amenity. Positive planning is seen as having an important role in delivering sustainable waste management through appropriate strategies for growth, regeneration and the prudent use of resources and by providing sufficient opportunities for new waste management facilities of the right type and in the right place at the right time.

In setting out the key planning objectives, PPS 10 (para.3) advises that planning authorities should prepare and deliver strategies that:

- Drive waste management up the hierarchy and look to disposal, including landfill as the last option, but one which must be adequately catered for;
- Provide a framework for greater community responsibility for their own waste;
- Help deliver the national waste strategy and supporting targets;
- Help secure the safe management of waste, and enabling it to be disposed of in one of the nearest appropriate installations;
- Reflect concerns and interests of a wide range of stakeholders including communities, waste disposal authorities and business;
- Protect Green Belts but recognise that the particular locational needs of waste management facilities, together with the wider environmental and economic benefits of sustainable waste management, are material considerations that should be given significant weight in determining whether proposals should be given planning permission; and

- Ensure the design and layout of new facilities support sustainable waste management.

With regard to the above stated objective to protect Green Belts, Planning Policy Guidance Note 2: Green Belts (PPG2), is relevant.

With regard to planning applications, PPS10 affirms that the development plan provides the framework within which proposals for waste management development are considered. When considering planning applications before the development plan can be reviewed to reflect the PPS, the waste planning authority should determine proposals in a way that is consistent with the policies in the PPS and avoid placing requirements on applicants that are inconsistent (para.22 and 23).

PPS10 also clarifies the responsibilities of the waste planning authorities and the pollution control authorities whilst acknowledging the need for close working. It also advocates the preparation and submission of planning and pollution control applications in parallel (para.26 to 28).

RECAP Specific Comment

RECAP must develop any waste management facilities within the development plan, which provides the framework within which proposals for waste management development are considered.

1.24 EU Directive on Batteries and Accumulators 2006/66/EC

This Directive is a further piece of producer responsibility regulation, and applies to batteries containing lead, mercury or cadmium, and its primary focus is controlling the disposal of spent batteries and accumulators (energy storage devices) containing potentially dangerous materials.

The Directive requires Member States to ensure that appropriate systems are in place for consumers to return used batteries. The Directive will also require the re-design of appliances to allow for the easy removal of spent batteries and ban the use of NiCad batteries from 2008.

On 26 September 2006 the agreed text of Directive 2006/66/EC on Batteries and Accumulators and Waste Batteries and Accumulators was published in the Official Journal of the European Communities. This Directive repeals the existing Batteries Directive 91/157/EEC which in comparison had a more limited range of provisions. The directive is yet to be implemented into UK legislation; however Defra published a provisional policy paper regarding the implementation of this directive in March 2007[4]. Interim targets are as follows:

- Starting point: 2% collection rate in 2008;
- 8% by 26 Sept 2009;
- 15% by 26 Sept 2010;
- 20% by 26 Sept 2011; and
- 25% by 26 Sept 2012.

The paper says that it will be a producer responsibility based scheme, but that local authorities could also have a role to play. It is suggested that a varied approach to collection will be needed to meet the 2012 target. Producers are, therefore, likely to have to consider a range of different collection and take-back options including local authority collection, in-store take-back, drop-off points, voluntary sector, school involvement and other institutions.

RECAP Specific Comment

The focus of this directive is producer responsibility; however RECAP can assist in collecting batteries via kerbside schemes or via the HRCs and feeding into the compliance schemes.

4 http://www.defra.gov.uk/environment/waste/topics/batteries/pdf/collection_policy_paper.pdf

1.25 EC Working Document on Biological Treatment of Biowaste

In 2001 the European Commission issued a second draft of the EU Directive on the Biological Treatment of Biological waste (known as the Biowaste Directive). In December 2003, a draft discussion document for an ad hoc meeting (January 2004) on biowastes and sludge was issued. It stated that it would present proposals for the revision of the Sewage Sludge Directive 86/278/EEC and for a Directive on the biological treatment of biodegradable waste. Moreover, the Commission gave a commitment that, by the end of 2004, a Directive on biowaste, including catering waste, would be prepared with the aim of establishing rules on safe use, recovery, recycling and disposal of this waste and of controlling potential contamination (fourth recital in Regulation (EC) No 1774/20021).

It was then decided to make the development of these two proposals an integral part of the multi-stakeholder process accompanying the development of a fully fledged Soil Thematic Strategy that was finally adopted in September 2006[5].

The working document objectives are to promote the biological treatment of biodegradable waste (e.g. anaerobic digestion or composting) to help meet the Landfill Directive targets for the diversion of biodegradable waste from landfill. It covered not only municipal waste (including household waste) but also biodegradable residues produced by industry, such as agricultural or food and drink industry wastes. The Directive proposes that local authorities may be required to set up separate collections of biodegradable waste in order to maximise the scope for composting and anaerobic digestion. Urban areas with over 100,000 inhabitants would be required to set up such systems within three years of implementation. Urban area with over 2,000 inhabitants would have five years to do the same.

2 EU Thematic Strategies

2.1 Thematic Strategy on the Prevention and Recycling of Waste

On 21 December 2005 the European Commission published a thematic strategy on the prevention and recycling of waste, including proposals for associated legislation comprising (i) a revision of the Waste Framework Directive (the WFD), (ii) the repeal of the Waste Oils Directive and (iii) the repeal and integration of the Hazardous Waste Directive into the revised WFD and an Impact Assessment[6]. The thematic strategy on the prevention and recycling of waste is one of the seven thematic strategies programmed by the 6th Environmental Action Plan.

This long-term strategy aims to help Europe become a recycling society that seeks to avoid waste and uses waste as a resource. It will draw on the knowledge that the thematic strategy on resources, also adopted on 21 December 2005, will generate.

As a first step, the Commission proposes revising the 1975 Waste Framework Directive to set recycling standards and to include an obligation for EU Member States to develop national waste prevention programmes. This revision will also merge, streamline and clarify legislation, contributing to better regulation.

The main actions of the Thematic Strategy are:

- A renewed emphasis on full implementation of existing legislation;
- Simplification and modernisation of existing legislation (E.g. Firstly, an amendment of the Waste Framework Directive merging it with the Hazardous Waste Directives and introducing life cycle thinking);
- Introduction of life-cycle thinking into waste policy;
- Promotion of more ambitious waste prevention policies by clarifying Member States' obligations to develop publicly available waste prevention programmes;

5 http://europa.eu.int/comm/environment/soil/

6 http://www.defra.gov.uk/environment/waste/thematicstrat/background.htm

- Better knowledge and information which will underpin the continued development of waste prevention policy. Member states to draw up waste prevention plans; and
- Development of common reference standards for recycling.

A key element of the thematic strategy that may impact on local authorities in the future is a greater prominence of waste prevention action. Waste prevention is a key element of any waste strategy, the importance of addressing this issue through specific targets and actions is only likely to increase in the future. It is important to address waste minimisation within the RECAP JSA and any related waste strategy document.

2.2 Thematic Strategy on Soil Protection

The European Union has decided to adopt a Thematic Strategy on Soil Protection as part of its aim of protection and preservation of natural resources. The European Commission adopted the Thematic Strategy for Soil Protection on 22 September 2006.

The Soil Thematic Strategy is seeking to:

- Establish common principles for the protection and sustainable use of soils;
- Prevent threats to soils, and mitigate the affects of those threats;
- Preserve soil functions within the context of sustainable use; and
- Restore degraded and contaminated soils to approved levels of functionality.

Defra, the Scottish Executive and the Welsh Assembly Government are currently running a public consultation exercise on the Commission's proposals. The consultation closes on 19 October 2007.

3 Regional policy context

The emerging East of England Regional Spatial Strategy (RSS) when adopted will provide the main policy framework for the region. It will cover all topics but will be supplemented by a number of specialists regional strategies e.g. transport, waste, housing, energy etc. The underlying objectives of these strategies will be represented in the RSS but their purpose is to provide further and more in-depth guidance in relation to the specific topic areas. The Regional Waste Management Strategy is especially relevant to the context of this review and will need to be considered explicitly in the JMWMS. Also the regional housing strategy has a particular relevance in relation to housing growth, and RECAP needs to consider the waste infrastructure that will be required in response to the additional planned housing and consequently larger population of the future.

The Regional Waste Management Strategy, the Regional Planning Guidance 6 and the drafted Regional Spatial Strategy were prepared prior to the publication of PPS10 (PPS10: Planning for Sustainable Waste Management). As such, some aspects of the above documents are clearly out of date. This particularly applies to the role of Best Practical Environmental Option (BPEO), which is now delivered through the Sustainability Appraisal and Strategic Environmental Assessment requirements for plans and strategies, and to the limited approach to the allocation of sites for waste management development.

3.1 Regional Spatial Strategy for the East of England (East of England Development Plan)

The Regional Spatial Strategy (RSS) for the East of England, also known as the East of England Development Plan, will replace the existing Regional Planning Guidance 6 (RPG6) and Cambridgeshire and Peterborough Structure Plan as required under the Planning and Compulsory Purchase Act 2004. The aim of RSSs is to strengthen the role of regional planning by making the RSS part of the development plan. The East of England Development Plan is currently in final draft form but is expected to be adopted by the end of 2007, Autumn at the earliest[7], dependant upon

some final alterations to ensure it complies with the Habitats Directive. The plan will set out the regional strategy for planning and development in the East of England until 2021 and will cover a range of areas including economic development, housing, the environment, transport, waste management, culture, sport and recreation and mineral extraction. To date (October 2007), however, until the RSS is formally adopted, RPG6 will remain in force and a number of policies from the Cambridgeshire and Peterborough Structure Plan have been saved and are still applicable (beyond the date of 27th September 2007).

The Draft Regional Spatial Strategy for the East of England Plan8 lists a number of policies, derived from the Regional Waste Management Strategy, to guide the future Waste Management of the region including;

Policy ENV10: waste management

Waste development documents and waste management strategies will include policies to:

Encourage waste minimisation;

- Determine how the principle of Best Practicable Environmental Option (BPEO)[9] will be applied in the context of the hierarchy of waste management and the proximity principle;
- Ensure adequate provision of sites with sufficient capacity for the collection, storage, treatment, processing, recycling and disposal of all controlled wastes that are forecast to arise within the local authority area, and to make an appropriate provision for reducing waste imports for landfill from outside the region as required by policy ENV12;
- Identify specific sites for such waste management facilities that are likely to be needed, and provide comprehensive criteria for the consideration of proposals for such facilities; and
- Provide for ongoing monitoring and review so that waste development documents and development frameworks continue to adequately reflect national and regional waste polices and are based on appropriate forecasts of future waste management requirements.

Local development documents will include policies to ensure that all forms of new development are designed and constructed in such a way as to minimise the production of waste, maximise use of recycled materials, and to facilitate, by provision of adequate space and facilities, the ongoing recycling and recovery of such waste as may arise from the completed development and from surrounding areas where appropriate.

Policy ENV11: management of wastes arising within the East of England

Challenging but achievable targets will be adopted by all authorities and commercial waste producers to minimise waste and provide the basis for implementing the overall aim of recovering value from waste (including recycling/composting), and minimising disposal. The aim is to secure at least the following minimum levels of recovery:

- Municipal waste – recovery of 40% at 2005, 50% at 2010 and 70% at 2015; and
- Commercial and industrial waste – recovery of 66% at 2005, 75% at 2015.

Within the above targets, waste planning authorities will develop an integrated approach which simultaneously maximising the level of recycling/composting whilst making appropriate provisions for optimising recovery of value from the remaining waste. In doing so, waste planning authorities should plan for net self-sufficiency though provision of waste management capacity equivalent to the amount of waste forecast to arise within their area, except where consideration of the Best Practicable Environmental Option (BPEO) clearly indicates that this would be achieved through collaboration between authorities. Monitoring of performance against the specified targets will be undertaken annually.

7 The RSS had still not been adopted by later October 2007

8 The RSS was drafted in 2004, therefore there are a number of concepts that will be required to be updated prior to formal adaptation

9 As per the PPS10 note: BPEO has been superseded by Sustainable Environmental Assessment (SEA)

Policy ENV12: regional self-sufficiency

In developing policies in their waste development plan documents and local development documents, and when considering proposals for waste management facilities within the region, local authorities will apply the principle that after 2015 the import of waste from outside the region will be restricted to the landfill of residual waste that has been subject to the maximum practical level of recovery and treatment, and for which landfill is the only practical management option. To this end, local authorities should plan for a progressive reduction from the levels of waste imports as at 31 March 2004 to an allowance of 30% by weight for the equivalent residues after 2015.

No allowance should be made for new non-landfill waste facilities dealing primarily with waste from outside the region unless there is a clear benefit to the region. Such benefit might include the provision of specialist processing or treatment facilities which would not be viable without a wider market catchment and which would enable enhanced recovery of locally arising wastes that would not otherwise occur.

Policy ENV13: hazardous waste

A hazardous waste strategy for the East of England, will be developed incorporating the following elements:

- The likely arisings and hazardous waste types in the East of England (taking into account the new definition of hazardous waste);
- The implications for the East of England of the post EU Landfill Directive movement of hazardous waste (intra and inter regional);
- Opportunities and technologies available to increase the treatment of contaminated construction and demolition waste (including soils) on site;
- Consideration of interim measures to manage hazardous waste e.g. storage solutions for packaged hazardous waste; and
- Appropriate provision within the East of England for the management of hazardous waste (treatment and landfill).

Policy ENV14: Regional Waste Management Strategy

The East of England Regional Assembly will regularly review the Regional Waste Management Strategy in order to ensure that it continues to provide an appropriate and up to date policy framework to guide waste management in the region.

Local authorities should have regard to the provisions of the Regional Waste Management Strategy when developing policies in their waste development plan documents, local development documents, and waste management strategies, and when considering specific development proposals.

3.2 East of England Regional Waste Management Strategy[10]

The Regional Waste Management Strategy (RWMS) was published in 2003. Due to the development of Government guidance and European policy, there is now further pressure to reduce the amount of waste that is sent to landfill, thus requiring a review of the RWMS, which began in 2006. The draft RSS also requires that the RWMS is regularly reviewed and updated to ensure that it provides an up-to-date framework to guide waste management in the region.

The principle purpose of the Regional Waste Management Strategy is to give guidance on the land use planning aspects of waste management, by considering what quantities of waste need to be treated by different methods, and what this means in terms of the scale of waste management needs across the Region, up to 2021 (the period covered by the strategy) and underpins the waste policies within the Regional Spatial Strategy.

10 http://www.eera.gov.uk/Documents/About%20EERA/Policy/Planning%20and%20Transport/RWMS16-7.pdf

Targets

Policy 1

Challenging but achievable targets should be adopted by all Authorities and commercial waste producers to minimise waste and provide the basis for implementing the overall aim of recovering value from waste (including recycling/composting), and minimising disposal. The aim is to secure the following minimum levels of recovery:

- Municipal Waste – recovery of 40% at 2005, 50% at 2010 and 70% at 2015; and
- Commercial & Industrial Waste – recovery of 66% at 2005, 75% at 2015.

Within the above recovery targets the aim should be to maximise the level of recycling/composting. Monitoring of these targets will be undertaken annually.

Future Provisions of Waste

Policy 2

Local Authorities in their Waste Local Plans (WLP), Local Development Documents (LDF) and Waste Management Plans should have particular regard to the principles of sustainable development so as to ensure that the developments proposed do not impact adversely on future generations or waste or destroy scarce resources. The LDF's and WLP's should include policies to:

1 Make adequate provision for sites for the collection, storage, treatment, processing and disposal of waste arising within the Plan area;

2 Ensure that sufficient capacity can be provided in each county to handle the forecast amount of municipal, industrial, commercial and construction and demolition waste arising within that area, and for hazardous and other problem wastes unless regional or national provision is more appropriate;

3 Provide for monitoring and review so that forecasts of future waste arisings in the region, and facilities needed to deal with them, are regularly updated, and that regional strategy and local plans are reviewed to ensure that they reflect future requirements; and

4. Provide specific policies to:

- Encourage waste minimisation;
- Determine how the principle of Best[11] Practicable Environmental Option will be applied in the context of the Hierarchy of Waste Management;
- Provide criteria for consideration of proposals for recycling/composting facilities , energy recovery, incineration and other plant likely to be needed; and
- Provide for the treatment, storage and disposal of hazardous and other wastes which give rise to problems of handling, treatment or disposal.

Self Sufficiency

Policy 3

In developing policies in their Waste Local Plans and Local Development Documents and when considering proposals for waste management facilities within the Region local authorities will apply the principle that after 2010 the import of waste from outside the region will only be acceptable in very special circumstances. Only residues from other waste processes, or very exceptionally (where it can be demonstrated that there is no other practical option) waste from outside the region which would not benefit from treatment will be acceptable in landfills in the region. New non-landfill waste facilities dealing primarily with waste from outside the region will not be permitted unless there is a clear benefit to the region. Such benefit might include the provision of specialist processing or treatment facilities for recyclates or special wastes where the provision would provide a facility for handling such locally arising wastes.

Policy 4

To meet the requirements of county self-sufficiency and the proximity principle, the current pattern of waste disposal with high levels of imports from outside the region must change, each area meeting its own needs, not relying on others. The starting point is for planning decisions and future municipal waste management contracts to be based on a facility within the county/unitary area where the waste arises, although where collaboration with other areas provides mutual benefits it should be pursued.

11 See note on PPS10 – SEA updates BPEO

Waste Reduction

Policy 5

With the aim of securing an annual reduction in the amount of waste produced in the region the Regional Planning Body will:

- Set waste minimisation targets following research and consultation, including work being carried out nationally, to determine the best options for the region;
- Pursue a programme of consultation and monitored waste minimisation pilot initiatives, in order to establish what actions will work best for the region and to determine targets which represent BPEO[12];
- Actively promote waste minimisation in partnership with local authorities, industry and other stakeholders; and
- Seek to identify the factors which determine the amount of waste produced. This will be used to refine and develop the region's waste minimisation strategy.

Policy 6

In order to raise public awareness of the links between consumer choices, the generation of waste and the economic, environmental and social impacts of waste management the Regional Planning Body will:

- Provide advice and guidance for the public on the practical measures which can be taken to reduce the amount of household waste being produced;
- Undertake, in partnership with the Waste Disposal and Collection authorities and other relevant bodies, a coordinated region-wide waste minimisation campaign. The campaign will be monitored annually; and
- Lobby government for changes in legislation and fiscal measures to help bring about waste minimisation.

Policy 7

The Regional Planning Body will actively encourage waste minimisation practices amongst industries in the product production chain. As a first step, the Region will initiate region-wide waste minimisation fora with raw material producers, product and packaging manufacturers and retailers. Such fora will consider issues such as sustainable product design, examining the potential for and promoting the concepts of minimal resource use and using reprocessed materials, and designing for repair, re-use, upgrading, longevity and recycling/composting. The fora will explore ways in which retailers can promote goods designed to minimise waste and goods made from reprocessed materials.

Policy 8

Waste Disposal and Collection Authorities should:

- Consider the relationship between waste minimisation, waste collection and recycling/composting, when devising and operating waste management strategies including collection and recycling/composting schemes. All collection and recycling/composting schemes should be supported by a strong waste minimisation message; and
- Introduce reduced capacity waste collection systems throughout the Region, in conjunction with existing or new recycling/composting schemes.

Policy 9

New development should be designed and planned with regard to minimising the production of waste. Local authorities should include policies in their development plans placing a requirement that development proposals have regard to the need to minimise the use of raw materials and the amount of waste generated during construction and demolition, reusing and recycling/composting such waste where possible.

12 See note on PPS10 – SEA updates BPEO.

Recycling and Composting

Policy 10

Government and local authorities should provide financial and other incentives to establish businesses and markets for products and raw materials made from reclaimed material, and lead by example by adopting purchasing and operational policies which establish best practice.

Waste Planning Authorities should include policies in their waste local plans to actively encourage and support the development of waste processing facilities where these can be shown to be environmentally acceptable. Local authorities should seek to encourage initiatives by the private sector, by voluntary bodies, local groups and individuals in developing recycling/composting.

Policy 11

Development plans should contain policies that actively support the development of waste re-use facilities. Waste Disposal Authorities should seek to ensure that facilities for the re-use of wood, furniture, white goods, and electronic equipment are provided. The Region will co-ordinate a region-wide directory of re-use facilities and schemes and promote partnerships with voluntary and other sectors to initiate schemes where under provision is identified.

Policy 12

Local authorities should include policies in their development plans which support in principle the infrastructure required to implement waste minimisation and recycling/composting initiatives.

Policy 13

In order to maximise recycling/composting, Waste Disposal Authorities, Waste Collection Authorities and private sector waste management companies should introduce separate collection of recyclable and compostable materials as early as practicable. The local authorities should ensure that "bring sites" and civic amenity sites are readily available.

Policy 14

New material recycling facilities (MRFs), composting facilities and processing plants for recyclable material will be needed to complement the introduction of separate collection of recyclables. These should be provided in the Region with capacity to meet the levels of recycling/composting aimed at, and should cater for both public and private sector requirements.

Policy 15

Local authorities should encourage composting or biodigestion of biodegradeable wastes where appropriate. In addition to providing for the collection of separated biodegradeable waste and green waste composting, initiatives such as home composting, and the use of reuseable nappies should be supported, and the feasibility of on-farm composting explored.

Policy 16

The production and collection of separated wastes from industrial and commercial producers should be encouraged. Waste management companies should where possible, promote the collection of separated waste from firms. Joint action by/or on behalf of groups of waste producers - for example tenants of industrial estates – is to be encouraged.

Other options for recovery of value from waste

Policy 17

All waste treatment and energy recovery plants must include processes to remove recyclable and compostable material where this has not been carried out elsewhere. Municipal waste strategies which include energy recovery should specify performance levels for recycling/composting to avoid energy recovery inhibiting recycling/composting.

Policy 18

Action should be taken by Waste Planning, Disposal and Collection Authorities to identify the need for Waste Treatment and Energy Recovery facilities, prepare plans and proposals and, if necessary, secure the consents and finance to ensure that the facilities can be made available when needed. They will normally be located in or adjacent to urban areas and where energy recovery is included should maximise the utilisation of heat and power produced. Existing waste management sites, including landfill sites, may be appropriate locations for new facilities which would deal with a range of wastes from public and commercial sources.

Landfill

Policy 19

Waste Local Plans and Local Development Documents must ensure that the region and preferably each county area has the capacity to meet the need for landfill of residual waste arising locally and where appropriate within the region. Exceptionally, and in appropriate circumstances, it may be necessary to make some provision for imported waste which cannot feasibly be dealt with in any other way.

Waste Disposal and Collection Authorities

Policy 20

Each Waste Disposal and Waste Collection Authority should adopt a municipal waste strategy which can deliver the recycling and composting targets for its area.

Hazardous and Restricted Wastes

Policy 21

New treatment and disposal facilities will be needed for hazardous wastes and other wastes requiring specialised treatment. These facilities will need to be considered in a regional context. Waste Local Plans and Local Development Documents should include policies setting out criteria for determining such proposals, and may make provision for such development where advised by the Region or on the advice of the Environment Agency that such action would be appropriate.

Construction and Demolition Waste

Policy 22

Planning authorities should seek to ensure adequate provision of sites and facilities for the recovery of construction and demolition waste. Before granting planning permission for development involving demolition or the production of waste materials authorities should require information on the proposed method of dealing with waste so as to minimise its production and maximise re-use and recycling.

Waste Management in Rural Areas

Policy 23

Local authorities will have regard to the problems of waste management in rural areas and the need to make adequate provision for dealing with such waste. They should consider the potential for waste management to make a positive contribution to the provision of job opportunities in rural areas.

Data and Monitoring

Policy 24

Monitoring of changes, progress towards meeting the targets and review of needs will be carried out on an annual basis by the EETAB and a review of this Regional Waste Management Strategy will be undertaken within five years of the publication of the Adopted Strategy. The Strategy will be reviewed earlier if national policy enables more rapid progress towards sustainable waste management.

3.3 Creating Sustainable Communities in the East of England[13]

'Creating Sustainable Communities in the East of England' (2005) outlines much of the work being done to create sustainable communities in the East of England.

Housing alone does not make a sustainable community. Places where people want to live also provide for work, education, culture, sport, health services, and transport to and between them – in a safe local environment which people can enjoy and take pride in.

This document explains what is happening to deliver more sustainable communities in the East of England:

- Delivering a better balance between housing supply and demand;
- Ensuring people have decent places to live;
- Tackling disadvantage;
- Delivering better services through strong effective local government; and
- Promoting the development of the region.

The Government Office for the East of England (GOEE) is working with partners and stakeholders in the region to improve the delivery of services and bring about positive outcomes for both the citizen and the community:

- Pilot Local Area Agreements (LAAs) in Suffolk and Peterborough represent a radical new approach to help join up public services more effectively and provide greater flexibility for local solutions to local circumstances;
- Over the next five years (2005-2010), GOEE will promote and advance the emerging local government strategy and strengthen the way that local and central government work together. In 2005, East of England's 54 local councils and the region's police and fire authorities are receiving over £4 billion from the Government through the Local Authority Formula Grant;
- Comprehensive Performance Assessments (CPAs) of local authorities within the region rate the majority as good or excellent. Only six are weak or poor and ODPM/GO-East are working with them to improve their performance;
- Over the next five years, GOEE will continue to tackle multiple challenges around growth and regeneration in key places across the region – for 2004-05 it has identified Peterborough, Luton, Harlow and Thames Gateway for targeted work. There are plans to extend to other areas later;
- GOEE will also pull together existing funding streams, with a focus on shared priorities at national and local level; and
- GOEE will continue to exploit all opportunities to develop and spread best practice, challenging local authorities on best value (e.g. in planning, housing, local transport, waste services), learning lessons from pathfinders and pilots, helping to develop centres of excellence and learning networks.

3.4 Revised Regional Housing Strategy for the East of England: Strategy Document 2005-2021[14] and its association with the Draft East of England Plan[15]

The Draft Regional Housing Strategy and the Draft East of England Plan make proposals for housing delivery in the East of England.

Policy SS13 in the Draft East of England Plan provides the detail on overall housing provision. During the period 2001 to 2021 an overall provision of 23,900 net additional dwellings per annum is established, with a target that at least 7,200 should be social rented units (or 30% of provision). In addition it is required that at least 760 net additional units per annum should be for key worker housing.

13 http://www.gos.gov.uk/goeast/people_and_sustainable_comm/

14 http://www.southeast-ra.gov.uk/our_work/planning/housing/rhs_review/rhs_review-cons_draft-feb07.pdf

15 http://www.eera.gov.uk/Documents/About%20EERA/Policy/Planning%20and%20Transport/PlanHome/RPG/RPG14/View%20the%20Plan/RSS14Finalversion.pdf

Phase 2 of the Affordable Housing Study identifies the need for 2,400 units each year for the intermediate housing market, of which the key workers element has been specifically identified as a requirement in policy SS13. The phase 2 study indicates that about 1,320 units per year over ten years are needed to meet the backlog. The Draft East of England Plan therefore requires local authorities and housing providers to seek additional supply over the base figure to meet these needs.

The Draft East of England Plan makes it clear that the 30% target for social rented housing is a minimum. At the local level the Draft East of England Plan sets a target for affordable housing as a whole (not just social rented) of at least 30% of provision in all local authority areas, with an aspiration of 40% where housing stress warrants higher provision.

Problems associated with this level of growth are sustainability, in particular the impact on the environment, and the capacity of the construction and development industries to deliver. The strategy must focus not only on "how much" housing is delivered, but also what type of housing, where and of what quality. The recently founded Regional Centre for Excellence provides a catalyst for co-ordination and taking some of these issues forward in partnership.

The government is encouraging Modern Methods of Construction (MMC) to achieve a step-change in the quantity and quality of housing. MMC primarily involves the manufacture of homes in factories, with the potential benefits of faster construction, fewer housing defects and reductions in energy use and waste. The Government has established initiatives to encourage the use of MMC because of its economic, social and environmental benefits. In the East of England 58% of the allocations for the investment years 2004/06 will use some form of MMC. A higher target may be used in the future.

4 Local policy context

4.1 Cambridgeshire and Peterborough Structure Plan

The Cambridgeshire and Peterborough Structure Plan is the strategic framework for land use planning in Cambridgeshire and Peterborough for the period 2001-2016. Cambridgeshire County Council and Peterborough City Council jointly adopted the Cambridgeshire and Peterborough Structure Plan on 22nd October 2003. The Structure Plan also provides the framework for the district councils' preparation of detailed Local Development Frameworks or Local Plans. Under the Planning and Compulsory Purchase Act 2004, the Structure Plan will soon be superseded by the Regional Spatial Strategy when it is adopted (see below). It was announced in a Direction dated 26th September 2007 by the Government Office for the East of England that only certain policies in the Structure Plan will be retained beyond 27th September 2007 and remains in force until the new RSS is adopted. With regards to waste management, the only policy saved is:

Policy P7/12 – Location of Waste Management Facilities

Major waste management facilities, other than landfill, should be located within or near to Cambridge, Peterborough and the Market Towns and other major sources of waste arisings to create a network of facilities to accommodate local needs. Proposals for major new developments, including that of the new settlement, will be required to make adequate provision for strategic and/or local waste management facilities.

A number of other policies relating to sustainable design, employment, water-based recreation, minerals development, transport and infrastructure and Greenbelts have also been saved, a full list of which can be seen below:

Policy reference	Subject
P1/3	Sustainable Design in Building
P2/3	Strategic Employment locations
P2/4	Development and Expansion of Employment Clusters
P2/5	Distribution, Warehousing and Manufacturing
P4/4	Water-based recreation
P6/1	Development-related Provision
P7/10	Location of new Sand and Gravel works
P7/12	Location of Waste Management Facilities
P8/3	Area Transport Plans
P8/6	Improving Bus and Community Transport Services
P8/7	Improvements to Rail Services
P8/10	Transport Investment Priorities
P9/2a	Green Belt
P9/2b	Review of Green Belt Boundaries
P9/2c	Location and Phasing of Development Land to be released from the Green Belt
P9/4	Market Towns – Cambridge and Sub Rregion
P9/5	Economic Regeneration of Chatteris
P9/8	Infrastructure Provision
P9/9	Cambridge Sub Region – Transport Strategy
P10/3	Market Towns – Peterborough and North Cambridgeshire
P10/5	Peterborough – Hampton

Source: Direction on Saved Policies issued by the Government for East of England on 26th September 2007.

4.2 Cambridgeshire and Peterborough Minerals and Waste Development Framework[16]

Peterborough City Council and Cambridgeshire County Council have jointly prepared Minerals and Waste Development Plan Documents (DPDs) in accordance with the requirements of the Planning and Compulsory Purchase Act 2004. These documents set out the spatial planning policies to guide mineral extraction and waste management development until 2021 and as part of the new Local Development Framework they replace Structure and Local Plans. They are vital in ensuring that:

- Construction materials are available to support planned growth in this area;
- Sustainable waste management facilities are in place for existing communities; and
- Sustainable waste management facilities are planned for future communities.

The three Minerals and Waste Preferred Options Development Plan Documents (DPD) are:

- Core Strategy Development Plan Document sets out the Councils' strategic vision and objectives for mineral extraction and waste management development. It also contains a suite of development control policies to guide minerals and waste development. The document applies to the whole of the Cambridgeshire County Council and Peterborough City Council areas; and
- Site Specific Development Plan Document sets out the Councils' preferred options for site specific land allocations for mineral extraction and waste management development including safeguarded areas, consultation areas, other policy specific boundaries and supporting site specific policies.

The document applies to the whole of the administrative areas of Cambridgeshire County Council and Peterborough City Council.

16 http://www.peterborough.gov.uk/page-9557

- Earith and Mepal Area Action Plan Development Plan Document sets out the preferred options for future minerals extraction and waste management development in the Earith – Mepal area. It covers site specific policies and issues such as transport, flood protection, sustainable use of land, including improving the quality of the Ouse Washes, through the provision of additional flood alleviation capacity and after uses. The document applies only to the Earith - Mepal area as defined in the Plan.

The vision of Cambridgeshire County Council and Peterborough City Council as Waste Planning Authorities guiding waste development over the period to 2021 is to:

'Support the planned growth in Cambridgeshire and Peterborough by recognising the value of waste as a resource, and making adequate provision, through a network of facilities, for sustainable waste management in new and existing communities. This will be in accordance with the guidelines in the National Waste Strategy, the Regional Spatial Strategy, and the principles of sustainability, regional self sufficiency and the proximate management of waste.'

The following Strategic Objectives support this vision:

- To ensure suitable provision is made for sustainable waste facilities to manage the waste of Cambridgeshire and Peterborough over the plan period, to contribute to ensuring regional self-sufficiency in the management of waste, and to seek self-sufficiency within the Plan area where practical and in accordance with the proximate management of waste;
- To encourage waste management practices which do not incur unacceptable adverse impact on the local and global environment or endanger human health in Cambridgeshire and Peterborough;
- To ensure high quality in terms of design and operation of waste management facilities in Cambridgeshire and Peterborough;
- To encourage sustainable transport of waste by alternative means e.g. rail and water;
- To protect the ground and surface water resources of Cambridgeshire and Peterborough;
- To allow scope for new technology and innovation in waste management in the Plan area e.g. exemplar projects in handling and processing of waste;
- To determine waste planning applications in the light of the government's principles for sustainable waste management i.e. sustainability, regional self-sufficiency, proximate management of waste, and the waste hierarchy;
- To identify planning policy criteria by which to assess waste development proposals, ensure effective planning control and the appropriate locations and distribution of waste management facilities; and
- To safeguard waste management sites from incompatible development.

4.3 The Cambridgeshire and Peterborough Waste Local Plan17

Cambridgeshire County Council and Peterborough City Council have prepared a Waste Local Plan in order to decide:

- Where the best locations for new waste management sites are; and
- The policies against which planning applications for new waste management will be judged

The Waste Local Plan covers all of Cambridgeshire and Peterborough and was adopted in 2003 and covers the period up until 2011, with reviews approximately every five years (the first review is expected in 2008).

The Plan is seeking to change the way waste is managed, moving away from the traditional method of landfill, to much greater levels of recycling and recovery from waste. It identifies a number of sites across Cambridgeshire and Peterborough for new waste management facilities where recycling and recovery of materials e.g. glass, paper, compost and energy from waste can take place.

The Waste Local Plan considers all waste streams including municipal waste and therefore addresses a far wider range of wastes than the Joint Municipal Waste Management Strategy. However, the Waste Local Plan has to be prepared with regard to the JMWMS and ensure that sufficient locations are available for the infrastructure required in the JMWMS. Once adopted the Waste Local Plan will be subject to 5 yearly review and will take into account any change to the Strategy as it is reviewed.

4.4 Districts' Community Strategies

4.4.1 East Cambridgeshire's Community Strategy

East Cambridgeshire's Community Strategy is dated April 2004 a revised strategy is due in 2007/08 new targets are to be set, which will provide an opportunity for the strategy to be consistent with the JMWMS and also with WS2007. There is one reference to waste within the present strategy and is as follows

Objectives	Headline Targets
Increase accessibility of waste minimisation and recycling services	Increase the amount of waste recycled from 13.5% to 33% by 2006 (post 2007 longer term joint contractual arrangements for service delivery and awareness raising)

These targets are outdated, but as the headline target states it will conform with the JMWMS in the longer term.

4.4.2 Huntingdonshire's Community Strategy

The Huntingdonshire Community Strategy was published in 2004; a revised strategy is due in 2008. There are several references to waste through the document.

The first of these is under the heading of 'Our Priorities for Action' in the 'Protecting and Improving our Environment' section. The first point on the list is "Support waste minimisation initiatives, including business waste."

A headline target is "increasing the amount of household waste recycled to 39% by 2006 (currently 14.9%) and minimise the amount of waste collected from households and landfilled".

'Specific Actions' include "Work with local businesses to minimise waste and pollution", "Support the implementation of the joint waste management strategy" and "Develop a joint PFI bid to improve waste management facilities and arrangements".

The Huntingdonshire community strategy is therefore consistent with the JMWMS, and also with WS2007 with regard to reducing business waste.

4.4.3 Fenland's Community Strategy

This strategy was adopted in May 2007 and makes some reference to waste, stating that one of the council's priorities is "Reducing waste, and increasing composting and recycling".

Joint working is well recognised in the document, and there are multiple references to the 'Cambridgeshire and Peterborough Waste Strategy' and the 'Joint Municipal Waste Management Strategy and recycling plans'. However, the strategy does not set out a firm policy position on waste or how the authority plans to develop waste and recycling services.

4.4.4 South Cambridgeshire Community Strategy (Draft Strategic Objectives and Priorities (June 2007)

This document was published in 2004 and is currently under revision. The authority states that "A draft SCDC sustainable community strategy, which will inform the next LAA, is due late September 2007. At the present time draft objectives and priorities are out to consultation". The principle reference to waste is the desire to minimise waste in order to minimise climate change.

4.4.5 Cambridge City Council Community Strategy

This document was published in 2004 and is currently under revision. Waste is mentioned in one section, where the 'Cambridgeshire and Peterborough Waste Strategy' is referred to. Targets are given as "Achieving the Government's recycling performance rate of 36% for Cambridge in 2005/6" and "Reducing the amount of biodegradable waste sent to landfill in Cambridgeshire to 75% of that produced in 1995 as required by the EU Landfill Directive". This shows that joint working is being considered, and that targets are being taken into account. However, this document is due to be updated soon.

17 http://www.cambridgeshire.gov.uk/environment/planning/policies/waste+local+plan.htm

4.4.6 Peterborough Community Strategy

There are some references to waste. The following bullet points are under the heading 'We Will…' in the section 'A Better Place to Live':

- "Achieve the highest environmental standards of housing quality, including waste and environmental management systems, both in developing new communities and in the upgrading of existing homes from 2004 onwards;
- Encourage the further development of recycling and recovery performances to attain a level in excess of 40% whilst encouraging local industry to reduce waste by 2008; and
- Identify and agree a target for the reduction in waste per head of population sent to landfill and encourage local industry to seek alternate use for its end of life products by March 2006".

The following statement is also made in the document; "[Peterborough] is also one of England's four environment cities and as such has a proud track record in improving the quality of life for the people and wildlife of Peterborough, not least through its city wide environmental audits, environmental support offered to communities, schools and businesses and in waste management."

The JMWMS is not referenced and there is little focus on waste in the document. However, the areas where waste is mentioned are in line with current thinking, e.g. encouraging industry to reduce waste and aiming for 40% recycling by 2008 (NWS2007 target for 40% is by 2010).

4.5 Climate Change Strategies

4.5.1 Cambridgeshire County Council Climate Change Strategy

The County Council's climate change strategy has been developed together with local businesses, organisations, and the district councils. It was published in 2005. It sets the 5 key focus areas for the Council's work on tackling climate change, and adapting to its effects.

- "Energy – we need to reduce the demand for energy, and to use more energy which comes from renewable sources;
- Transport – by reducing private car use, and increasing walking, cycling, and public transport use, we can decrease emissions of climate-damaging gases;
- Resource efficiency – better use of resources, including reusing and recycling goods, can significantly reduce energy use and greenhouse gas emissions;
- Adaptation – whatever we do to reduce it, some climate change will occur, and we need to prepare for it; and
- Awareness – there are both positive and negative implications of climate change, and it is important that good levels of information are available to organisations, businesses, and the public."

In the strategy an objective is set 'to reduce greenhouse gas emissions through better waste management (increased recycling), more efficient use of resources and more environmentally aware procurement.'

The strategy sets targets relating to waste as follows:

- "Recycle 44% of all domestic waste by 2006;
- Reduce levels of biodegradable waste sent to landfill by 25% (on 1995 levels) by 2010; and
- Increase Council procurement of 'environmentally preferable' goods."

4.5.2 Peterborough Climate Change Strategy

The Peterborough Climate Change Strategy was published in 2007 and sets out Peterborough's position on climate change. Potential impacts on climate change are listed, including those from waste management. The document also states that the council has signed the Nottingham Declaration on climate change. This means that the Council acknowledges that climate change is occurring, and that it will have far reaching effects on the UK's economy, society, and environment. By signing the declaration, the council commits to reduce greenhouse gasses produced from waste production and disposal.

The following table shows Peterborough's proposed actions to reduce greenhouse gasses.

Proposed Action
Continue to deliver high rates of recycling compared with the rest of the UK by exceeding national targets
Ensure that waste and recycling collections are developed in line with the city's growth
Ensure that contractors incorporate measures to prevent increased levels of leaching at landfill sites. Consider the possibility of increased levels of leaching due to increases in rainfall levels while planning new landfill sites.
Identify sustainable waste treatment solutions for the city
Through education and awareness activities and campaigns, reduce the amount of waste produced per household
Ensure that all new developments incorporate sufficient capacity for the storage of waste and recycling containers

4.6 Cambridgeshire and Peterborough Environment Strategies

4.6.1 Cambridgeshire Environment Strategy

The Environment Strategy and Action Plan (ESAP) sets out the Council's objectives and actions for achieving a healthy and sustainable environment.

The first strategy was introduced in 2002 and a revised document is planned to be launched in 200712.

This document sets out the County Council's overall objectives for the environment and lists actions to be taken to help achieve these objectives. The objectives have been widely drawn to provide a comprehensive and robust framework.

There are objectives, indicators and targets on a number of environmental issues including climate change, waste, water and air.

The waste objectives, indicators and targets are detailed in Table 2.

Objectives	Indicators	Target
Reduce the amount of household waste disposed to landfill	Waste landfilled per head of population (Best Value Performance Indicator)	Reduce biodegradable waste to 75% of 1995 level by 2010 (EU target)
Increase the efficiency with which the Council uses resources	County Council waste generated per Council employee (number of general waste skips emptied on Shire Hall site)	Reduce

Table 2: Objectives, indicators and targets relating to waste in Cambridgeshire's Environment Strategy

4.6.2 Peterborough Environment Strategy

The Environment Strategy and Policy Statement for Peterborough outlines the aims and objectives for the successful management of wastes and pollution. The statement sets out the council's objectives and also provides examples of good practice currently being undertaken. There are three broad aims and policy objectives for waste and pollution are set out in Table 3.

Strategic Aim	Policy Objective
7 – District Wide Pollution	DP1 – To identify and reduce levels of air pollution. DP2 – To continue to develop the services provided to deal with noise complaints.
8 – Reducing Council Emissions	CP1 – To identify improvements necessary to reduce emission to air and water from Council activities. CP2 – To continue to identify ways to reduce pesticide usage by the Council. CP3 – To identify grounds maintenance activities that have an adverse impact on the environment and recommend improvements.
9 – Reduce, Reuse Recycle	W1 – To enable and encourage the community to reduce, and reuse and recycle waste. W2 – To encourage Council employees to reduce, reuse and recycle waste. W3 – To work with producers, suppliers and regulators to reduce packaging.

Tabel 3: Aims and policy objectives for Peterborough

18 Still in revision in November 2007

4.7 RECAP – Waste Management Design Guide

This Waste Management Design Guide is intended to be Supplementary Planning Guidance. A number of key points can be drawn from this document and should be regarded as essential considerations when designing for effective waste management.

This Waste Management Design Guide addresses the issue of waste management in new developments and redevelopments of a residential, commercial or mixed (residential and commercial) nature. It is to be used by:

- Developers and designers to ensure effective segregation, storage and collection of waste materials; and
- Planning Authorities in assessing each planning application to ensure that waste management needs are adequately addressed.

This Guide:

- Details the waste segregation, storage and collection requirements that designers and developers need to satisfy;
- Provides a strategic tool for use by Planning Authorities when assessing development applications;
- Addresses the unique waste management problems presented by high density developments;
- States the requirements for developer contributions to waste management infrastructure;
- Highlights the financial implications of waste management upon developers;
- Highlights examples of good practice demonstrating what can be achieved; and
- Contributes to sustainability and reduced environmental impact.

4.8 Cambridgeshire and Peterborough Supplementary Planning Document (SPD) 'The Location and Design of Major Waste Management Facilities'

Cambridgeshire County Council and Peterborough City Council adopted a supplementary planning document on 'The Location and Design of Major Waste Management Facilities' on 28 April 2006.

This SPD has been prepared to assist in the delivery of high quality sustainable waste management facilities. The document sets out a series of key development principles based on recognized good planning and design practice, and is intended to:

- Encourage a more co-operative approach by all those involved in the design and development of major waste management facilities;
- Provide a good practice benchmark to guide developments and designs and to speed the evaluation of proposals and approval of proposals; and
- Achieve the highest standards of design, in relation to integration, layout, access, materials and environment.

It is also intended to be a practical tool to support planners in negotiations and at the master planning stages, as well as a tool for development control officers and a source of guidance for developers.

The SPD was prepared following public consultation between 7th November and 19th December 2005. Comments were assessed and used where appropriate to help shape the final document.

4.9 Cambridge City Council Planning Obligation Strategy (POS) 2007 (Draft Supplementary Planning Document (SPD) for Public Consultation)

Due to increasing pressure from the development of land for housing, commercial and other uses, Cambridge City Council has been influential in using planning obligations (also known as Section 106 agreements) to help secure improvements to local infrastructure. This is done through securing provisions or contributions from new developments to help mitigate against the impacts of the development on the environment and strategic infrastructure of the area. The existing Cambridge City Council Planning Obligation Strategy (POS) has been successfully applied to achieve these aims but the POS is now required to be reviewed and updated to reflect recent Central Government and Sub-regional guidance, advice and policy and in accordance with the Cambridge Local Plan 2006 and the Council's Local Development Scheme.

The draft POS SPD emphasises the need for financial contributions to successfully manage waste in the future as a result of the increasing pressures of development in the City. The draft POS SPD sets out a methodology for calculating contributions and applying them to new development as follows:

Household Waste and Recycling Receptacles

Financial contributions will be required in respect of all residential developments for the provision of household waste and recycling receptacles on a per dwelling basis. As the type of waste and recycling containers provided by the City Council vary, depending on whether the residential development proposed comprises houses or flats, two different formulae will be applicable.

Houses	£65 per house based on 2xwaste receptacles and 2x recycling boxes
Flats	£150 per flat (based on provision of large communal Eurobins which are litre for litre more expensive than small bins)

NB Bulk delivery of receptacles to a developer's site, where bins can be stored and released to residents as and when they move into properties, is preferable.

Mini Recycling Centres

For large-scale developments, including those within the "Areas of Major Change", consideration will be given to the need to incorporate additional mini recycling centres within the development site, based on the likely level of additional demand generated by the development and the available capacity of any existing local recycling centres in the vicinity However, it is likely that developments comprising 1,000 or more residential units will be expected to incorporate new underground 7 unit mini recycling centres within the development site. Requirements for developments comprising between 200 –1,000 residential units will need to be assessed on a site by site basis but consideration will be given to the potential for incorporation of smaller underground mini recycling centre facilities, related to the scale of the development.

Household Waste and Major Waste Recycling Facilities

Policy P7/12 of the "Cambridgeshire and Peterborough Structure Plan 2003" requires that major developments make adequate provision for strategic and/or local waste management facilities. Such requirements will need to be considered in relation to the developments within the Urban Extensions and will be considered as part of the relevant master planning processes. Regard will also need to be had to the "Cambridge and Peterborough Waste Local Plan 2003" and the current Waste and Minerals LDF process.

Although this POS has not yet been adopted, subject to changes to the education part of the strategy, a revised version is expected to be submitted to Members for consultation and adoption early 2008.

4.10 Peterborough City Council Planning Obligation Strategy (Draft for Public Consultation)

Peterborough City Council published a Planning Obligations Strategy in March 2007 following consultation that commenced in July 2006. The strategy is a supplementary Planning Document and is a 'material planning consideration' for decisions on planning applications. The strategy is a dynamic working document that is subject to regular review and update.

Peterborough City Council has direct responsibility for the provision and management of two household recycling centres (HRCs). The draft POS advocates that:

'Every new home and business produces waste and recyclable material, therefore every new development will have to contribute towards recycling and waste facilities. Some of this contribution will be used for the provision of new recycling systems and some may be used city wide for new recycling centres/facilities' (para.25.5).

The draft POS outlines a methodology for increasing the capacity of existing waste facilities to accommodate increasing development in Peterborough, as follows:

- Increase the frequency of collections, provide new plant and machinery, improve traffic management arrangements and increase opening hours;
- The general principle that shall be applied is that all residential schemes, irrespective of the number of the units should make a contribution to safeguard the delivery of these improvements; and
- In some circumstances, the improvement or expansion of existing facilities may not be sufficient to cope with the anticipated extra demand arising from new residential development. In these circumstances, the Council will seek to procure a new site for the provision of a new Civic Amenity Site.

Peterborough City Council has suggested a simple formula as follows:

$$\frac{\text{Cost of Infrastructure}}{\text{Number of dwellings without planning permission}} = \text{Contribution per dwelling}$$

Based on this formula we calculate the cost per dwelling to be £3,200 to £5,700 per dwelling.

The draft POS is currently under public consultation.

Appendix 2

LATS Statement

Appendix 2: LATS statement

1 Landfill Allowance Trading Scheme (LATS)

1.1 What is The Landfill Allowance Trading Scheme?

The landfill regulations transposed from the EU Landfill Directive sets demanding targets to reduce the amount of biodegradable municipal waste (BMW) which is landfilled. A Landfill Allowances Trading Scheme (LATS) has been introduced for England to help the UK meet these targets. The allowances are tradable between authorities allowing the burden of meeting the Landfill Directive's targets to be met in the most cost effective way.

1.2 How does the Landfill Allowance Trading Scheme work?

Each waste disposal authority (WDA) has been allocated a set amount of biodegradable municipal waste that it is permitted to send to landfill in each year up to 2020, based on the 'baseline year' tonnage it sent to landfill in 1995. These allocations are statutory and the maximum landfilled BMW reduces year on year in order to reach targets in 2010, 2013 and 2020. Failure to meet the targets can lead to an authority incurring financial penalties of up to £150 per tonne, while the UK as a whole faces significant fines from the EU. The LATS allows authorities to purchase allowances from those authorities with excess allowances, sell to those authorities who require more and also to bank any excess for their own use in subsequent years. They can also borrow from their own future allowances for use in the current year.

1.3 The Landfill Directive

The LATS is the mechanism for transposing part of the EU Landfill Directive into UK law. The implications for waste collection and disposal authorities are set out in Appendix 1.

The Landfill Directive requires the UK to reduce the amount of BMW sent to landfill as follows:

- To reduce the amount of BMW sent to landfill to 75% of that produced in 1995, by 2010;
- To reduce the amount of BMW sent to landfill to 50% of that produced in 1995, by 2013; and
- To reduce the amount of BMW sent to landfill to 35% of that produced in 1995, by 2020.

1.4 The LATS Targets

Under LATS, every WDA and unitary authority (UA) in England has been set specific targets (or allowances) for the amount of BMW that they can landfill. The maximum amount of BMW for each WDA and UA has been set for each year up to 2019/2020 with the targets being based on the waste arisings from 2001/02. As explained above, there is the opportunity for a failing authority, rather than be liable for fines, to purchase unused allowances from other authorities or to borrow some of their own allowance from a future year.

The individual landfill allowances for Cambridgeshire County Council (CCC) and Peterborough City Council (PCC) for each year can be seen in Table 1.

	Cambridgeshire	Peterborough
2005/06	145,772	46,037
2006/07	139,750	44,054
2007/08	131,720	41,409
2008/09	121,683	38,102
2009/10	109,638	34,135
2010/11	97,434	30,335
2011/12	85,230	26,536
2012/13	73,026	22,736
2013/14	69,894	21,761
2014/15	66,761	20,786
2015/16	63,629	19,810
2016/17	60,496	18,835
2017/18	57,364	17,860
2018/19	54,231	16,885
2019/20	51,099	15,909

Table1: Landfill Allowance Trading Scheme Allowances for Cambridgeshire Peterborough in tonnes[1] (target years highlighted)

Cambridgeshire and Peterborough have devised strategies that will enable them to meet their LATS targets. These strategies are outlined opposite.

1 Data sourced from http://www.defra.gov.uk/environment/waste/localauth/lats/pdf/tableb-latsallocat.pdf

2 Cambridgeshire County Council

Cambridgeshire has developed a LATS strategy with clearly defined roles for various officers. These include the buying and selling of permits, advertising of allowances, monitoring the market and keeping accurate data and lobbying Defra, Department of Communities and Local Government (DCLG), Environment Agency (EA) etc. These roles and responsibilities have been outlined in the Cambridgeshire 'LATS Trading Policy' (2007) and 'Risk Register' (2007) and are summarised in Table 2 below.

Role	Responsibility
LATS trading Officer (CCC Waste Business Manager)	Monthly monitoring of the allowances trading • Provide accurate up-to-date actual figures • To compare actual with tonnages predicted • Update forecasts and prediction models. Report quarterly on market place activities, the Council's performance and trade to date. Put forward trading recommendations and notify Authorising Officers of any approach to trade. Act as initial point of contact for DEFRA, EA and trading authorities etc. Co-ordinate Trades: • liaise with WDA • ensure contract completion • register trade • update bulletin boards and any relevant documents/models.
Waste Policy and Delivery Officer	Communicate to DCs and contractors Communicate with PFI contractor
Authorising Officers (E&R Director and Directors of Finance & Performance)	Advise on LATS budget Authorise trades/banking/borrowing Approve advertisement of allowances

Table 2: CCC LATS roles and responsibilities[2]

2.1 Cambridgeshire County Council Disposal Treatment Facility

Cambridgeshire intends to manage its residual waste via a Mechanical Biological Treatment (MBT) facility. Cambridgeshire has named Donarbon as its preferred bidder to design, build and operate the MBT facility. Donarbon's solution includes expanding the source-segregated composting facilities and the new MBT facility to treat 240,000t of residual waste per annum. The outputs from the MBT facility include metals that can be recycled, plastics which can be used in Refuse Derived Fuel (RDF) and a stabilised compost-like output which can potentially be used as a soil enhancer. It is proposed that the MBT facility will be built and operational by 2010.

The MBT will divert BMW from landfill and assist in the long term to achieve the LATS targets.

2.2 Meeting long term LATS allowances

Cambridgeshire County Council's LATS Trading Policy (2007) includes predictions for the amount of BMW sent to landfill in the Cambridgeshire area up to 2015/16, as shown in Table 3 and Table 4. Table 3 shows the figures from Cambridgeshire's prediction model, and does not take into account the implementation of the MBT facility, planned for commissioning in 2010. Whereas Table 4 shows predictions once Donarbon's MBT plant is operating.

The growth rate for municipal waste is based on projected household growth with a 1% growth per household up to 2007, 0.5% from 2008 – 2019[3].

The data show that without the implementation of the MBT facility, Cambridgeshire will need to purchase permits from 2009/10 onwards. With the implementation of the facility by 2010, Cambridgeshire will have the option of selling surplus allowances in subsequent years which is a stronger and more positive position to be in.

2 From Cambridgeshire County Council's LATS Trading Policy (2007)

3 This is the same as scenario 3 discussed in the baseline appendix and used in the modeling exercise (however the modeling has different base years i.e. 2005/06 in the LATS strategy and 2006/07 for the baseline.)

If for any reason the MBT is not operational by 2010, Cambridgeshire has predicted that a cost of £246,105 will be incurred for purchasing permits to make up the deficit for that year (if permits are estimated to cost £45 per tonne in that year). The cost of allowances is set by the authority selling them, in response to the prevailing market trading rate, and therefore this figure is based on predictions of the cost of purchasing. Under the worst case scenario, where there were no permits available for purchase, Cambridgeshire would attract an £820,550 fine in that year (based on the £150 per tonne set fine rate). Table 3 illustrates the years where it was predicted that surplus would be available for trade and also the years where it is anticipated that further allowance would need to be purchased.

2.3 Trading scheme

Cambridgeshire County Council has a comprehensive LATS strategy which predicts future LATS requirements. The strategy is designed to meet long term requirements whilst setting out the operational and financial implications of the trading scheme.

	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16
LATS ALLOCATION	145,772	139,750	131,720	121,683	109,638	97,433	85,230	73,026	69,894	66,761	63,629
Landfilled/Predicted Model[3]	125,350	118,783	111,001	113,034	115,107	117,222	119,380	121,519	123,700	125,922	128,188
LATS Allowances for sale	20,422	20,967 +	20,422	20,719	8,649	n/a	n/a	n/a	n/a	n/a	n/a
LATS Allowances to buy	0	0	0	0	5,469	19,788	34,150	48,493	53,806	59,161	64,599
Carried forward	20,422										
Price	£40	£16.79+	£16.79+	£16.79+	Up to £150	£?	Up to £150	Up to £150	£?	£?	£?
Recommendation	Sell/bank	Sell/bank	Sell	Sell	Buy	Buy	Buy	Buy	Buy	Buy	Buy

Table 3: Cambridgeshire Prediction Model Forecast without MBT

	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16
No RDF	N/a	N/a	N/a	N/a	Some contribution from MBT could be expected	31,685-	32,288-	32,884-	42,204-	34,110-	34,741
RDF*3						39,937	40,694	41,422	33,941	42,982	43,774
Surplus: No RDF						57,497-	44,536-	31,584	27,690-	23,779-	19,855-
RDF						65,749	52,942	40,142	36,403	32,651	28,888
Recommendation					Sell if surplus	Sell	Sell	Sell	Sell	Sell	Sell

Table 4: Donarbon's Model Forecast with MBT

Notes: *1 Figures for 05/06 are actual
*2 Donarbon's predictions are subject to negotiation of Waste PFI
*3 There is still further work to be done if any Refuse Derived Fuel is to be produced

3 Peterborough City Council LATS trading policy and position statement 2005/06

Peterborough City Council developed a comprehensive LATS trading policy and position statement in 2005/06 that clearly sets out their predictions and stance on their LATS situation.

3.1 Future waste Growth and LATS Targets

The amount of BMW being sent to landfill in Peterborough was been modelled using 6 different scenarios by Peterborough, shown in Table 5. The scenarios include improvements to recycling and composting schemes and do not include the impact of any new residual waste treatment facilities such as MBT or EfW to treat all the residual waste. However Scenario 6, is the same as Scenario 5 with an additional diversion of 5,000 tonnes per annum to an energy from waste facility, to divert more BMW from landfill.

Scenario	Description
1	Extension of current waste management practices (business as usual)
2	Materials Recycling Facility (MRF) improvements (such as a reduction in rejects and improved segregation of recyclable material, & higher recycling coverage
3	Scenario 2 + high diversion of kitchen waste and compostable paper from 2008/09
4	Scenario 2 + very high diversion of kitchen waste from 2008/09
5	Scenario 3 + high capture of recyclable materials from the kerbside
6	Scenario 5 + diversion of materials to energy recovery

Table 5: The Scenarios Modelled[4]

All the scenarios were modelled with a population growth rate of 1.65% for every year and a waste (per head) growth rate of 2% up to 20012/13 and 1% thereafter.

Scenario 1 is a 'business as usual' scenario, and shows the growth in BMW being sent to landfill if no improvements are made to current waste management practices. When this performance is compared against its LATS targets, Peterborough clearly fails to meet LATS targets by progressively larger margins from 2008/2009. A comparison of predicted waste growth and LATS targets under the Scenario 1 stipulations is shown in Figure 1

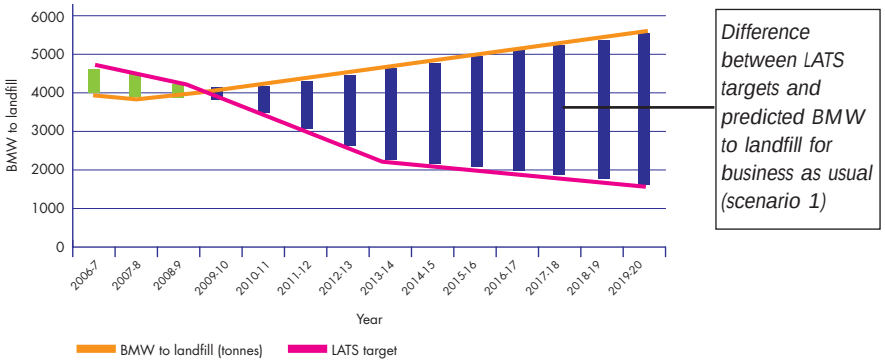


Figure 1: Peterborough Predicted BMW to Landfill (Under Scenario 1 – Business as Usual) Against BMW to Landfill LATS Targets[5]

In 2008/2009, no fines would be incurred by Peterborough, and they would not be required to purchase additional permits, as there would be sufficient permits banked from previous years. However, permits cannot be banked into the 2009/10 target year, as explained earlier, so Peterborough would have to purchase additional permits to avoid incurring fines.

3.2 Alternative scenarios

Figure 2 shows the BMW to landfill and LATS targets under the remaining five scenarios described in Table 5. As can be seen, scenarios 4, 5 and 6 meet the LATS target in 2009/10, however, all scenarios fail to stay within LATS allocations from 2010/11 onwards. Consequently, Peterborough had the following options available to it (in 2005/06):

4 Peterborough LATS Position Statement: Executive Summary (2006)

5 Peterborough Landfill Allowance Trading Scheme: Trading Policy (2006)

- Bank as many surplus LATS permits as possible (but this will only have an impact on the years preceding a target year);
- Trade permits when possible to meet the LATS allocation instead of paying the fines (dependent on the market for LATS allowances, costs and availability);
- Accept all LATS fines (Table 3) and its share of any EU fines imposed on the UK (this figure could run into millions of pounds in LATS fines alone); and
- Invest in a new residual waste diversion technology sufficient to achieve the longer term LATS targets or reduce the impact of associated costs.

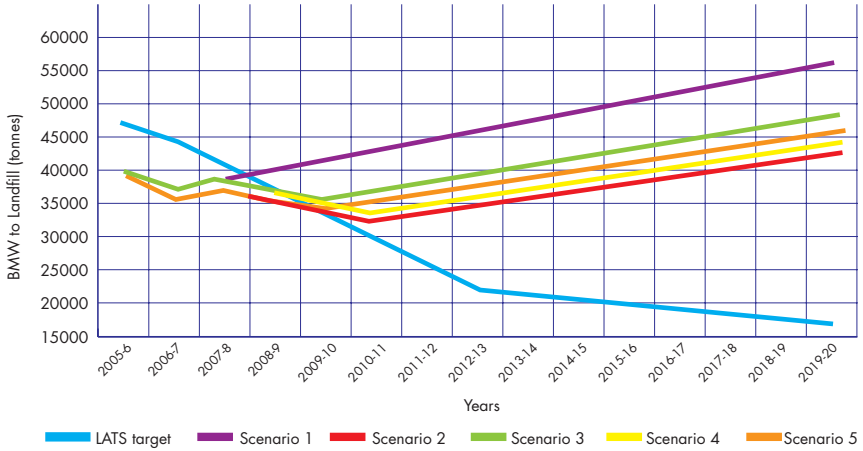


Figure 2 Peterborough City Council BMW to Landfill and LATS Targets Under All Scenarios

3.3 Preferred scenario

Scenario 2 assesses the effects of improvements to the MRF on recycling rates and on diversion of BMW from landfill. Scenario 3 takes into account that approximately 50% of the materials in the refuse bin are organic. These materials could be diverted from landfill into the kerbside organic collection if processed in an approved organic treatment facility. This scenario shows the effect of diverting a proportion of the kitchen waste and compostable paper which are not presently diverted from landfill.

Scenario 4 represents the same assumptions as scenario 3, with a higher diversion of kitchen waste from the refuse to the kerbside collection. The capture rates of kitchen waste assumed in this scenario are 50% in 2008/09 and 75% in the following years. This scenario shall therefore show the impact this would have on composting and diversion rates. These capture rates, although theoretically achievable, will require not only education campaigns but enforcement action to be taken against those residents not using the bins correctly.

Scenario 5 is a combination of scenario 2 and 3 with a high capture of recyclable materials from the kerbside to achieve 51.2% recycling and composting rate and was seen to be the most realistic in terms of meeting the short term targets up to 2009/2010. To achieve this, research needs to be undertaken into the possible introduction of more underground banks to improve the recycling collection coverage across the city; improvements to the Householders Recycling Centre (HRC) and Electrical Appliance Recycling programme (EARP) Facility; as well as a new treatment facility for kitchen waste. These improvements to the waste management infrastructure of the city would cost the council an estimated £10 million but could also create opportunities for income generation.

3.4 Meeting long term LATS allowances

The position statement published in 2005/6 stated that to avoid the future increased costs and penalties the Council needs to invest in a new long-term residual waste management technology to be operational by 2010/11. This could cost the Council up to £45 million but once operational could generate an income through not only selling excess treatment capacity to local authorities/parties but also in the trade of surplus LATS allowance. An "integrated strategy" for the treatment of waste is proposed. This will include treatment of the residual portion of the waste stream via a technology such as MBT or EfW as well as achieving higher levels of recycling and composting.

It will be very difficult to meet the LATS targets from 2010/11 without a new residual treatment facility. Therefore the medium to long term position

6 Peterborough LATS Position Statement: Chapter 5.1 (2005/6)

for the treatment of waste must be considered by a Waste Working Group in the very near future. Options for a new residual treatment include:

- Option A – Procuring residual waste treatment capacity from a third party such as a private waste contractor or a neighbouring local authority;
- Option B – Enter into Public Private Partnership (PPP) with a waste management company, or other LA's. This would allow the capital investment required to build a residual treatment facility as well as the risk associated with building such a facility to be shared; and
- Option C – Enter into a PFI agreement with a private waste contractor and other LA's which would entail the Council being successful in bidding for PFI funding from DEFRA.

3.5 Updates and changes to the LATS trading policy and position statement 2005/06

Since the LATS position statement published by Peterborough in 2005/06, Peterborough have made progress with regards to their selection of their residual waste treatment technology. As a result, Peterborough are due to update Peterborough's LATS position statement by the end of 2008 and it will include the following changes:

- Peterborough has now chosen the technology option of an Energy Resource Recovery Facility (ERRF) to be operational by 2012/13;
- Financial options to procure this facility are still be considered; and
- Updated modelling required (incorporating new recycling options from the JMWMS strategy) to achieve the new higher recycling targets (with agreed growth rates) of:

  55% in 2015; and

  65% in 2020.

Appendix 3

Baseline Report

Appendix 3: Baseline Report

1. Introduction

This baseline report is based on the collection and collation of data relating to household waste arisings in Cambridgeshire and Peterborough. The data collected has been analysed to highlight the summary of the waste management practices in the region for the Recycling in Cambridgeshire and Peterborough (RECAP) Waste Strategy consultation and prepared by RECAP.

1.1 Sources of information

- Cambridgeshire County Council Research Group
- www.cambridgeshire.gov.uk
- www.peterborough.gov.uk
- Data supplied by Cambridgeshire County Council

2. Socio-demographics

2.1 Introduction

This baseline report sets the scene for the management of household waste for the Cambridgeshire and Peterborough Waste Partnership and forms part of the core strategy document.

The following information will illustrate current waste services provided in the area, current waste performance and composition of household waste and predicted waste growth trends with forecasted performance.

As Cambridgeshire County Council and Peterborough City Council are both Waste Disposal Authorities (WDA), at times it will be necessary to provide separate information for each. However, both WDAs work in partnership where appropriate and share best practice.

2.2 Context

Cambridgeshire and Peterborough are made up of both urban and rural authorities with a vast array of housing type, demographics and socio-economics all of which are factors that influence waste arisings.

The socio-demographic profile from ACORN is used in order to represent the population. A Classification of Residential Neighbourhoods (ACORN) is based on the Census information and classifies the UK households according to a range of sociological, demographic and socio-economic indicators (e.g. age, sex, property type, number of residents, location, income, occupation, life style variables). The main six categories of the ACORN classification are:

ACORN 1 – Wealthy Achievers	ACORN 4 – Moderate Means
ACORN 2 – Urban Prosperity	ACORN 5 – Hard Pressed
ACORN 3 – Comfortably Off	ACORN U – Undefined

Each of the above categories have subdivisions for e.g. ACORN 3 is further branched as:

Asian Communities	Crowded Asian terraces
	Low income Asian families
Post-Industrial Families	Skilled older families, terraces
	Young working families
Blue-Collar Roots	Skilled Workers, semis and terraces
	Home owning families, terraces
	Older people, rented terraces

Table1: ACORN 3 Sub Categories

Table 2 and 3 outlines the ACORN profile for the region as percentage of total households. The most prominent ACORN categories in the region are 1, 3 and 5 for both Cambridgeshire and Peterborough City.

Cambridgeshire	Peterborough
40% of households ACORN 1	23% of households ACORN 1
31% of households ACORN 3	29% of households ACORN 3
12% of households ACORN 5	25% of households ACORN 5

Table 2: Overall ACORN Profile for Cambridgeshire and Peterborough

Local Authority	ACORN 1	ACORN 2	ACORN 3	ACORN 4	ACORN 5	ACORN U
Cambridge City	5.3%	46.5%	19.1%	4.4%	20.9%	3.8%
East Cambridgeshire	49.2%	2.5%	36.2%	2.1%	9.5%	0.5%
Fenland	41.6%	1.4%	33.9%	7.8%	15.3%	0%
Huntingdonshire	45.1%	3.2%	34.9%	7.5%	9.1%	0.2%
South Cambridgeshire	53.8%	4.3%	30.8%	2.2%	8.5%	0.4%
Cambridgeshire County	39.8%	11.6%	31.2%	5%	12.4%	0%
Peterborough	23.4%	2.9%	29.2%	19.7%	24.8%	0%

Table 3: ACORN Profiles for Cambridgeshire and Peterborough

2.3 Population forecasts

Table 4 shows past and future population estimations within the JSA and also the mid estimates for 2006. East Cambridgeshire is predicted to have had the greatest population increase, with a 7.6% increase since 2001 followed by Fenland and South Cambridgeshire with increases of 7.4% and 5.6% respectively. Peterborough has the largest population in the region in the Mid-2006 estimates since 2001 Census.

Local Authority	2001	2006	2011	2016	2021
Cambridge City	109,900	113,700	131,800	147,500	149,000
East Cambridgeshire	70,900	76,300	80,600	81,800	80,700
Fenland	83,700	89,900	91,600	94,900	99,300
Huntingdonshire	157,200	160,700	168,100	165,500	165,600
South Cambridgeshire	130,600	138,000	150,000	160,900	170,500
Cambridgeshire County	552,100	578,800	621,900	650,400	664,800
Peterborough	157,400	166,000	175,200	188,900	203,200

Table 4: Mid-2006 Estimates for Cambridgeshire and Peterborough[1]

Population in the area is expected to increase to 797,100 by 2011, an increase of 7% from 2006. All the authorities have estimated rises ranging from 15.8% in Cambridge City to 1.8% in East Cambridgeshire during this same period.

2.4 Housing forecasts

The Mid-2006 estimates for the region indicate an increase of 10.6% and 9% respectively in East Cambridgeshire and Fenland housing stock which is line with the increase in population rise in the two District Councils, followed by South Cambridgeshire with an increase of 6.5%.

Local Authority	1991	2001	2006	2011	2016	2021
Cambridge City	41,700	44,500	46,700	53,400	61,500	63,500
East Cambridgeshire	25,700	30,900	34,200	37,200	38,900	39,500
Fenland	32,400	36,700	40,000	42,100	44,800	47,700
Huntingdonshire	58,200	65,700	68,600	73,100	75,000	76,900
South Cambridgeshire	48,300	54,200	57,700	65,000	72,000	77,700
Cambridgeshire County	206,400	232,000	247,200	270,800	292,200	305,300
Peterborough[3]	64,300	70,300	74,000	79,600	87,200	95,300

Table 5: Dwelling Stock Estimates for Cambridgeshire and Peterborough[2]

1 Cambridgeshire County Council Research Group Mid-2006 population forecasts by district and single year, 12th July 2007

2 Cambridgeshire County Council Research Group Mid-2006 population forecasts by district and single year, 9th August 2007

3 http://www.peterborough.gov.uk/pdf/env-plan-pop-PboroPopEstsdwellingReportMid2004a.pdf

The area has been earmarked for development by Central Government and Cambridgeshire and Peterborough are expected to have some of the highest housing increases in the Country. Cambridge City is estimated to be allocated a 14.3% rise between 2006 and 2011, the biggest in the partnership area, followed by South Cambridgeshire and East Cambridgeshire with an estimated 12.7% and 8.8% rise respectively. Over the long term to 2021, Peterborough has the highest level of planned housing growth of any district in the East of England.

The area is experiencing such a high growth because it is attractive to business, has good transport links, high tech businesses that want to be associated with the universities, its proximity to London and the availability of land.

Figure 1 illustrates the housing infrastructure in the region. The majority of the houses are detached or semi-detached according to the 2001 Census. Terraced houses also make around one-fifth of the dwelling stock.

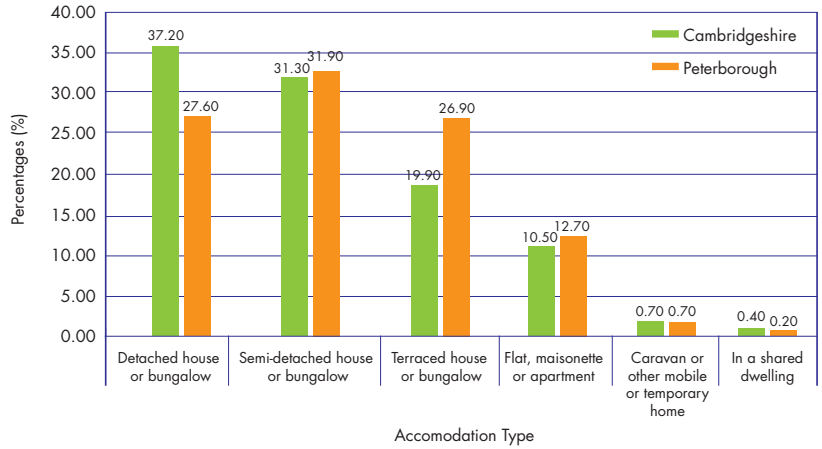


Figure 1 Accommodation Type [4]

3. Refuse collection and recycling service

In 2006/07, Cambridgeshire County and Peterborough generated in excess of 436,000 tonnes of Municipal Solid Waste (MSW) through a range of waste collection services provided by the Household Recycling Centres (HRCs), District and City Council services.

The following pages provide a brief description of the waste collection services offered by the Authorities. Tables 6 and 7 provide the various arrangements the authorities have in place to collect and treat waste.

3.1 Summary of Refuse Collection

Each authority has its own arrangements in place to collect residual waste and all but one authority uses its in-house services. Table 6 below summarises the arrangements across the area.

Authority	Coverage	Receptacle	Frequency	Policy
Cambridge City	100%	240l / 140l black wheeled bins, some black sacks	Alternate Weekly	Side waste (waste that will not fit into the bin and is left at the side of the bin by residents) not collected
East Cambridgeshire	100%	Black sacks	Weekly	No restrictions on number of sacks
Fenland	100%	140l /180l /240l green wheeled bin/ black sacks	Alternate Weekly	Side waste is placed back into the bin and owner is requested to discuss needs with the Council.
Huntingdonshire	100%	180l /240l black wheeled bin	Alternate Weekly	Side waste is placed back into the bin and owner is requested to discuss needs with the Council.
South Cambridgeshire	100%	240l black wheeled bin	Alternate Weekly	Side waste is not collected
Peterborough	100%	240l black wheeled bin	Alternate Weekly	Side waste is not collected

Table 6: Residual Waste Collection in Cambridgeshire and Peterborough

4 http://www.cambridgeshire.gov.uk/NR/rdonlyres/D2A9BC59-DFA1-4722-955A-35A0AA51A10A/0/CambsProfile.pdf and http://www.cambridgeshire.gov.uk/NR/rdonlyres/E0DEA099-0B7A-42A2-A459-055AB91FA9A8/0/PeterboroughProfile.pdf

Authority	Contractor	Contract Start Date	Contract End Date	Number of Vehicles	Destination
Cambridge City	In house	None	None	5 RCVs	Donarbon, Waterbeach
East Cambridgeshire	Veolia	2007	2015	7 RCVs and 1 caged vehicle	Donarbon, Waterbeach
Fenland	In house	None	None	10 RCVs	WRG, March; Donarbon, Wisbech and Waterbeach
Huntingdonshire	In house	None	None	9 RCVs	WRG, Buckden
South Cambridgeshire	In house	None	None	7 RCVs, 1 caged vehicle and 1 van	Donarbon, Waterbeach
Peterborough	In house	None	None	6 RCVs	WRG, Dogsthorpe

Table 7: Current Refuse Contracts in Cambridgeshire and Peterborough (as of October 2007)

3.2 Summary of Kerbside Recycling and Organic Collections

Almost all households in the area are provided with a comprehensive three-stream kerbside collection service. This has been achieved through successful bids to the DEFRA Waste Minimisation and Recycling Fund and commitment of the authorities. Each authority has its own collection systems in place and the tables below outline the current arrangements.

Authority	Coverage	Receptacle	Frequency	Materials	Policy
Cambridge City	84.6%	55l / 40l black and blue box	Fortnightly	Paper, Cans, Separate Glass, Aerosols, Plastic Bottles, Foil	Side waste accepted, additional box charged.
East Cambridgeshire	99.7%	55l black box	Fortnightly	Paper, Cans, Mixed Glass, Aerosols	Free additional box.
Fenland	100%	240l blue wheeled bin or clear sack	Fortnightly	Paper, Cardboard, Cans, Aerosols, Plastic Bottles, TetraPak	Co-mingled (recyclables collected together for later sorting). No side recycling collected.
Huntingdonshire	100%	240l / 140l blue wheeled bin or 55l green box or clear sack	Fortnightly	Paper, Cardboard, Cans, Aerosols, Plastic Bottles, TetraPak	Co-mingled Free additional box.
South Cambridgeshire	97.8%	55l green box	Fortnightly	Paper, Cans, Mixed Glass, Aerosols,	Free additional box.
Peterborough	93.6%	240l green wheeled bin	Fortnightly	Paper, Card, Cans, Aerosols, Plastic Bottles, TetraPak	Co-mingled. No side recycling collected.

Table 8: Kerbside Dry Recycling Services in Cambridgeshire and Peterborough

Authority	Coverage	Receptacle	Frequency	Policy
Cambridge City	84.6%	240l/140l green wheeled bins / 75l paper sack	Alternate Weekly	Green garden and kitchen waste accepted. Side waste not collected
East Cambridgeshire	99.7%	Paper sack	Fortnightly	Green garden & kitchen waste accepted. No restrictions on number of paper sacks set out. Residents can purchase extra sacks.
Fenland	100%	240l brown wheeled bin/ paper sack	Alternate Weekly	Green garden and kitchen waste accepted. Side waste not collected
Huntingdonshire	100%	240l /140l green wheeled bins	Alternate Weekly	Green garden and kitchen waste accepted. Side waste accepted
South Cambridgeshire	100%	240l /180l green wheeled bins & sacks	Alternate Weekly	Green garden and kitchen waste accepted. Side waste not accepted
Peterborough	83.6%	240l brown wheeled bin	Alternate Weekly	Only Green garden waste accepted. Side waste not collected

Table 9: Kerbside Organic Waste Services in Cambridgeshire and Peterborough

Each authority has its own contractual arrangements in place for these kerbside services, with two authorities using a private contractor for collections. The arrangements are outlined in the Table 10.

Authority	Kerbside Dry Recycling Collections			Kerbside Organic Collections		
	Contractor	Contract Start Date	Contract End Date	Contractor	Contract Start Date	Contract End Date
Cambridge City	In house	None	None	In house	None	None
East Cambridgeshire	Veolia	2007	2015	Veolia	2007	2015
Fenland	In house	None	None	In house	None	None
Huntingdonshire	In house	None	None	In house	None	None
South Cambridgeshire	Veolia None	October 2005, review 2008	October 2010	In house	None	None
Peterborough	In house	None	None	In house	None	None

Table 10: Current Contracts for Kerbside Recycling and Organic Services in Cambridgeshire and Peterborough

3.3 Bring sites

A series of bring sites are located around the area that take dry recyclables. Members of the public can take their recyclables they have already sorted to special containers located at convenient locations, such as supermarket car parks. Table 11 below summarises the number of sites and type of material collected.

Authority	Households within 1 km (2003/04)[5]	Number	Waste Acceptance
Cambridge City	98%	30	Paper, Glass, Cans, Plastic Bottles, Textiles, Books, Foil, TetraPak
East Cambridgeshire	89%	51	Paper, Glass, Cans, Plastic Bottles, Textiles, Books, Foil, TetraPak
Fenland	>90%	70	Paper, Glass, Cans, Textiles, Foil
Huntingdonshire	97%	101	Paper, Glass, Cans, Textiles, Books, Foil
South Cambridgeshire	85%	92	Paper, Glass, Cans, Plastic Bottles, Textiles, Books, TetraPak
Peterborough	95%	31	Glass, Textiles, Mixed recyclables, books, small electrical appliances

Table 11: Bring Banks in Cambridgeshire and Peterborough[5]

3.4 Summary of other waste and recycling services

3.4.1 Bulky waste

All authorities provide a bulky waste collection service to the public shown in Table 12 and material collected generally goes to landfill (except Fridges and Freezers, and Peterborough send many of the electrical appliances to the Electrical Appliance Recycling Plant). Members of the public are encouraged to use charity and community collection services if they have items of furniture for example that are reusable and suitable for re-sale.

Authority	Policy
Cambridge City	A charge is made for the service depending upon the number of items, except for fridges/ freezers. The service is free for pensioners and disabled people.
East Cambridgeshire	This service is chargeable at £20.00 per three items. Service for items of household furniture, floor coverings and white goods such as washing machines and cookers provided.
Fenland	Service charge of £20.60 for two items and £10.30 per additional item. Director of Environment and Health has discretion to waive charge in cases of severe hardship. Fridges/ freezers are charged at £15.45 per unit.
Huntingdonshire	Service charge for six items or less is £23 and £29.00 per hour for any additional items. Payments are to be made in advance.
South Cambridgeshire	Service charges are £30 for up to three items and £5 per additional item.
Peterborough	One free collection of up to five items is allowed per household per year. Allowable items include washing machines, TV's, videos, HiFi's, computers, prams, pushchairs, bicycles, carpets, mattresses, cardboard, furniture refrigerators, cookers, baths, sinks, WC pans, wash basins, internal doors and radiators. Charges apply if a second service is needed in any given year, more than five items are collected or for certain special items. The current charge is typically £20.48, though this may vary according to the amount collected. Many of the electrical items collected are sent to the Electrical Appliance Recycling Plant for refurbishment or recycling.

Table 12: Bulky Waste Services in Cambridgeshire and Peterborough

5 www.bvpi.gov.uk

3.4.2 Commercial waste services

Each authority has different arrangements in place that service local businesses or Small and Medium Enterprises (SMEs). Only East Cambridgeshire has contracted this service to a private contractor.

The Partnership was awarded £213K BREW funding for 2007/08 to establish new and expand existing trade recycling collections:

- Currently, only Peterborough provides a comprehensive trade recycling service, which collects recyclables commingled. They are using this funding to establish a trial weighing system linked by a full GIS system, with a view to adopt a charging by weight service;
- Cambridge City provides a separate cardboard collection and is using this funding to include glass collection for its customers;
- The other collection authorities are investigating options to introduce trade recycling services to SMEs in the area and are using the BREW funding to support this; and
- Cambridgeshire County Council are using this funding to work with their landfill and composting contractor to establish transfer stations across the region that will accept trade waste delivered, at a charge, which can be sorted so some elements can be recycled.

The details of the service are shown in Table 13.

Authority	Receptacle	Frequency	Policy
Cambridge City	Varies as per requirement	As required	Cardboard recycling collection available. Other waste collected is taken to Donarbon landfill Site.
East Cambridgeshire	Council passes commercial waste collection enquiries to its contractor Veolia.		
Fenland	Varies as per requirement	As required	Waste collected is sent to Donarbon landfill site.
Huntingdonshire	White sacks	Weekly	Waste collected is sent to Buckden landfill site.
South Cambridgeshire	Varies as per requirement	3 times a week	Waste collected is sent to Donarbon landfill site.
Peterborough	Varies as per requirement	As required	Waste collected is sent to Dogsthorpe landfill site or commingled recyclate is sent to Peterborough MRF.

Table 13: Commercial Waste Services in Cambridgeshire and Peterborough

3.4.3 Clinical waste service

Residents that require a clinical waste collection are provided yellow bags through the NHS and the Authority collects the bags from the kerbside.

Authority	Coverage	Receptacle	Frequency	Policy
Cambridge City	100%	Yellow sacks double skinned	Weekly	Waste is sent to Addenbrookes Hospital for incineration
East Cambridgeshire	100%	Yellow sacks double skinned	Weekly	Waste is sent to Addenbrookes Hospital for incineration
Fenland	100%	Yellow sacks double skinned	Weekly	Waste is sent to Addenbrookes Hospital, Cambridge for incineration.
Huntingdonshire	100%	Yellow sacks double skinned	Weekly	Waste is sent to Vetspeed, Thirplow for incineration
South Cambridgeshire	100%	Yellow sacks double skinned	Weekly	Waste is sent to Addenbrookes, Hospital for incineration.
Peterborough	100%	Yellow sacks double skinned	Weekly	Waste is sent to Edith Cavel Hospital Transfer Station the onward for incineration at Addenbrookes Hospital.

Table 14: Clinical Waste Services in Cambridgeshire and Peterborough

3.4.4 Street sweepings

In compliance with the Environmental Protection Act 1990, the Waste Collection Authorities have a comprehensive street cleansing service to ensure roads are kept free of litter and refuse, detailed in Table 15.

Authority	Frequency	Details
Cambridge City	Daily	Collections are delivered to Waterbeach landfill site and leaves are sent to Cherry Hinton for composting.
East Cambridgeshire	Daily	Collections are delivered to Donarbon
Fenland	Dependent on road classification	Collections are delivered to Wisbech landfill site.
Huntingdonshire	Dependent on road classification	Collections are delivered to Buckden landfill site.
South Cambridgeshire	3 times a week	Collections are delivered to Waterbeach landfill site.
Peterborough	Daily	Collections are delivered to Dogsthorpe landfill site for disposal or composting as appropriate.

Table 15: Street Sweeping Services in Cambridgeshire and Peterborough

3.4.5 Fly-Tipping

Local Authorities have been given new powers to investigate, enforce and help prevent offences involving the illegal disposal of waste under the Clean Neighbourhoods and Environment Act (CNEA), enacted in April 2005, although relevant clauses did not come into force until April 2006.

With the increased importance of fly tipping, littering and related street-scene issues and of the powers that councils have under the CNEA, the partnership has agreed to include this issue under their responsibility. A sub-group has been formed and a coordinating officer employed to drive this issue forward.

Authority	Response	Details
Cambridge City	One Day	Waste collected is sent to Waterbeach landfill site. A street-scene officer tackles issues with any fly-tipping.
East Cambridgeshire	As and when needed	Waste collected is sent to Waterbeach landfill site.
Fenland	As and when needed	Waste collected is sent to Wisbech landfill site. A dedicated enforcement officer tackles issues with any fly-tipping.
Huntingdonshire	As and when needed	Waste collected is sent to Buckden landfill site. A dedicated enforcement officer tackles issues with any fly-tipping.
South Cambridgeshire	As required	Waste collected is sent to Waterbeach landfill site. A dedicated enforcement officer tackles issues with any fly-tipping.
Peterborough	As required	Waste collected is sent to Dogsthorpe landfill site. Council has a dedicated Fly Tipping Action Group and four enforcement officers.

Table 16: Fly-Tipping Services in Cambridgeshire and Peterborough

3.5 Household recycling centres (HRC)

There are ten HRCs within Cambridgeshire County Council and one under Peterborough City Council management. Four contractors operate the sites for Cambridgeshire County Council. These are Fenland Recycling, Wisbech Recycling, Cambridge Recycling and Waste Recycling Group. From November 2007, Peterborough City Council's Dogsthorpe site is currently run by an external contractor.

Cambridgeshire County Council operates a performance incentive scheme for the HRC operators that are based on diversion targets. Cambridgeshire County Council pays the contractor a monetary bonus for each tonne exceeding the number of tonnes required to achieve between an annual 55% recycling rate and 60% recycling at each Site. The Authority uses seasonally adjusted calculations for all bonus and service credit calculations. In addition, Cambridgeshire deducts a Service Credit based on each tonne less than the number of tonnes required to

achieve an annual 55% recycling rate for each Site. Peterborough City Council operates a similar bonus scheme to incentivise diversion away from landfill at its sites.

A range of recyclable materials is accepted at Cambridgeshire HRCs for recycling to the general public as follows:

Glass	Paper / cardboard	Food / drink cans	Textiles
Aerosols	Plastic bottles	Green garden	Electricals
Large white goods	Fluorescent tubes	Timber	Scrap metal
Engine oil	Hardcore	Paint (oil based)	Gas cylinders
Car batteries	Domestic batteries	Soil	Mobile phones
Ink cartridges	Plasterboard	Cooking oil	

The following recycling materials are accepted from the general public at Peterborough HRC for recycling:

Glass	Paper / cardboard	Food / drink cans	Textiles
Aerosols	Plastic bottles	Green garden	Electricals
Large white goods	Fluorescent tubes	Timber	Scrap metal
Engine oil	Hardcore	Paint	Gas cylinders
Car batteries			

The service is free for members of the public. However trade or commercial waste is not accepted at any site.

All the sites practice longer working hours during summer and are open most Bank Holidays with the exception of the Christmas / New Year period.

In 2006 / 07 overall diversion in excess of 55% was achieved by Cambridgeshire County Council and 66% by Peterborough City Council, excluding hardcore.

Cambridgeshire County Council is investigating new sites at St. Neots, near Ely and Cambridge to meet the increasing demands for the rising population and new housing stock planned in the near future. The Peterborough City Council site is currently operating under maximum designed capacity, and the council is actively looking to find a new site. Hazardous waste materials such as pesticides and chemicals are accepted and go to a designated hazardous waste storage box. Asbestos is not accepted due to licensing restrictions, but other arrangements are in place (see below).

There are several policies that control the types of waste accepted at HRC sites. All waste is accepted at the Site Manager's discretion.

3.5.1 Hazardous waste

The Districts and Peterborough provide a hazardous waste collection service for items such as fridges / freezers and electrical items as part of their bulky waste collection services. Items are sent to licensed facilities that can take this type of waste.

Hazardous waste materials such as pesticides, asbestos, chemicals and non-soluble paint are not accepted due to licensing restrictions. Other hazardous waste materials such as aerosols, batteries (car / household), chemicals, engine oil, fridges / freezers and water-soluble paint are collected in small quantities at HRC sites in special designated areas.

Cambridgeshire residents can dispose of a limited amount of asbestos. The District Councils in Cambridgeshire will provide up to nine large bags to each property for asbestos which must be taken to one of three licensed facilities in the area.

Peterborough City Council offers a chargeable collection service for the legal disposal of cement-bonded asbestos.

3.5.2 Abandoned vehicles

All RECAP partners, except Peterborough, entered into an ESPO (Eastern Shires Purchasing Organisation) procurement for this service in March 2007. The procurement ended in June 2007 and the new contracts (listed below) will be in place for 3 years with the option to extend for a further three years. Significant efficiencies were realised as a result of the joint procurement, and a continuity of service has been established across all contracts awarded.

- East Cambridgeshire, Fenland, and South Cambridgeshire have contracted with Charlton Recycled Autoparts, Thriplow.

- Huntingdonshire have contracted with Burtons Car Disposal, Old Weston, Huntingdonshire.
- Cambridgeshire has remained with its former supplier, WFL and will assess the performance of the contract with a view to joining after a review period.

With the exception of Peterborough City Council, all contractors undertake the collection of the vehicles. Peterborough City Council has an in-house team that run the collection service with disposal provided by First Stop Breakers.

All contractors provide vehicle storage, however Peterborough City Council provides storage for collected vehicles at its depot. The capacity overall varies considerably, between 50-200 cars.

All contractors provide de-pollution in accordance with all End of Life Vehicle (ELV) Legislation.

4. Waste prevention

4.1 Cambridgeshire and Peterborough current waste prevention initiatives

Waste prevention is at the top of the waste hierarchy and the Cambridgeshire and Peterborough Waste Partnership has several waste reduction initiatives in place that help reduce the growth in overall municipal waste.

These initiatives focus on the following areas:

- Developing a waste prevention plan in line with national guidelines produced by WRAP, the plan forms an important element of this joint waste strategy;
- Prevention of waste at home;
- Consumer choice and 'buying power';
- Support from local community groups and charitable organisations; and
- Awareness raising activities, including the 'Reduce for Cambridgeshire and Peterborough' campaign which builds on the success of 'Recycle for Cambridgeshire and Peterborough'.

4.2 Waste prevention at home

4.2.1 Home composting

The partnership has actively and successfully promoted home composting for many years through the sale of subsidised home compost bins, its award winning Master Composter Programme which has trained over 250 volunteers to promote the benefits of composting in their communities, and most recently, the partnership has started working with the WRAP home composter initiative and has adopted the latest national branding.

4.2.2 Reusable cotton nappies

The Cambridgeshire and Peterborough Real Nappy Network (CPRNN) has been working to promote the use of cotton nappies since 1999. This community-led initiative promoted a free reusable nappy trial kit scheme for new parents until mid-2007. Due to funding restrictions, this scheme had to end but the network is still available to provide information, leaflets, publications and offer talks and seminars to parents and health professionals.

4.2.3 Consumer-led waste prevention initiatives

Consumption habits affect the amount of waste generated. The partnership carried out research to find out public perception of 'smart shopping' and the barriers faced when deciding to purchase more sustainable products. The results of the focus groups show that the concept of a 'smart choice' is unclear and that concise specific messages need to be delivered.

4.2.4 Anti-junk mail campaign

A multi-media campaign was launched in November 2006 to increase registrations to Mailing Preference Service and Opt-Out Royal Mail. This included bus, radio and lifestyle magazine and newspaper advertising and the creation of door stickers.

4.2.5 Choose2Reuse

This campaign has been running since 2004 and has grown from being a local to a regional campaign. Choose2Reuse is a consumer campaign to encourage the general public to increase the amount of good quality material donated to charity shops and community groups and to encourage more purchases and the reuse of second-hand goods.

4.2.6 Less waste shopping

This campaign aims to raise awareness about purchasing goods with minimal packaging and products made from recycled material, reusing carrier bags or using long-life carrier bags, and buying products such as rechargeable batteries or solar powered calculators that create less waste.

4.2.7 Activities supported by community groups

A comprehensive network has been set up to strengthen the relationship between the community sector and local authorities. Cambridgeshire Community Reuse and Recycling Network (CCORRN) was established in 2004 to support community initiatives that would contribute to reducing waste to landfill through recycling or reuse initiatives.

A coordinator is employed for this project and acts as a mediator between councils and community organisations. The projects aim to identify and develop joint work opportunities between community groups and the local authority to undertake or extend their reuse and recycling activities.

4.2.8 Raising awareness

A range of activities has been planned to promote waste prevention of household waste throughout the partnership area. In the wider context, the Government has stated that it will raise the landfill tax annually, which will make waste disposal more expensive, and this should encourage companies to reduce the amount of waste they produce. The partnership will also work to raise awareness amongst local businesses about the benefits of waste reduction.

Cambridgeshire County Council and Peterborough City Council have implemented and invested in waste awareness campaigns which have resulted in reduced waste quantities directed to the landfills and execution of principles highlighted in the Waste Hierarchy.

Initiative[6]	CCiC	ECDC	FDC	HDC	SCDC	PCC
Issuing annual calendar of waste collection timetables	✓	✓	✓	✓	✓	✓
Magazine/ Newsletter dedicated to waste and recycling issues	✓	✓	✓	✓	✓	✓
Updating and improving Council website	✓				✓	✓
Advertisements in media such as TV, radio, newspaper, etc.	✓	✓	✓	✓	✓	✓
Door Knocking Campaigns/ Surveys	✓	✓	✓	✓	✓	✓
Educational programmes at school to promote recycling	✓	✓	✓	✓	✓	✓
Supporting the National 'Recycle Now', the 'Slim Your Bin' and other campaigns	✓	✓	✓	✓	✓	✓
Subsidised home compost bins	✓	✓	✓	✓	✓	✓
Real Nappy promotion	✓	✓	✓	v	✓	✓
'Welcome Pack' to new residents explaining services offered		✓				
Continue to support Local community groups	✓	✓	✓	✓	✓	✓
Waste Infrastructure site visits in conjunction with Wildlife Trust projects	✓	✓	✓	✓	✓	✓

Table 17: Waste Recycling and Minimisation Policies Adopted

6 For reference, the abbreviations are: Peterborough City Council (PCC); Cambridgeshire County Council (CCC); Fenland (FDC); South Cambridgeshire (SCDC);East Cambridgeshire (ECDC); Huntingdonshire (HDC); and Cambridge City (CCiC).

5. Waste arising

Table 18 and Figure 2 outline the MSW arising in Cambridgeshire and Peterborough and the percentage of each stream in MSW.

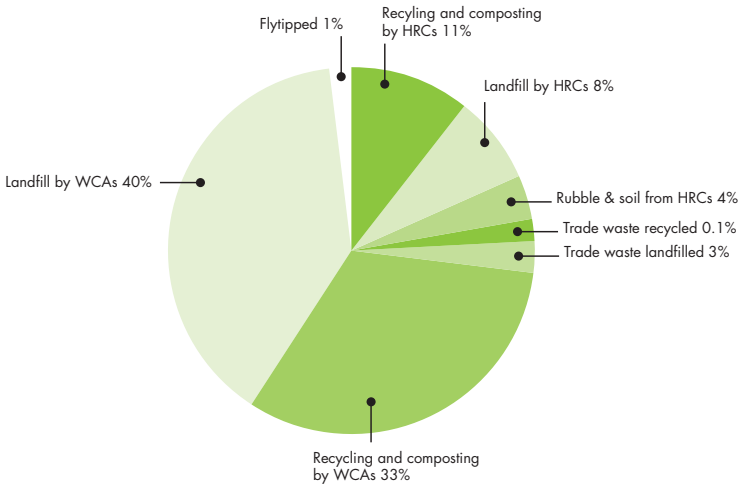
Municipal Waste Stream	2006/07 (Tonnes)	% of total waste stream
Recycling and Composting by WCAs	142,810	33%
Landfill via WCA collections	177,632	41%
Flytipped waste	4,219	1%
Recycling and Composting via HRCs	46,790	11%
Landfill via HRCs	33,390	8%
Rubble via HRCs	16,628	4%
Trade Waste Recycled	552	0%
Trade Waste Landfilled	14,343	3%
Total Municipal Solid Waste	**436,364**	**100%**

Table 18: Summary of 2006/07 Municipal Waste Arisings

In 2006/07, Cambridgeshire and Peterborough produced over 436,000 tonnes of MSW. The table above outlines the MSW arising in Cambridgeshire and Peterborough. Households produced over 91% of this waste; the remaining is made up of fly-tipped waste, rubble, soil and trade waste. Peterborough was the only authority within the partnership that provided businesses with a recycling collection; the low percentage of trade waste recycled in the table reflects this.

Almost 53% of MSW was landfilled in 2006/07 with almost 44% being recycled and composted. The Figure below illustrates the MSW breakdown in the area.

Figure 2 MSW Breakdown



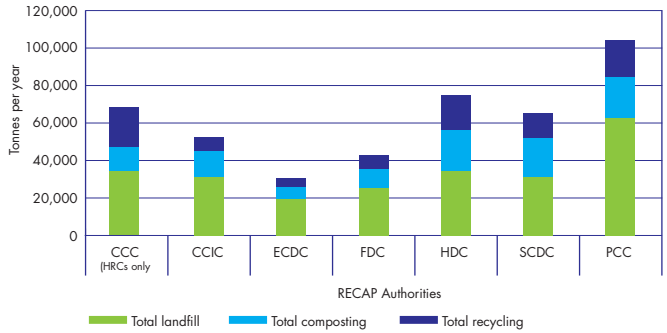


Figure 3 Municipal Solid Waste Recycled, Composted and Landfilled in 2006/07 in Cambridgeshire and Peterborough

The figure above illustrates the difference in waste production by each authority and their performance. Peterborough and Huntingdonshire are the highest waste producers, which coincides with their larger populations. East Cambridgeshire has the smallest waste arisings but also has the smallest population.

It is not until the data is broken down by households and population that performance becomes comparable. From (Table 19), Peterborough appears to be the highest waste producer per person, however this includes the waste produced

at HRC's. Waste collected in Peterborough (excluding HRCs) equates to 430 kg/person which is the second highest next to Fenland. The variation in waste production is influenced by socio-demographics of the area.

Waste generated per household is also calculated below with Peterborough appearing to be highest producer. However, again this includes HRC waste and without this they produce 970 kg/household, lower than the others in the area. Cambridge City, Fenland, Huntingdonshire and South Cambridgeshire all produce over one tonne of waste per household, the highest within the area. The lowest waste producer per household is East Cambridgeshire with only 880 kg/household.

5.1 Recycling and composting targets

The Cambridgeshire Authorities and Peterborough City Council have been set challenging recycling and composting targets for 2005/06 and onwards by DEFRA. Since the last strategy was published, the area has seen a significant increase in recycling and composting, rising from 21% in 2001 to 42% in 2005/06 and achieving 47% in 2006/07.

	Waste Type	Total Cambridgeshire	Cambridgeshire	Cambridge City	East Cambridgeshire	Fenland	Huntingdonshire	South Cambridgeshire	Peterborough
Household waste	Households	247,200	247,200	46,700	34,200	40,000	68,600	57,700	73,225
	Population	578,800	578,800	113,700	76,300	89,900	160,700	138,000	166,000
	Inorganic	17,031		3,597	2,034	1,820	4,388	5,193	3,394
	Organic	32,764		4,373	3,096	6,107	13,439	5,750	11,606
	Green	66,574		10,504	5,500	11,188	19,771	19,611	11,411
	Total recycling and composting	**116,369**		**18,474**	**10,630**	**19,114**	**37,598**	**30,553**	**26,411**
	Total household waste landfilled	131,807		28,124	19,574	21,155	33,564	29,389	44,936
	Total Household	248,176		46,598	30,205	40,269	71,162	59,942	71,346
HRC waste	HWRC Inorganic	14,932	14,932						1,883
	HWRC Organic	7,266	7,266						1,112
	HWRC Green	9,873	9,873						11,725
	Total recycling and composting	**32,071**	**32,071**					**14,720**	**52,540**
	HWRC household waste landfilled	25,785	25,785						7,604
	Total HWRC household waste	**57,856**	**57,856**					**22,324**	**93,670**
Other waste	HWRC Hardcore	8,698	8,698						4,088
	HWRC Soil	3,842	3,842						0
	Trade waste	12,407		6,837	0	2,411	958	2,201	3,408
	Flytipping	1,708		5	189	293	554	667	2,511
	Total MSW	**332,687**	**70,396**	**53,440**	**30,393**	**42,973**	**72,675**	**62,810**	**103,677**
	Kg/person household waste (BV84)	529	100	410	396	448	443	434	564
	Tonnes/household	1.24	0.23	1.00	0.88	1.01	1.04	1.04	1.28

Table 19: Breakdown of Waste Collected in 2006/07 (Tonnes)

Table 20 below indicates the Best Value Performance Indicators for each authority. Not all authorities reached their 2003/04 targets, however, all have exceeded the 2005/06 targets. All the authorities in the area have performed better than their set targets, with two authorities recycling and composting almost half of their household waste.

Authority	Actual 2001/02	Actual 2002/03	Target 2003/04	Actual 2003/04	Actual 2004/05	Target 2005/06[7]	Actual 2005/06	Actual 2006/07
Cambridge City	13%	18%	28%	23%	30%	30%	35%	40%
East Cambridgeshire	12%	14%	22%	20%	27%	30%	32%	35%
Fenland	7%	10%	10%	12%	20%	18%	31%	47%
Huntingdonshire	13%	15%	14%	22%	33%	21%	49%	53%
South Cambridgeshire	16%	18%	16%	28%	47%	24%	49%	51%
Cambridgeshire County[8]	24%	26%	30%	31%	39%	33%	43%	49%
Peterborough	20%	22%	30%	27%	26%	33%	35%	44%

Table 20: Best Value Performance Indicators (BPVI) 82a and 82b (Recycling and Composting Targets)

The largest increase in recycling since 2001/02 has been in Huntingdonshire and Fenland who increased their recycling and composting performance by 40% each district. With the introduction of comprehensive three stream collection systems throughout the area, each authority is performing well above its targets.

It is expected that next year there will be a further rise in recycling and composting rates overall. The authorities are committed to ensuring that these rates are maintained.

5.2 Material capture rates

In 2004 and 2005 the partnership carried out a two-phased compositional analysis study of household waste, one in autumn/winter and the other in spring/summer.

The same households were sampled in each phase and samples were taken from residual waste, dry recyclables, and green wastes. Over 890 households were sampled in each phase and in order to obtain a representative sample of the population in each authority, the sample was selected to mirror the ACORN household profile for each authority.

The Figure 4 below illustrates the composition of household waste in Cambridgeshire and Peterborough in 2005/06. This provided the information necessary to assess the amount of waste produced and the potential for recycling in the area.

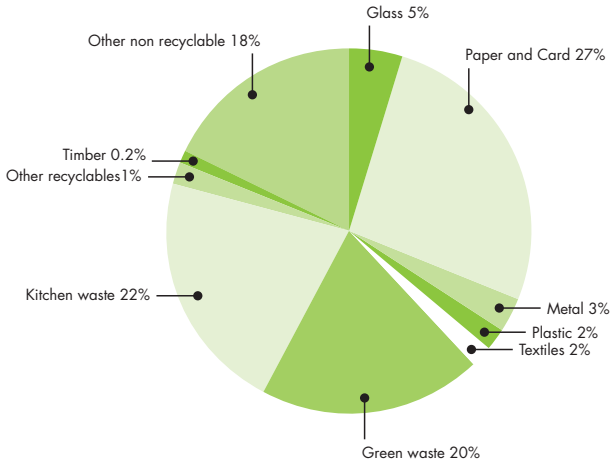


Figure 4 Composition of Household Waste in Cambridgeshire and Peterborough

Figure 4 shows that over 40% of material is organic waste, 27% is paper and that only 18% is non-recyclable waste. With almost 70% of waste being biodegradable waste, the partnership is keen to ensure that divert as much of this material is diverted from landfill as possible, especially with the first Landfill

7 In December 2004, Defra announced that recycling rates above 33% would be capped at 30%

8 Cambridgeshire County Council target is for the made up of both Waste Collected by the districts and at the Household Recycling Centres.

Material	CCC (HRC only)	CCiC	ECDC	FDC	HDC	SCDC	PCC[10]
Paper	63.0%	49.0%	45.0%	58.0%	66.0%	70.0%	69.0%
Glass	57.0%	61.0%	56.0%	50.0%	58.0%	84.0%	32.0%
Cans /metal	95.0%	29.0%	18.0%	30.0%	24.0%	41.0%	56.0%
Textiles	31.0%	10.0%	19.0%	33.0%	15.0%	20.0%	10.0%
Plastic	1.0%[11]	10.0%	4.0%	12.0%	10.0%	3.0%	11.0%
Kitchen Organics	0.0%	24.0%	8.0%	20.0%	6.0%	19.0%	0.0%[12]
Garden Organics	84.0%	93.0%	78.0%	64.0%	99.0%	98.0%	79.0%

Table 21: Material Diversion Rate for Cambridgeshire and Peterborough Household Waste 2006/07

Directive target year approaching. The partners used the composition analysis to calculate the diversion rate for each material. This rate relates to the percentage of material recovered from the residual waste stream and sent for recycling and composting[9]. Table 21 illustrates the diversion rate for materials in each authority.

From these figures above and in the next table, it is evident that diversion rates could increase for certain materials. The Data Group is monitoring trends of the waste stream to determine the most effective use of resources to ensure that as much waste is diverted from landfill as possible and that Landfill Directive targets are met. A data model has been developed that will indicate what materials could potentially deliver an increase in capture and participation rates (see modelling report) and what the impact will be in terms of tonnages, effect on LATS and the impact on infrastructure resources.

Material	Peterborough, Dogsthorpe	Milton	Alconbury	Thriplow	St Neots	Grunty Fen	Wisbech	March	Bluntisham	Buckden	Whittlesey
Garden organic	93.40%	77.80%	77.20%	90.30%	74.30%	87.20%	89.80%	89.60%	78%	83.90%	85.40%
Paper	21.40%	61.30%	73.90%	64.40%	63.60%	79.50%	49.60%	72.10%	52.90%	64.50%	62.10%
Glass	21.60%	34.40%	73.90%	60.10%	66.30%	38.40%	72%	39.40%	60.60%	65.80%	63.10%
Metals	90.80%	93.50%	95.50%	94.60%	96.30%	94.30%	93.40%	94.60%	94.40%	95.60%	94.10%
Textiles	14.50%	31%	27.10%	27.20%	38.60%	0%	0%	47.80%	22.40%	53.50%	18.70%
Plastics	0%	1.80%	0%	0%	0%	0%	0%	0%	0.00%	0%	0.00%
Hazardous	62.90%	33.50%	59.50%	61.30%	39.80%	51.30%	46.70%	84.70%	83.80%	36.10%	47.70%
WEEE*	73.10%	98.20%	98.50%	92.90%	88.30%	95.30%	88.40%	87.40%	90.90%	73.30%	91.30%
Wood	61.60%	45.30%	36.80%	35.70%	30.60%	33.80%	33.20%	29%	48.70%	33.90%	31.50%
Miscell.	0.20%	19.90%	27.90%	17%	18%	19%	15.40%	22%	15.10%	0%	13.40%

Table 22: Capture Rates of Materials from Individual HRCs

9 This differs from capture rate in that capture rate calculates the percentage of targeted material collected from a given scheme, whereas diversion rate calculates amount of material that is recycled out of the whole waste stream regardless if it is a targeted material.

10 These figures include Peterborough's total diversion via collection schemes and HRCs

11 Only one HRC site collects plastics in Cambridgeshire, resulting in a low diversion rate.

12 Peterborough City Council did not collect kitchen organics for recycling at this time.

5.3 Forecasting waste growth

A waste model was developed by RECAP to predict total waste growth in Cambridgeshire and Peterborough and to forecast performance in key target years. It should be noted that both Cambridgeshire and Peterborough also carry out their own waste modelling upon which their individual LATS strategies are based; however the details that follow are taken from the RECAP model. Due to the nature of modelling the results are slightly different but closely comparable to those from the individual models and provide an overview of the situation for the whole partnership.

Predicting waste growth is a 'continual work in progress' that is revisited as new information and trends became available. The two main factors in predicting annual waste growth are household growth and waste growth per household. Six scenarios have been produced to model waste growth to help investigate the infrastructure needed to cope with predicted waste arising. Municipal Waste has been growing in the area at a rate of 2-3% over the last few years which is higher than the national average of 1.5%.

To calculate future waste growth both historical trends and housing growth in the area has been considered. Cambridgeshire and Peterborough will see some of the highest housing growth in the country with an additional 78,000 households to be built by 2021.

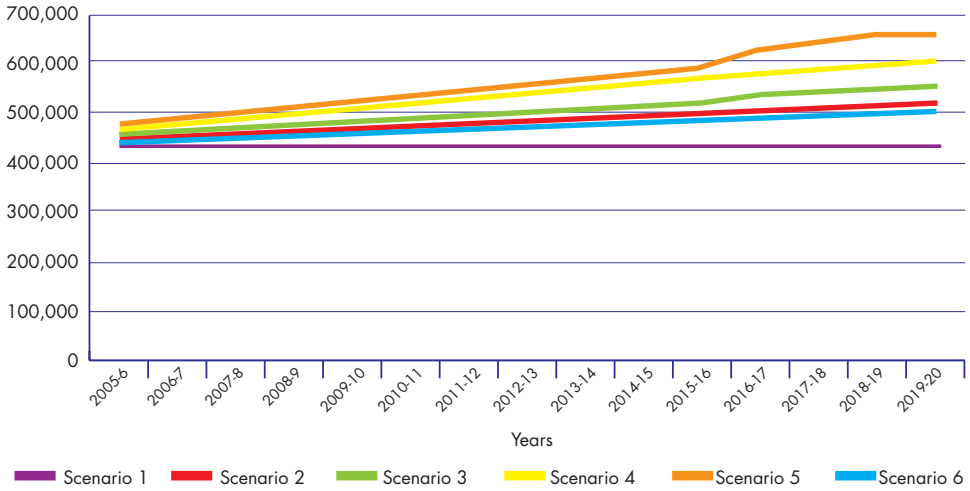
To inform the strategy development, a number of waste growth scenarios have been developed;

- Scenario 1 – no change in waste growth;
- Scenario 2 – waste growth based on projected household growth without any additional growth per household;
- Scenario 3 – waste growth based on projected household growth with a 1% growth per household up to 2007, 0.5% from 2008 – 2019;
- Scenario 4 – waste growth based on projected household growth with a 1% growth per household up to 2019;
- Scenario 5 – waste growth based on projected household growth with a 2% growth per household up to 2009 and 1.5% from 2010 to 2019; and
- Scenario 6 – waste growth consistent with the national trend of 1.5% growth in municipal waste per annum.

Year	Scenario 1	Scenario 2	Scenario 3	Scenario 4	Scenario 5	Scenario 6
2006/07	436,364	436,364	436,364	436,364	436,364	436,364
2007/08	436,364	445,137	450,378	449,497	453,857	442,909
2008/09	436,364	452,564	460,182	461,567	470,658	449,553
2009/10	436,364	460,132	470,217	473,979	488,100	456,296
2010/11	436,364	467,846	480,490	486,743	503,726	463,141
2011/12	436,364	475,707	491,007	499,871	519,872	470,088
2012/13	436,364	482,965	500,986	512,574	535,724	477,139
2013/14	436,364	490,362	511,196	525,629	552,089	484,296
2014/15	436,364	497,899	521,643	539,046	568,984	491,561
2015/16	436,364	505,580	532,333	552,835	586,430	498,934
2016/17	436,364	513,407	543,271	578,711	619,972	506,418
2017/18	436,364	518,814	551,730	590,672	635,920	514,014
2018/19	436,364	524,294	560,339	602,900	652,298	521,725
2019/20	436,364	529,848	569,099	602,900	652,298	529,551

Table 23: Summary of Municipal Solid Waste Growth Scenarios

The table above and figure below show the range of growth rates produced by the different scenarios. Scenarios 2, 3, 4 and 6 all represent the mid range. Scenario 3 has been used in planning for future waste because waste growth per household is more reliable and realistic in predicting waste growth. The importance of the rate of housing growth in the area also supports the use of this scenario. Waste projections will be regularly reviewed as new data and trends become available.



Scenario 1: No change
Scenario 2: Projected household change with no additional waste growth
Scenario 3: Projected household growth with 1% waste growth per houshold until 2007 and 0.5% until 2019
Scenario 4: Projected household growth with 1% waste growth per houshold until 2019
Scenario 5: Projected household growth with 2% waste growth per houshold until 2009 then 1.5% to 2019
Scenario 5: Waste growth consistent with current trend of annual 1.5% increase in minicipal waste

Figure 5 Summary of Waste Growth Scenarios

The table below illustrates the historical and future trend of waste growth in the area. Since Cambridgeshire and Peterborough have their own Landfill Directive targets they are shown separately in the table.

The prediction table below uses the same Scenario 3 growth trends to illustrate what the situation would be in respect to LATS and recycling targets if no changes other than those already firmly planned are introduced. It is identified that additional LATS allowances may be required in the first target year and that more will need to be done to achieve the voluntary targets set out in the Strategy. A separate model has been developed to identify which waste streams could potentially deliver highest diversion from landfill to ensure RECAP will achieve the voluntary targets agreed in the Strategy.

		2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2009/10	2012/13
Cambridgeshire	MSW tonnes	283,518	292,470	292,124	313,584	323,314	332,687	358,914	382,869
	Household Waste tonnes	264,479	270,413	268,791	289,860	296,604	306,032	331,003	353,809
	LATS target					145,772	139,750	109,638	73,026
	Predicted LATS Surplus/Shortfall							-5,675	-49,842
	Actual LATS Surplus/Shortfall					26,236 (5000 banked/sold)	30,000	-	-
	Percentage Recycling	21%	24%	29%	38%	43%	49%	49%	49%
	Percentage annual household waste growth	4.6%	2.2%	-0.6%	7.8%	2.3%	3.2%	2.3%	2.0%
Peterborough	MSW tonnes	83,259	90,282	84,400	101,334	100,998	103,677	111,304	118,117
	Household Waste tonnes	83,259	87,819	84,400	90,898	89,129	93,670	99,830	106,256
	LATS target					46,037	44,054	34,135	22,736
	Predicted LATS Surplus/Shortfall							-2,782	-16,319
	Actual LATS Surplus/Shortfall					5,316	9,760	-	-
	Percentage Recycling	20%	22%	27%	26%	35%	44%	44%	44%
	Percentage Increase in annual waste growth	5.3%	5.5%	-3.9%	7.7%	-1.9%	5.1%	2.0%	2.3%

Table 24: Waste Growth (landscape)

6. Waste treatment and disposal

6.1 Material Recovery Facility (MRF)

The Peterborough MRF is licensed for 75,000 tonnes per year and accepts co-mingled kerbside recyclate from households and commercial properties in Peterborough. The MRF was originally operated on a joint venture basis by Peterborough City Council and Grosvenor, and is now operated by Viridor.

Both Huntingdonshire and Fenland District Councils collect co-mingled materials from kerbside and deliver them to the MRF in Milton Keynes that is run by Cutts Recycling;

- Paper is recycled at SCA, Aylesford and Anglia Recycling;
- Glass is reprocessed by Berrymans, Midlands Glass and British Glass Recycling;
- Cans/ tins/ aerosols are reprocessed AMG, ALCAN, Pearsons;
- Textiles are delivered to Oxfam, Salvation Army, Black Country Rag; and
- Books are sent to the Oxfam charity shops.

6.2 Composting

There are two types of composting methods adopted, enclosed (in-vessel) and open (windrow). The enclosed in-vessel composting sites in Cambridgeshire utilised by the County Council are located at Ellington (capacity 25,000 tpa) and Waterbeach (capacity of 100,000 tpa). The County Council also use windrow sites located in Ramsey Heights (capacity 25,000 tpa), March (capacity 4,000 tpa), Waterbeach (capacity 25,000 tpa) and Ellington to compost garden waste from its HRCs. Peterborough use the windrow sites located at Dogsthorpe (owned and operated by PCC with a 12,000 tonnes capacity) and Crowland (owned and operated by a contractor Organics Recycling) to compost garden waste collected at kerbside and at the HRCs. The enclosed compost sites are specially designed to comply with the animal by-products regulations to reprocess food and garden waste while the windrow sites can take garden waste only.

6.3 Waste disposal

There are four waste transfer stations situated at Waterbeach (Donarbon), Alconbury (Donarbon), Buckden (WRG) and Wisbech (Donarbon).

Table 25 outlines the landfills utilised by the Local Authorities in the region.

Authority	Buckden	Waterbeach	March	Dogsthorpe
Cambridge City		✓		
East Cambridgeshire		✓		
Fenland		✓	✓	
Huntingdonshire	✓			
South Cambridgeshire		✓		
Peterborough				✓
Licensed tonnage	No limit	250,000	100,000	500,000
Annual capacity (tonnes per year)	110,000	200,000	40,000	150,000
Life Expectancy (years)	18	25	28	4

Table 25: Landfills in the JSA and Who Uses Them

6.4 Future disposal options

Using current predictions neither Peterborough nor Cambridgeshire predicts that they will meet their LATS allowances from 2009/10 using the existing waste treatment infrastructure only (see table 24 above). They have therefore highlighted the need for alternative treatment and disposal routes for residual waste in the future.

Peterborough has confirmed that the preferred option for a residual waste treatment facility is an Energy from Waste facility (EfW). It has been agreed to establish this facility at the preferred site on Fourth Drove, Fengate, Peterborough, pending a successful planning application and IPPC permit application. The EfW facility is proposed to be operational in 2012/13. Aspects such as capacity and technology are to be confirmed further into the process.

Cambridgeshire's 'Benchmarking LATS Allowances 07' report also highlights the need for an MBT facility if LATS targets are to be met. Cambridgeshire named Donarbon as its preferred bidder to implement an MBT option and signed a Private Finance Initiative (PFI) contract in March 2008. Donarbon's solution includes expanded composting facilities for the recycling of garden and kitchen waste and a new Mechanical Biological Treatment (MBT) facility to treat 240,000 tonnes of residual waste per annum. The outputs from the MBT facility include metals (for recycling), plastics (for use as a Refuse Derived Fuel (RDF) or landfill) and a stabilised compost-like output (for use as a soil enhancer or landfill). The MBT facility is proposed to be built and operational by 2010.

Appendix 4

Recycling Plans

Appendix 4: Recycling Plans

Cambridgeshire County Council (CCC) Recycling Plan 2007/08

Cambridge City (CCiC) Recycling Plan 2007/08

East Cambridgeshire (ECDC) Recycling Plan 2007/08

Fenland (FDC) Recycling Plan 2007/08

Huntingdonshire (HDC) Recycling Plan 2007/08

Peterborough (PCC) Recycling Plan 2007/08

South Cambridgeshire (SCDC) Recycling Plan 2007/08

Cambridgeshire County Council (CCC) – Recycling Plan 2007/08

1 Introduction

This document describes the socio-demographics of the local authority area, together with current municipal waste management infrastructure and performance specific to Cambridgeshire County Council.

2 Cambridgeshire – Population and Socio-Demographics

Cambridgeshire has been earmarked for development by Central Government and is expected to have some of the highest housing increases in the country. The area is experiencing such a high growth rate due to it s attractiveness to business through having good transport links, close proximity to London and land availability. Additionally the technology sector (bio-tech, IT and pharmaceutical) is attracted due the possibility of association with the local universities.

The population of Cambridgeshire in 2006 was 578,800 and according to mid 2006 forecasts, the population is predicted to rise by 7.4% between 2006 and 2011 and rise by another 5.3% between 2011 and 2016. The predicted population for Cambridgeshire in 2016 is 650,400[1].

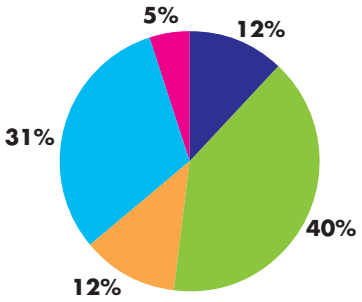
The table below shows the dwelling forecast for Cambridgeshire set against dwelling forecasts for Cambridgeshire and Peterborough overall. Dwelling projections are a factor used in calculations to predict waste growth.

Forecast year	2006	2011	2016	2021	2026	2031
Dwellings in Cambridgeshire	247,200	270,800	292,200	305,300	318,400	328,900
Dwellings in Cambridgeshire and Peterborough	321,200	350,400	379,400	400,600	420,000	436,100

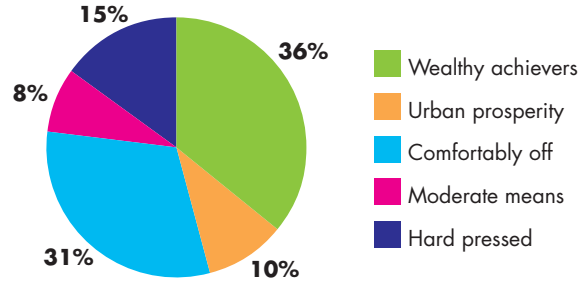
1 Research Group, OCS – Cambridgeshire County Council, Mid-2006 forecasts

The pie charts below show ACORN (A Classification of Residential Neighbourhoods) profiling for Cambridgeshire, compared to profiling for Cambridgeshire and Peterborough as a whole, to give an indication of certain socio demographic characteristics of Cambridgeshire. This ACORN profiling is used in waste composition analysis.

ACORN Profile for Cambridgeshire



ACORN Profile for Cambridgeshire and Peterborough



The profiling shows that the two prevalent groups in Cambridgeshire are:

Wealthy Achievers – These are some of the most successful and affluent people in the UK. They live in wealthy, high status, rural, semi-rural and suburban areas of the country. Middle-aged or older people predominate, with many empty nesters and wealthy retired. Some neighbourhoods contain large numbers of well-off families with school age children, particularly in the more suburban locations. These people live in large houses, which are usually detached with four or more bedrooms. Almost 90% are owner-occupiers, with half of those owning their home outright. They are very well educated and most are employed in managerial and professional occupations. Many own their own businesses.

Comfortably Off – This category contains much of the 'middle-of-the-road' Britain. Most people are comfortably off - they may not be wealthy, but they have few major financial worries. All lifestyles are represented in this category. Younger singles and couples just starting out on their careers are the dominant group in some areas. Other areas have mostly stable

families and empty nesters, especially in suburban or semi-rural locations. Most people own their own home, with owner occupation exceeding 80%. Most houses are semidetached or detached. Employment is a mix of professional and managerial, clerical and skilled occupations.

Evidence suggests that more affluent people tend to produce more waste and that higher deprivation areas tend to have lower recycling rates. The socio-demographics therefore suggest that prevalent residents groups in the county are likely to produce more waste but to recycle more too.

3 Waste Arising and Performance

3.1 General

Cambridgeshire County Council performance in this section is for both the combination of each of the Cambridgeshire districts and the Household Recycling Centres; and for the Household Recycling Centres separately.

Cambridgeshire overall		
BVPI 84a	Kg of household waste collected per head of population	529 kg per head of population
BVPI 82a	Total tonnage and % recycled	71,993 tonnes / 24%
BVPI b	Total tonnage and % composted	76,447 tonnes / 25%
BVPI 82a and b	Total tonnage and % recycled and composted	148,440tonnes / 49% (National average 27%)
BVPI 82d	Total tonnage and % landfilled	157,592 tonnes / 51%
Cambridgeshire Household Recycling Centres		
BVPI 84a	Kg of waste collected per head of population Household Recycling Centres	234 kg per head of population
BVPI 82a	Total tonnage and % recycled	22,198 tonnes / 38%
BVPI b	Total tonnage and % composted	9,873 tonnes / 17%
BVPI 82a and b	Total tonnage and % recycled and composted	32,071 tonnes / 55%
BVPI 82d	Total tonnage and % landfilled	25,785 tonnes / 45%

Cambridgeshire as a whole produced 306,032 tonnes of household waste in 2006/07 and of this 18% was collected via the 10 Household Recycling Centres provided by the County Council, amounting to 57,856 tonnes of the total. The tables show a breakdown of total household waste as per government Best Value Performance Indicators (BVPIs).

Central Government has set challenging targets for local authority recycling in its document 'Guidance on Municipal Waste Management Strategies' published in March 2001. In the 2000 and 2007 National Waste Strategies, government set objectives and targets for the UK to meet as a whole. As with all other local authorities, Cambridgeshire County Council's Best Value recycling targets were based on its recycling performance in 1998/99.

In 1998/99 the County Council's BVPI (Best Value Performance Indicator) recycling rate was 16%, and according to Government targets Cambridgeshire County Council was required to achieve 33% recycling in 2003/04 and 36% in 2005/06. Cambridgeshire did not meet its BVPI target set by government in 2003/04; in 2004/05, Cambridgeshire achieved a recycling rate of 37.8% and further exceeded the target of 36%, reaching a rate of 43%in 2005/06. Subsequently this had increased to 48.5% in 2006/07.

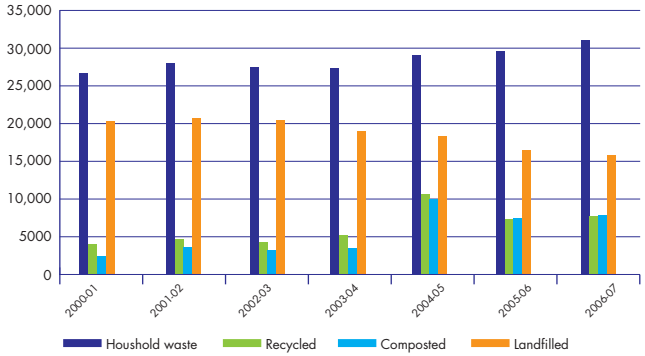
The EU Landfill Directive (99/31/EC) requires all member states to reduce their dependency on landfill and sets countries targets to reduce the amount of Biodegradable Municipal Waste (BMW) each sends to landfill. The Government introduced the Waste Emissions Trading (WET) Act in 2003, which transposes the EU landfill directive into UK law. The Act sets all Waste Disposal Authorities (WDAs) annual targets for reducing BMW sent to landfill by issuing each council with a preset tonnage allowance of how much BMW can be sent to landfill in specific years. WDAs will be fined £150 per tonne for every tonne landfilled in excess of its allowances, but councils that landfill less than their targets can sell the extra allowances to other councils that may miss their target, under the Landfill Allowance Trading Scheme (LATS). The main target years within the Landfill Directive are 2010, 2013 and 2020, in which the BMW tonnages allowed for landfill in Cambridgeshire are 109,638, 73,026 and 51,094 tonnes respectively.

In 2004/05 123,861 tonnes of municipal BMW were landfilled by Cambridgeshire County Council, and by 2006/07 this had fallen to 109,750 tonnes. In 2006/07, Cambridgeshire used approximately 30,000 tonnes less than its allocated allowance of landfill permits under the Landfill Allowance Trading Scheme (LATS). This was achieved through the public's excellent participation in the comprehensive three-bin collection schemes across all authorities in the area and high recycling performance at the Household Recycling Centres.

The County Council recognises the contribution it will need to make to ensure that less biodegradable waste goes to landfill, taking into account the waste and population growth pressures in the area, especially since the landfill allowances are preset and do not take account of population growth. Landfill Tax now stands at £24 per tonne in 2006/07, paid on every tonne of waste sent to landfill; however it will increase by £8 per tonne per year in future years until at least 2010/11. This, plus the gate fee charged by the landfill operators, makes landfilling waste a very expensive waste disposal option, but increases the viability of recycling, composting and other treatment options.

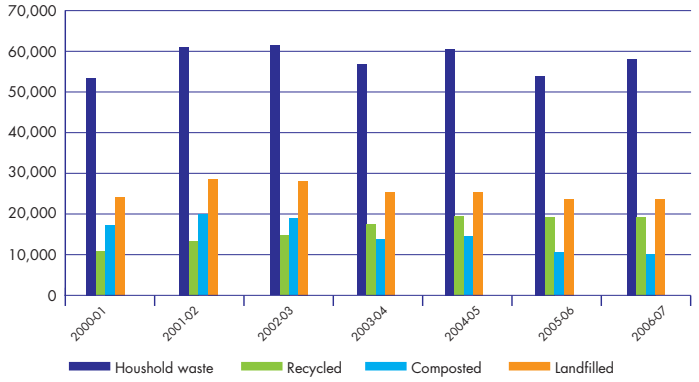
At present waste in Cambridgeshire is growing by approximately 3% per year, partly due to the growth in population and partly because generally residents are producing more waste year on year.

3.2 Cambridgeshire Performance Trends



This graph shows how there has been a steady increase in the amount of recycled and composted waste in Cambridgeshire and a reduction in landfilled waste. This is attributed to the expansion of kerbside collection of recyclable and compostable waste and also changes consumer behaviour.

3.3 Household Recycling Centre Performance Trends



This graph shows that whilst the total household waste received and waste landfilled from Household Recycling Centres has remained relatively even, the amount of waste recycled has increased and the amount of composted waste has decreased. This can be attributed to the expansion of the garden waste collections across all authorities in the area.

3.4 Waste Composition

The table below shows the average composition of the Household Recycling Centre waste stream in Cambridgeshire.

Material	% in Recycling Centre waste stream
Paper and Books	2.69
Card	3.74
Glass	2.62
Cans and Metals	11.96
Plastic	0.28
Textiles	2.67
Wood	7.33
Other Dry recyclables	14.40
Green	19.65
Soil	0.51
Hardcore	2.04
Non-targeted waste	32.12
TOTAL	100

4 Overview of Services Within Cambridgeshire County Council

Cambridgeshire County Council is responsible for the disposal of all household waste generated in the county and for the provision of Household Recycling Centres, which are run by private contractors for Cambridgeshire County Council. It is also responsible for meeting the targets set out in the WET Act, and for the management of specific closed landfills and contaminated land for which the County Council is responsible.

Household Recycling Centres (HRCs)

The County Council handled 19% of the total waste produced in Cambridgeshire at its ten Household Recycling Centres in 2006/07. This is down from 21% in 2004/05 and can be attributed in part at least, to the increase in kerbside recycling collections introduced by all District Councils during this period.

Each HRC has designated skips where the public can deposit sorted recyclable material and residual waste. The sites are licensed to only accept household waste, and the service is free for members of the public. Waste from businesses and traders are not accepted and waste from charities and local community groups may be accepted at other County Council sites.

The County Council achieved 55.4% recycling (this figure excludes hardcore for BVPI purposes) at these sites in 2006/07 and significantly contributed to the overall county recycling rate. This is down slightly from the 2004/05 recycling rate of 56.8%, which is due to the increased level of kerbside recycling collections operated by the District Councils.

In the previous RECAP strategy published in 2002, the County Council resolved to achieve 65% recycling at Household Recycling Centres in 2003/04 contributing to the overall 33% recycling rate. However, the County Council has realised that it will not achieve this target; the main reasons for this are the expansion of kerbside collections by the District Councils and a downturn in the market for plate glass recycling at Household Recycling Centres. Green waste diversion by the District Councils has increased significantly year on year since 1999/2000 with a corresponding downturn in green waste recycling at the Household Recycling Centres. It is therefore deemed realistic for the recycling rate target to be set at maintaining the current rate of 55.5% and that a stretching target of 58% is set for achievement by 2011/12. This represents an increase of 0.5% per annum. The increase in recycling may be achieved by the addition of schemes such as the expansion of current plasterboard recycling to include more sites, carpet recycling, and the re-introduction of plate glass recycling. However, it must be noted that these schemes are expensive and can only be realistically put into place if markets are available and they are cost effective for the County to implement.

At the Household Recycling Centres the public is encouraged to separate recyclables, compostable material and residual waste into the skips provided. There are always members of staff present on site to give assistance when required. Site operators also segregate items that are in good condition and sell permitted re-usable items to the public on the site. However in busy periods a considerable amount of waste remains unsorted and goes to landfill. The public can help by sorting waste when loading their vehicle before going to the HRC.

The results of a waste analysis completed in 2005 on eight of the Household Recycling Centres showed that an average of 25% of the waste put in skips by the public for disposal was potentially recyclable. A waste analysis has begun in 2007 which will further inform what other potential recyclables are being sent to landfill. Initial results of the 2007 waste analysis highlight areas where improvements can be made. Materials that were found in the residual skips that could have been recycled and we hope to concentrate on include: textiles (8 of 10 sites), and paper, hardcore and furniture (3 of 10 sites). Waste Electrical and Electronic Equipment (WEEE) was present in a number of waste skips, but this should begin to be recycled completely following the implementation of the WEEE Regulations, which require retailers and manufacturers to achieve recycling targets (see below).

The waste analysis also showed that woodchip and MDF made up an average of 27.8% of each HRC waste skip. To reduce the amount of this material ending up in landfill, the council hopes to direct effort at reducing householders' use of this type of material and at finding suitable end markets.

Since the previous strategy was published in 2002, four additional materials, namely timber, household batteries, fluorescent tubes and mobile phones can now be recycled at all Household Recycling Centres. Plasterboard collections have also been added at three centres. Unfortunately, plate glass is no longer collected at Household Recycling Centres due to the downturn in demand for the recycled product; consequently this has affected the overall recycling rate.

All ten Household Recycling Centres across the County collect the same range of recyclable material as follows:

Glass; Scrap Metal; Engine oil; Textiles; Green Waste; Fridges, freezers and other white goods; Soil; Books; Hardcore; Car & household batteries; Cans; Fluorescent tubes; Paper; Timber; Cardboard; and Mobile phones.

The WEEE (Waste Electrical and Electronic Equipment) Regulations were implemented in July 2007. In simple terms, the Regulations will require producers (through a vehicle called a Producer Compliance Scheme) to pay for the collection, treatment and recycling of household WEEE from Designated Collection Facilities (DCF). All 10 Household Recycling Centres in Cambridgeshire are registered as DCFs for all 5 streams of WEEE. The Regulations have had minimal impact on how the service is delivered to members of the public as the sites already separated and recycled 4 of the 5 streams. The "streams" of WEEE are:

A. Large household appliances (Cookers, washing machines, dryers);

B. Cooling Appliances (Fridges/freezers);

C. Display Equipment containing Cathode Ray Tubes (TVs, Computer monitors);

D. Gas Discharge Lamps (fluorescent tubes, low energy light bulbs); and

E. All Other WEEE (This is only additional stream: small mixed WEEE).

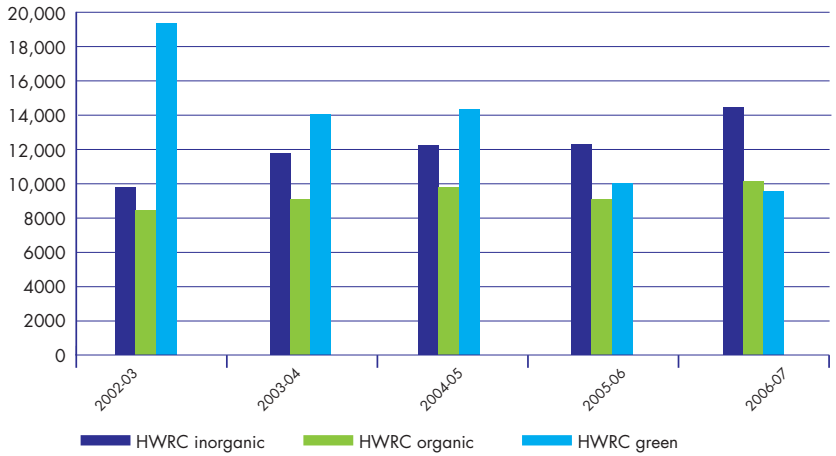
The following table lists the contractors receiving the materials from Household Recycling Centres for reprocessing:

Material	Contractor	Location
Paper	Holman Recycling	Kent
Green Waste	Donarbon/Marshalls /AW Bedfords	Waterbeach/Ellington /Ramsey Heights
Wood	Donarbon & Marshalls	Waterbeach/Ellington
Hardcore	Donarbon & WRG	Waterbeach/Ellington
Soil	Donarbon & WRG	Waterbeach/Ellington
Glass	WRG	Berryman's in West Yorkshire
Cans and scrap metal	Various – see right	Most scrap metal goes to EMR Ltd at Snailwell
Books	Oxfam	Cambridge
Engine Oil	SafetyKleen	Cottenham
Cardboard	SCA Recycling	Cambridge
Textiles	Various	Various
Fridges/Freezers	CFC/EMR	Christchurch/Willesden
Household Batteries	G & P Batteries	Wolverhampton
Car Batteries	Glazewing	Norfolk
Mobile phones	Local community groups	As applicable
Small Mixed WEEE	Environcom	Grantham
CRTs (TVs, Computer Screens)	Reclaimed Appliances	Boston
Household Hazardous Wastes (chemicals etc)	WasteCare GB	Hertfordshire
Fluorescent tubes	Wiser Waste	Fenstanton

Altogether the Household Recycling Centres diverted 44,611 tonnes of waste from landfill (including hardcore and soil) in 2006/07, achieving a 63.4% recycling rate for all waste delivered to the sites. The amounts of material diverted from landfill were as follows:

- Inorganic (including hardcore) 23,630 tonnes;
- Organic (including soil) 11,108 tonnes; and
- Green waste 9,873 tonnes.

The graph below illustrates how the sites have collected a high quantity of green waste along with smaller amounts of inorganic and other organic material in the past, but that the amount of green waste has experienced a downturn.



The reasons for the reduction in green waste are:

- Green waste at Household Recycling Centres consists primarily of garden waste; namely grass cuttings, bush and hedge clippings, weeds, tree cuttings and seasonally leaves and Christmas trees. Food waste, pet bedding and other animal by products are not accepted at the Household Recycling Centres as part of the green waste collection as the method of composting the green waste from the Household Recycling Centres is not covered by an Animal By Products Order. The material is sent for composting and by its bulky nature this has constituted one of the largest elements of household waste at Household Recycling Centres; and
- Since the adoption of the first RECAP Strategy all District Councils have introduced kerbside collections of green waste (kitchen as well as garden waste) and this has diverted garden waste away from Household Recycling Centres.

Green waste contributes 14.0% to the HRC recycling rate.

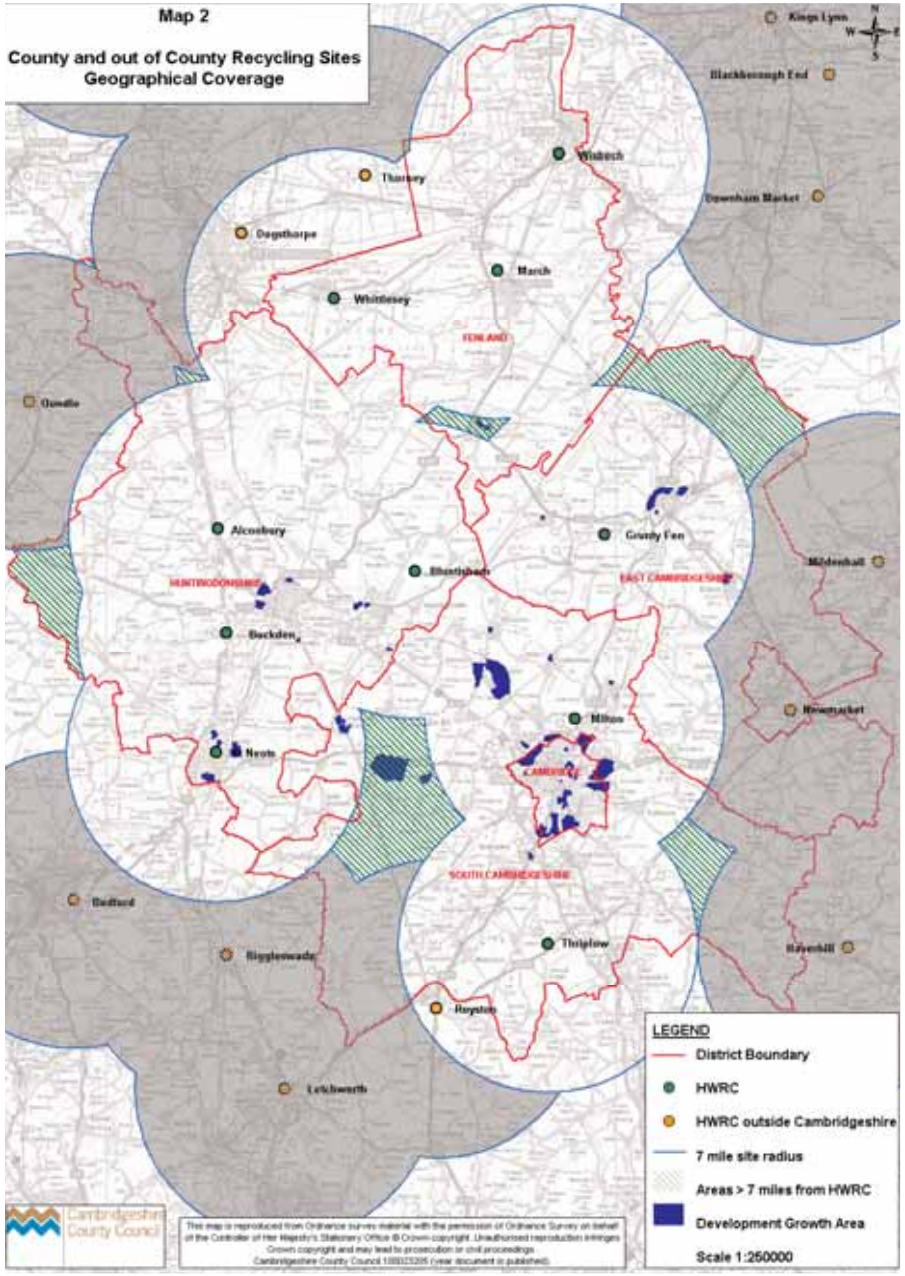
Organic waste consists of soil, timber, paper and cardboard and some textiles (in order of quantities collected). These materials are sent for reuse or recycling. This waste contributes 15.8% to the HRC recycling rate.

The main constituents of inorganic materials sorted at the sites are scrap metal, cans and white goods (scrap metal is sorted thoroughly by the site operators because they are able to separate the higher value non-ferrous material); hardcore; glass; plasterboard; batteries; some textiles; oil; electrical goods and other household items, which are sent for reuse and recycling. This waste contributes 33.6% to the HRC recycling rate.

Location of Household Recycling Centres

Cambridgeshire operates ten Household Recycling Centres across the county area and this network is also supplemented by Household Recycling Centres in neighbouring Waste Disposal Authorities that are located near the border. For example, Newmarket and Haverhill Household Recycling Centres that are located in Suffolk but are geographically close the Cambridgeshire border. Below is a table listing all Household Recycling Centre sites and a diagram showing the location and coverage of the current network.

HRC	Site Address	Site Telephone Number	Site Management Contractor	Opening Hours
Alconbury	Woodwalton Road, Alconbury, Western PE28 4JH	01480 414796	Cambridge Recycling	08.00-17.00 Summer 09.00-16.00 Winter
Bluntisham	Heath Road, Bluntisham, PE17 3LQ	01487 841810	Cambridge Recycling	08.00-17.00 Summer 08.00-16.00 Winter
Buckden	Brampton Road, Buckden, PE18 9UH	01480 810543	Anti-Waste (WRG)	08.00-18.00 Summer 09.00-16.00 Winter
Grunty Fen	Pools Road, Witchford, Ely, CB6 2JE	01353 668728	Fenland Recycling	09.00-16.00 Summer & Winter
March	Hundred Road, March, PE15 8QJ	01354 661130	Fenland Recycling	08.00-16.00 Mon-Sat Summer 09.00-16.00 Sun Summer 08.00-16.00 Mon-Sat Winter 09.00-16.00 Sun Winter
Milton	Butt Lane, Milton Cambridge,	01223 860674	Cambridge Recycling	09.00-20.00 Mon-Fri Summer 09.00-18.00 Sat & Sun Summer 09.00-16.00 Winter
St. Neots	Council Depot, Huntingdon Street, St.Neots, PE19 1BG	01480 471181	Cambridge Recycling	08.00-18.00 Summer 08.00-16.00/ or dusk Winter
Thriplow	Gravel Pit Hill, Thriplow, SG8 7HZ	01223 839001	Cambridge Recycling	08.00-17.00 Summer 08.00-16.00 Winter
Whittlesey	New Road, Whittlesey, PE17 1SZ	01733 351144	Whittlesey Recycling	09.00-17.00 Mon-Fri Summer 09.00-16.00 Sat & Sun Summer 09.00-16.00 Winter
Wisbech	Boleness Road, Wisbech, PE13 2RB	01945 582332	Fenland Recycling	08.00-17.00 Summer & Winter



Household Recycling Centre Facilities

The below table shows the current state of the facilities in the network, location by District area, contract end dates and planning permission end dates:

Household Recycling Centre	Covered	Split level	District area	Contract end date	Planning permission end date	Capacity tonnes per year
Alconbury	No	No	Huntingdonshire	30/09/2009**	Permanent	5,000
Bluntisham	No	Yes	Huntingdonshire	30/09/2009**	Permanent	24,999
Buckden	No	No	Huntingdonshire	01/11/2008	Permitted until 1st January 2010 or the cessation of tipping operations on the adjacent landfill site, whichever is the sooner.	N/A
Grunty Fen	No	No	East Cambridgeshire	30/09/2009**	31/12/2009***	24,999
March	No	No	Fenland	30/09/2009**	31/12/2011***	24,999
Milton	No	No	South Cambridgeshire*	30/09/2009**	31/12/2010***	24,999
St Neots	No	No	Huntingdonshire	30/09/2009**	30/09/2008	24,999
Thriplow	No	No	South Cambridgeshire	30/09/2009**	Permanent	7,500
Whittlesey	No	No	Fenland	30/09/2009**	Permanent	5,000
Wisbech	No	No	Fenland	30/09/2009**	Permanent	7,500

*This Household Recycling Centre also serves the Cambridge City Council area as well

**The contract for the on-going management of this site forms part of the Donarbon PFI bid

***Tied to adjacent landfill

Improving the HRC network

In order to meet its duties and objectives for waste management, Cambridgeshire County Council must continue to deliver Household Recycling Centres for the public to use. For the next five to ten years, as new communities are developed in Cambridgeshire and older sites lose planning permission, additional and replacement Household Recycling Centres will be required in order to maintain the level of service. Cambridgeshire is taking the opportunity to re-deploy part of the network in relation to location and design of these sites, whilst balancing population demand with the geographical coverage of the existing site infrastructure.

Any new facilities will be built to meet customer expectation and will be in line with Supplementary Planning Document – The Location and Design of Major Waste Treatment Facilities Adopted April 2006, which requires:

- Modern and innovative design in keeping with existing surroundings;
- Appropriate screening and landscaping;
- Good connections to the existing road network;
- Close proximity to the centres of population served; and
- Co-location of recycling facilities with waste transfer stations and treatment plants where appropriate.

Similarly, the County Council is reviewing the remainder of the network to identify where improvements can be made in order to raise the standard of the existing sites to that of the new and replacement sites, where possible.

4.1 Landfills, Composting Facilities and Transfer Stations

Cambridgeshire currently utilises 2 landfills, 3 composting facilities and 1 transfer station in its network of waste reception and disposal points. The table below depicts where these are located by District area. Landfill has been the prevalent means of waste disposal across the whole country for many decades and will still have an important role to play for many years to come. However stricter environmental regulations and tougher recycling targets have meant that other treatment options, such as composting are now far more prevalent. The County Council has been at the forefront of such developments by letting composting contracts for garden waste collected at Household Recycling Centres in the 1990's. The composting process was called open windrow, whereby the garden waste is shredded and built into large 'Toblerone' shaped piles, which are turned regularly to ensure it is adequately aerated to ensure proper composting. However, with the proposed collections of food waste from households stricter restrictions are in place on the composting process, through the Animal By-Products Regulations (ABPR) and again the County Council was at the forefront by letting one of the first contracts for ABPR compliant composting facilities in the country. The ABPR basically requires that the composting of food waste takes place in an enclosed area and that the composting process must reach certain temperatures for minimum periods of time, to ensure that any harmful bacteria are neutralised. The two methods used in current council contracts are in-vessel composting, where the green waste containing food is placed in concrete tunnels and air is blown in and temperatures monitored on a regular basis, and enclosed windrows, which operates as open windrows, but in a large enclosed area, again with regular temperature monitoring. Garden waste from Household Recycling Centres is still treated through open windrows, since this is a cheaper option and this waste is not controlled by the ABPR.

Facility	Type of Facility	District Area	Contract end date
Buckden	Landfill	Huntingdonshire	March 2008
Waterbeach	Landfill	Cambridge City	Extended until PFI
Waterbeach	Composting	Cambridge City	Extended until PFI
Ellington	Composting	Huntingdonshire	August 2010
March	Composting	Fenland	Extended until PFI
March	Landfill	Fenland	Contracted through Donarbon
Wisbech	Transfer Station	Fenland	Contracted through Donarbon

4.2 Private Finance Initiative (PFI) Project

The Private Finance Initiative (PFI) is a way of funding long term public sector contracts, such as schools, hospitals and waste management facilities, which involve a significant capital expenditure component. The private sector contractor will build the new facilities and then provide the service using these facilities over, typically in waste management contracts, a 25-30 year period. A PFI contract has the advantage over other forms of contract by providing additional government money to the Council to help meet the costs of the contract.

A long term contract, such as PFI, provides a way of funding the investment needed over a sufficiently long pay back period in order to make it affordable. Also, under a PFI contract, key risks associated with the project (from construction cost risk to meeting long-term targets) can be transferred to the private sector contractor.

The main pressures faced by Cambridgeshire are:

- The ability to meet nationally set tough government targets to substantially reduce the amount of waste sent to landfill;
- Increasing waste disposal costs;
- Increasing population growth; and
- Environmental consequences of continued reliance on landfill.

The net effect of these factors is that a step change in how the Council manages its waste in the future is necessary.

In order to help mitigate the risks associated with the above pressure, Cambridgeshire has implemented a project to deliver new waste treatment facilities through a long-term PFI contract with a private sector waste management company, Donarbon Ltd of Waterbeach. The contract builds on the excellent work of the District Councils and the RECAP Waste Partnership in developing recycling, composting and public awareness in Cambridgeshire. It is supported not only by the councils involved but also by Government, which is providing £35m of financial support over the 28-year lifespan of the contract.

The Waste Management PFI Project is an exciting and important project for the County Council. Working in partnership with the district councils, this project will deliver:

- New waste management facilities for the processing and treatment of municipal waste as a means to achieve landfill diversion targets by reducing the amount of material sent to landfill.
- Additional Transfer Stations to allow for the bulking up of loads in order to minimise the amount of household waste related traffic; and
- A more sustainable way of managing our waste in the future.

The contract itself is worth approximately £800m over 28 years (signed in April in 2008)), which makes it the largest single contract ever run by the County Council. However, the continued use of landfill by the County Council as the primary means of disposing of residual (non-recycled) waste would present an even higher cost than that of the new PFI contract. In addition, the contract is incentivised to ensure the Council meets its landfill directive targets and thus not face substantial fines.

Donarbon's proposals include expanding in-vessel composting facilities for the recycling of garden and kitchen waste, a new Mechanical Biological Treatment (MBT) facility at the Waterbeach site to treat residual waste and to incorporate additional recycling through the network of Household Recycling Centres across the county.

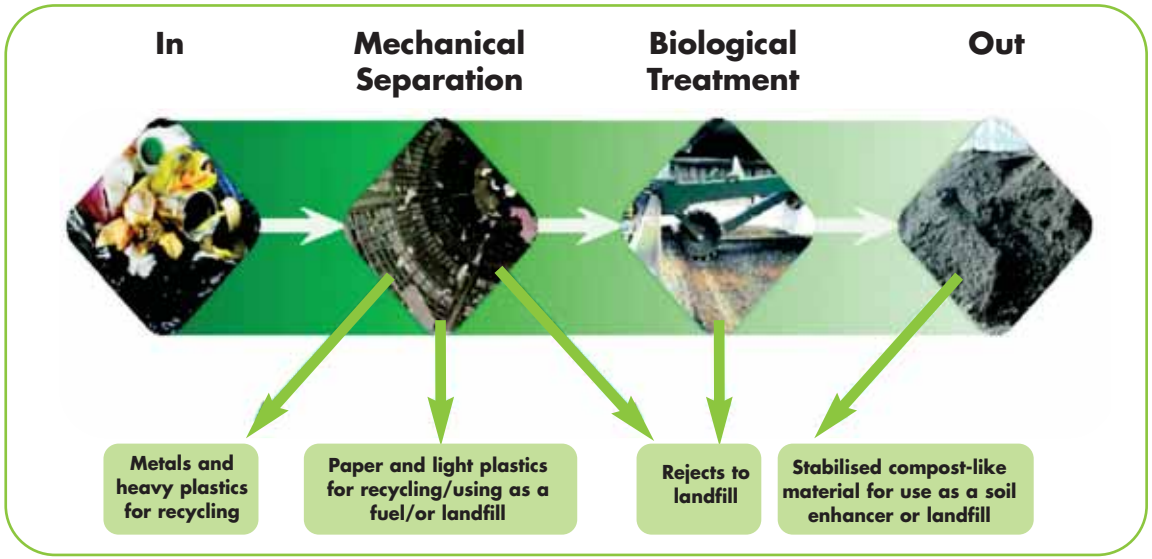
The proposed MBT plant will treat mixed household waste by mechanically removing some materials and biologically treating others (see overview of MBT process below). Some of the recovered materials, such as metals and plastics, can be recycled. The main output will be a stabilised organic material which looks like compost. This can be used as a soil enhancer, a landfill restoration material or can be landfilled. In this form it takes up less room in landfill sites than untreated waste and has less impact on the environment.

Overview of MBT Process

The advantages of this type of MBT system are:

- It will reduce our dependency on landfill;
- It will enable the recovery of additional materials from waste to recycle or use in other ways; and
- It will retain flexibility to respond to changes in the type of waste to be dealt with in the years to come.

The new MBT (artist's impression below, to be situated just off the A10 at Donarbon's Waterbeach site) should be available to start processing Cambridgeshire's waste in 2009.



5 Awareness Campaigns and Education

The County Council, in partnership with the other authorities of RECAP, organises and runs campaigns and events across the strategy area to promote all aspects of waste minimisation, reuse, recycling and composting. These include, road shows, newspaper and schools competitions, radio and newspaper advertisements, displays, press releases, leaflets and other literature, web-based information and the schools recycling buses and practical initiatives, such as re-usable cotton bag and compost give-aways.

The RECAP Partnership has been successful in obtaining external funding for some campaigns, in particular:

	2004/05	2005/06
Awareness Campaigns	£140K	£22K
Cambridgeshire Community Reuse and Recycling Network (CCORRN)	£84K	£110
Capital Schemes	£40K	£40K
Totals	£264K	£62K

Cambridgeshire County Council and the five district councils recognise that external funding is no longer available at previous years' levels. To address this and continue successful communications campaigns a Joint Awareness Fund (JAF) has been put in place. The JAF is made up by contributions from each Waste Collection Authority in the RECAP area (RECAP will investigate including contributions from Peterborough City Council) and matched by the County Council. These are based on recycling credits, so that improvement in the performance of the recycling schemes run by the waste collection authorities (district councils) will result in additional funds to the JAF to prevent waste and increase recycling.

The following sections outline key initiatives and campaigns that the County are currently engaged in.

5.1 Home Composting

To help divert waste from landfill the County Council is currently running the following home composting programmes:

- Master Composter Programme: working with Cambridgeshire Community Reuse and Recycling Network (CCORRN) and the National Trust to recruit and train volunteers in home composting, as well as expand the action remit of existing volunteers. In return for 2 days structured training, the volunteers agree to spend 30 hours promoting home composting to receive the Master Composter qualification. To date, over 250 volunteers have been trained and over 5,000 hours of promotion completed;
- Selling subsidised home composters through the WRAP Home Composting Programme. The Council has promoted the sale of subsidised home composters through one-day sales, garden centres and home delivery schemes since 1999 and over 65,000 composters have been sold;
- Promotion of home composting through leaflets, displays and the local media; and
- Working with schools to increase the amount of biodegradable waste composted on site, and increase awareness and knowledge amongst staff and pupils.

The County Council plans to continue to promote home composting, through the Master Composter Programme and the provision of subsidised bins. However, with fewer funding sources the council will need to investigate and secure alternative sources if the schemes are to continue.

5.2 Schools Recycling Buses

Cambridgeshire County Council operates a recycling bus, which is used to educate small groups of young people through fun activities geared to the national curriculum, and to spread the word about recycling, waste reduction and other environmental issues. From 2003 to 2006 a second bus was also operated and used to attend a range of community events. The County Council continues to investigate alternative sources of funding in order re-activate the second bus.

The bus is also used to train groups and individuals in how to engage others. Some of the training sessions that have taken place include:

- A 'Recycling Heap Challenge'- scrap model making for Key Stage 2 pupils linked to the Science / Design Technology curriculum. Designed for recycling officers and teachers;
- Sessions on waste and recycling in Cambridgeshire and the importance of natural resource conservation. Designed for Cambridgeshire Direct contact centre staff;
- Ways to engage children in recycling activities and action, environmental games and paper making for childminders; and
- How Recycling Buses can engage the public and schoolchildren. Designed for local authority staff.

The County Council is presently looking to replace the Recycling bus with another newer vehicle in 2008, to ensure that high quality education programmes are delivered.

In addition the bus manager works with schools to help them recycle their own waste. All councils now collect recyclable waste from at least some schools in their area and the recycling buses help promote this to schools and provide information about how schools can collect such items as old mobile phones and printer cartridges to raise funding for the school or a charity.

5.3 Recycle for Cambridgeshire

This is a joint campaign between the County Council, the five district councils and Peterborough City Council; to promote recycling, kerbside collections, bring sites and charity shops. The campaign to date has been hugely successful in communicating waste minimisation, reuse and recycling messages to a large cross-section of the community.

The Recycle for Cambridgeshire Roadshows are particularly effective at getting the message across to the public, along with give-aways of items made from recycled materials. Working together with other partnership members ensures there is a good selection of staff for a wide variety of venues, but in particular supermarkets, shopping centres and market squares. The campaign promotes recycling, in particular the financial, environmental and social benefits.

5.4 Working with Community Groups

Cambridgeshire County Council recognises the importance of working with charities and the community sector in reuse and recycling, particularly with reference to furniture, textiles, wood and items for resale. The County Council, working with the Districts and Peterborough City Council, was successful in obtaining funding to establish Cambridgeshire Community Reuse and Recycle Network (CCORRN) in 2003. CCORRN now has 39 member community groups that are involved in reuse, repair and recycling of waste materials. There are plans being prepared to increase the profile of CCORRN, to develop a campaign with charity shops, to link with similar groups in neighbouring counties, and to increase working between the community sector and local businesses.

Cambridgeshire County Council continues to support CCORRN and their Choose2Reuse campaign so that 'reusing' in the area increases, as well as its profile in local media. The aim is to ensure more good quality items are donated to charity shops and the community sector by householders and businesses and to encourage more people to buy more goods from these establishments to complete the reuse loop. Choose2Reuse is described by CCORRN as:

"Choose2Reuse is a brand that unifies charity shops, furniture reuse outlets and other community reuse organisations. Together we promote community reuse through the Choose2Reuse branding which is used on campaign materials and by licensed organisations such as charities, social enterprises and local authorities.

Part of the Choose2Reuse campaign is to raise awareness and provide opportunities to engage organisations and members of the public in supporting their local community reuse schemes because:

- Charity Shops and Reuse Organisations help to re-home goods that would otherwise end up in landfill, which accelerates climate change;
- They raise funds for their respective good causes making a real difference to millions of people around the world;
- Reduce your carbon footprint - buying reusable goods reduces the use of packaging, transportation and the use of virgin material;
- They provide training, voluntary and supportive paid work opportunities; and
- And of course they are great places to find unusual items at affordable prices.

5.5 Trees for Cans

This campaign is sponsored by not-for-profit organisation, Alupro (Aluminium Packaging Recycling Organisation). It has been developed from Alupro's very successful 2003/04 'recycle for trees' promotion that led to 35,000 trees being planted across the UK in 2004/05. This initiative provides a reward for recyclers that improves their landscape, with trees being planted in local parks and woodland. All the trees that are planted locally are selected from a list of native species such as English Oak, Scots Pine, Silver Birch and Rowan. In 2005/06 the appeal also helped to develop a well-managed sustainable forest training programme in the dry lands of Africa and in 2006/07 fruit trees were planted in parts of Kenya. Excellent local media coverage has been achieved over the years, which has helped deliver wider sustainability messages.

5.6 Links to National Campaigns

The County Council always ensures that local activities are organised as part of wider national awareness campaigns, as this helps improve the coverage of such campaigns in the local and national media and allows the County Council to use celebrity endorsements of the campaigns. The major campaigns that the Council helps co-ordinate local activity for include:

- Real Nappy Week;
- Compost Awareness Week;
- Recycle Now Week (formally The Big Recycle); and
- Christmas card and tree collection campaigns.

5.7 Lobbying

The County Council, along with partnership colleagues, takes it's 'campaigning' to Central Government through:

- Responses to consultations on proposed new government policy and legislation;
- Writing to and meeting ministers to put across our case for improved support for waste reduction, reuse and recycling;
- Where possible getting positions on government advisory panels that help in the development of new policies; and
- Being actively involved in relevant organisations representing local authority waste interests that have strong lobbying and advisory roles e.g. National Association of Waste Disposal Officers, Local Authority Recycling Advisory Committee, relevant Local Government Association working groups, the Chartered Institute of Wastes Management etc.

Cambridge City (CCiC) – Recycling Plan 2007/08

1 Introduction

This document describes the socio-demographics of the local authority area, together with current municipal waste management infrastructure and performance specific to Cambridge City Council.

2 Cambridge City – Population and Socio-Demographics

Cambridge City is a condensed urban area that is heavily influenced by the Cambridge and Anglia Ruskin Universities and tourism. The result of this is a highly transient population that can fluctuate through the year between students and tourists. As an urban environment it also has a diverse range of housing types and a significant proportion of properties are flats or houses converted into multiple occupancy residences. Cambridge also has good cultural diversity from both its permanent residents and international students.

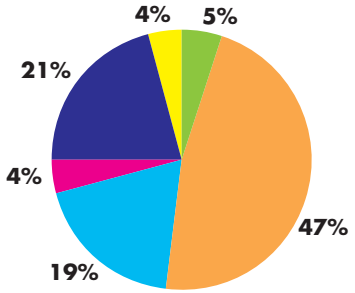
The population for Cambridge City in 2006 was 113,700, which is approximately 15% of the total population in Cambridgeshire and Peterborough. According to mid 2006 forecasts, the population in Cambridge City is predicted to rise by 15.9% between 2006 and 2011 and rise by another 11.9% between 2011 and 2016, the biggest population increase in the partnership area. The predicted population in Cambridge City for 2016 is 147,500.

The table below shows the dwelling forecast for Cambridge City set against dwelling forecasts for Cambridgeshire and Peterborough overall. Cambridgeshire and Peterborough have been earmarked for development by Central Government and are expected to have some of the highest housing increases in the country. Dwelling projections are used in calculations to predict waste growth.

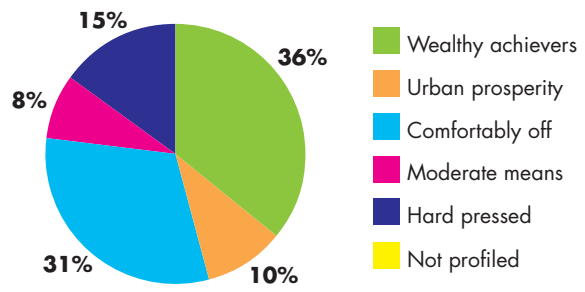
Forecast year	2006	2011	2016	2021	2026	2031
Dwellings in Cambridge City	46,700	53,400	61,500	63,500	67,500	69,800
Dwellings in Cambridgeshire and Peterborough	321,200	350,400	379,400	400,600	420,000	436,100

The pie charts below show ACORN (A Classification of Residential Neighbourhoods) profiling for Cambridge City, compared to profiling for Cambridgeshire and Peterborough as whole, to give an indication of certain socio demographic characteristics of the city of Cambridge. This ACORN profiling is used in waste composition analysis.

ACORN Profile for Cambridge City



ACORN Profile for Cambridgeshire and Peterborough



The profiling shows that the three prevalent groups in Cambridge City are:

Urban Prosperous – These are well-educated and mostly prosperous people living in our major towns and cities. They include both older wealthy people living in the most exclusive parts of London and other cities, and highly educated younger professionals moving up the corporate ladder. This category also includes some well-educated but less affluent individuals, such as students and graduates in their first job. The wealthier people tend to be in senior managerial or professional careers, and often live in large terraced or detached houses with four or more bedrooms. Some of the younger professionals may be buying or renting flats. The less affluent will be privately renting.

Hard Pressed – This category contains the poorest areas of the UK. Unemployment is well above the national average. Levels of qualifications are low and those in work are likely to be employed in unskilled occupations. Household incomes are low and there are high levels of long-term illness in some areas. Housing is a mix of low-rise estates, with terraced or semi-detached houses and purpose built flats. Properties tend to be small and there is much overcrowding. Over 50% of the housing is rented from the local council or a housing association.

Comfortably Off – This category contains much of the 'middle-of-the-road' Britain. Most people are comfortably off - they may not be wealthy, but they have few major financial worries. All lifestyles are represented in this category. Younger singles and couples just starting out on their careers are the dominant group in some areas. Other areas have mostly stable families and empty nesters, especially in suburban of semi-rural locations. Most people own their own home, with owner occupation exceeding 80%. Most houses are semidetached or detached. Employment is a mix of professional and managerial, clerical and skilled occupations.

3 Waste Arising and Performance

3.1 General

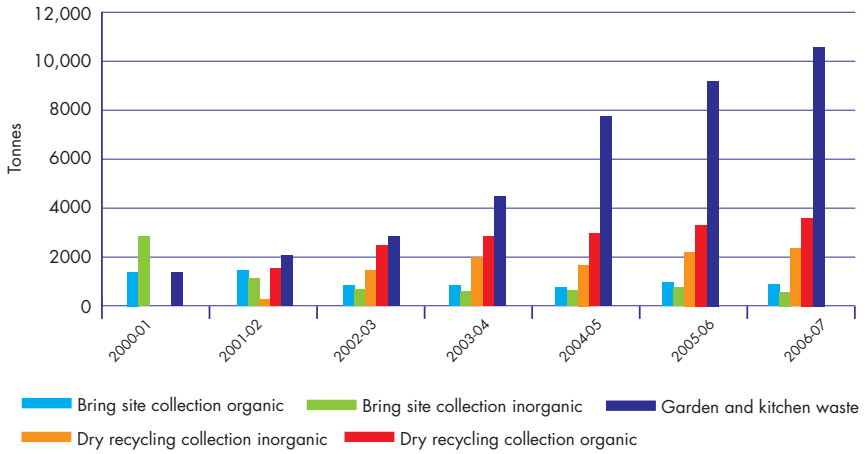
Cambridge City produced 46,598 tonnes of household waste in 2006/07, which is around 11% of the total amount of household waste produced in the partnership area in this year. The table below shows a breakdown of this waste as per government Best Value Performance Indicators (BVPIs):

Cambridge City		
BVPI 84a	Kg of household waste collected per head of population	410kg per head of population
BVPI 82a	Total tonnage and % recycled	7,970 tonnes / approx 17%
BVPI 82b	Total tonnage and % composted	10,504 tonnes / approx 23%
BVPI 82a and 82b	Total tonnage and % recycled and composted	18,474 / approx 40%
BVPI 82d	Total tonnage and % land filled	28,124 tonnes / approx 60%

Cambridge City Council did not meet BVPI targets set by government in 2003/04, but exceeded their target of 30% in 2005/06 by achieving 35%. The RECAP Partnership has agreed voluntary targets for its authorities, exceeding those set by government. The Landfill Allowance issued to Waste Disposal Authorities which set the amount of biodegradable waste permitted to landfill, has also been calculated for each district council (Waste Collection Authority) using the Environment Agency estimator.

3.2 Performance of Waste Collection Schemes

The chart below illustrates the performance of waste collection schemes in Cambridge City over time.



The table below shows the percentage of collections missed per 100,000 collections of household waste. This is for all kerbside bin collections in Cambridge City.

Year	2005/06	2006/07	2007/08	2008/09
Target			0.5%	0.25%
Actual	0.5%	0.05%		

To determine performance the RECAP partnership commissioned a two-phase waste composition analysis in 2004/05. The study provided a detailed assessment of household waste produced in each district and across the partnership as a whole. At a partnership level the results showed that:

- Compostable waste is around 50% of total waste arising. Approximately 30% of which is currently captured within organic waste collections, which leaves around 20% of compostable waste available for potential capture; and
- Materials that are commonly targeted in kerbside recycling schemes account for around 29%. Around 15% of this is currently diverted from the residual waste stream, leaving around 13% of the total arisings available for potential capture.

The table opposite shows the composition of household waste within each waste stream in Cambridge and therefore the potential material that could be recycled or composted specifically within this district. It indicates that a high percentage of household waste is paper and that potentially up to 26% of waste within the refuse stream is paper that could be diverted through recycling or composting.

RECAP has commissioned another waste composition analysis, the results of which will be available early 2008. These results will be used, along with other required data, such as predicted waste growth and targets, within a modelling tool commissioned by the RECAP partnership. The tool will model predicted outcomes of pursuing a particular course of action (e.g. targeting a particular material and or participation rates) and will therefore help to determine the most effective action to improve performance and meet recycling and landfill diversion targets.

Material	% in Refuse waste stream	% in Dry recycling waste stream	% in Organic waste stream
Kitchen Organics	35	1	13
Garden Organics	1	0	60
Paper	26	67	27
Glass	6	28	0
Metals	3	4	0
Textiles	3	0	0
Plastics	15	0	0
Multi-layer	2	0	0
Hazardous	0	0	0
Sanitary	4	0	0
WEEE	1	0	0
Wood	0	0	0
Miscellaneous	3	0	0
TOTAL	100	100	100

4 Overview of Services Within Cambridge City

Cambridge City Council provides the following waste collection services:

- A district wide four-stream kerbside waste collection service for households (dry recycling, organic waste, plastic bottles and refuse);
- A series of public bring sites across the district for household recycling;
- A series of private mini recycling centres for household recycling as an alternative to kerbside collection; and
- a chargeable Bulky Waste Collection Service is provided for bulky household items and domestic fridges and freezers.

The Council started collecting garden waste at kerbside in the early 1990s and has gradually rolled this scheme out across the Cambridge City area utilising the Defra Waste Minimisation and Recycling Fund. In 2004 the garden waste collection was expanded to include kitchen waste and in October 2005 the City moved to alternate weekly collections. The dry

recycling kerbside collection scheme was developed between 2001 and 2002, with the collection of plastic bottles at kerbside introduced in October 2005, at the same time as the introduction of alternate weekly collections. Having developed waste collection infrastructure, the City Council continually looks to improve the performance of its schemes, increase the amount of materials it collects for recycling and the ways in which people can present their recycling for collection. In 2007 Cambridge City and South Cambridgeshire District Councils worked on a project with TetraPak Ltd to establish carton collection points at supermarkets and other local recycling centres across Cambridge and South Cambridgeshire. The City Council also supports local schools and educational establishments by providing recycling collections as appropriate and providing educational visits and information.

Cambridge City Council offers a chargeable trade waste collection throughout the district; this is a fast, efficient and reliable service, which is offered seven days a week. Collections are frequent and can be as frequent as a business requires them to be. The district also offers a recycling scheme for businesses which is for mixed glass and cardboard. Nationally we are generating some 400m tonnes of waste each year and this is growing by 3% each year. Industrial and commercial waste accounts for around 20% of total waste and over half of this goes to landfill. Neither land-filling nor incineration provide sustainable long term solutions for dealing with the level of waste on this scale. This is why Cambridge City is supporting Cambridgeshire and Peterborough Waste Partnership's BREW funded project. As part of the BREW project Cambridge City are expanding their existing trade waste recycling scheme.

The Cambridgeshire and Peterborough Waste Partnership has expanded its remit to incorporate street scene and environmental enforcement. Cambridge City Council has a responsibility to ensure that the adopted roads, pavements and publicly owned open areas of the district are cleansed and maintained as set out in the Environmental Protection Act 1990 (EPA), to standards prescribed by the Code of practice for Litter and Refuse (COPLAR). Cambridge City Council sweeps city centre streets and shop fronts daily. It also aims to sweep all residential streets twice a year. The street sweeping programme is supported by a deep cleaning crew who carry out intensive cleans on residential streets as needed. Members of the public can also call and register a street that needs to be cleaned.

The following sections provide more detail on the waste collection schemes and streetscene services provided in Cambridge City.

5 Bring Sites

There are 28 bring sites (recycling centres) located at publicly accessible sites, such as supermarkets, public car parks and community centres across the City. In 2003/04 it was calculated that 98% of households within Cambridge City were within 1km of a bring site. In August 2007 the City expanded its collection banks to include the collection of paper-based drink and liquid food cartons, such as TetraPaks, at four of it's bring sites. The Council also worked with Waitrose to establish a collection point for household batteries at the Trumpington store with a view to establishing further in-store collection points in the City.

A total of approximately 2,046 tonnes of household waste was recycled at bring sites in Cambridge in 2006/07, accounting for 26% of the total amount of household waste recycled in Cambridge in this year (not including organic waste). In 2004/05 bring sites accounted for 27% of household waste recycled in the district. The graph below shows the recycling tonnage collected at bring sites each year in Cambridge since 2000. The graph shows tonnages in 2001/02 compared with 2002/03 decreased partly as a result of introducing kerbside collections of dry recycling.

The table below provides detail, by material type, of the number of bring sites plus where materials and sent and the system employed.

Materials collected	Number of sites collecting material	Who receives materials	Contracts in place	Process
Glass (green, brown and clear)	29	Owens-Illinois	Yes	City Services empties banks and takes glass to the Mill Road Depot, Cambridge, where it is bulked up and stored in its separate colours. Glass is then collected by Owens-Illinois and taken for re-processing.
Paper (newspaper, junk magazines)	28	Aylesford Newsprint, Kent	Yes	City Services empties banks and the paper is taken directly to SCA Recycling based at Cowley mail, Road, Cambridge. Some large banks are emptied by SCA. The paper is then take to Aylesford Newsprint's mill in Kent where it is pulped, fibres are cleaned and it is put through paper mills to be turned into newspaper.
Mixed cans, foil and aerosols	28	Pearsons, Thetford	No	City Services empties banks and takes cans to Mill Road Depot where it is bulked up and collected with foil and aerosols by Pearsons. The tins and cans are separated into aluminium and steel by means of a magnetic separation line. They are then compacted into bales and transported to Corus steel and Novellis aluminium. The aluminium is melted and then cooled to form aluminium bars weighing 24 tonnes. These are then cut, rolled into thin sheets and then used to create new aluminium cans. This process is a very energy efficient and economical way of producing cans. The steel is melted down, rolled into sheets and then used to create a range of steel materials and products.
Plastic bottles	14	Donarbon, Waterbeach	No	City Services empties banks and plastic bottles are taken to Donarbon, Waterbeach, where they are baled and sent on for reprocessing.
Books	5	Oxfam, Cambridge	No	Oxfam provides, maintains and empties the banks. The books are sorted and distributed to local charity shops.
Textiles	7	Oxfam, Cambridge	No	Oxfam supply, maintain and empty a number of the textile banks. Items are taken to a central processing facility in Kettering. After sending some items local charity shops the remainder is packed into large canvas (botany) bags – each holds about 140 kg of clothes. These bags are then loaded onto 40ft trailers for transportation by road and sea to Eastern European Countries, Tunisia and elsewhere.
		Black County Rag, West Bromwich, West Midlands	No	Black County Rag provide, maintain and empty the banks. Items are taken to their Head Quarters in West Bromwich and weighed. Items are then hand sorted into different grades of clothing and textiles. Once separated into categories, re-useable and recyclable items are then tightly packed and wrapped in protective transport bags before being dispatched.
Foil	28	Pearsons, Thetford, Norfolk	No	City Services empties banks and takes foil to Mill Road Depot where it is bulked up and collected with cans and aerosols (collected within kerbside collections) by Pearsons.
Paper-based drink and liquid food cartons	4	Recresco (on behalf of TetraPak), Nottinghamshire	No	TetraPak supply and maintain the banks. Banks are emptied by Recresco and material is baled and stored in 25 tonne containers, which when full, are shipped for reprocessing to the Orebro paper mill in Sweden.
Batteries	1	G and P Batteries, Wednesbury	No	Receptacles for batteries are located within Waitrose, Trumpington. The containers are provided by G & P Batteries, who also collect the batteries. Waste batteries and battery-powered appliances produce a number of different components that can be reused. The majority of these are recycled by G & P Batteries.

6 Private Mini Recycling Centres

The City Council not only provides standard recycling centres for general public use but an extensive network of mini recycling centres at private locations across the city. These sites are designated for shared use of occupants of the particular properties and are not intended for wider public use. These recycling facilities use a range of containers (240 – 1100 litre bins), depending on the size of the site and number of occupants. This service is provided for flats, communal properties, the 30 University colleges and Anglia Ruskin University plus their external residences and schools. These flats and communal properties account for about 20% of the City dwellings, although not all properties are served as yet. An installation programme for remaining properties is being developed for the roll out of these facilities during 2007. Properties that are served in this way are visited by officers to assess the needs before installation and often receptacles (boxes or bags) can be provided to enable users to collect and carry their recycling easily to the communal site.

This service area has seen the most change over the last 12 months. Investment has been made into the physical infrastructure to provide this method of collections and to cope with demand. Historically there are many properties to which a standard kerbside service is not suited that are now being served in this way and in addition many of the new developments in the city will be required to provide these facilities. The mini recycling centres do not generally include the provision of containers for the recycling of plastic bottles or cardboard containers as yet, however, the City Council has plans to develop these over the course of 2008/09 when extra vehicle capacity is anticipated.

7 Kerbside Dry Recycling Collection

Cambridge City Council provides a kerbside–sort collection for dry recyclables. Some flats are not currently on the collection system, as explained in the previous section. When the council moved to Alternate Week Collections (AWC) in October 2005 they also introduced, as a result of feedback from the public, a kerbside collection of plastic bottles. This is carried out separately from the dry recycling scheme and requires separate vehicles. The City Council's kerbside sort system for dry recycling negates the need for a central sorting facility, required for co-mingled collections, and generates high quality recycling with a corresponding increase in value of the material and low contamination. It also enables the collection of glass, separated by colours, which is, at present, not feasible with co-mingled collection methods.

Cambridge City collected 5,917 tonnes of dry recycling at kerbside during 2006/07 – an average of 127kg per household. This is around 13% of the total amount of household waste collected in the district in this year. The graph below shows the dry recycling tonnage collected at kerbside in Cambridge, each year, since 2000/01.

The table below provides detail on the kerbside dry recycling collection scheme:

Coverage	85% of all households provided with service	
Receptacles	Households are issued with a 55-litre black box for most dry recyclables and a 55-litre blue box for plastic bottles (a 40-litre box is also available)	
Frequency	Alternate weekly	
Materials collected	**Materials collected in black box**	**Materials collected in blue box**
	• Newspapers; • Magazines; • Junk Mail and envelopes; • White paper; • Clean glass jars; • Metal jar lids; • Clean glass bottles (all colours of glass); • Clean drinks cans; • Aerosols (not squashed); • Clean food cans; and • Clean foil.	All Plastic Bottles including: • Water, squash and fizzy drink bottles; and • All cleaning, shampoo and bleach bottles.
Kerbside collection operator/contractor	Cambridge City Council operates the dry collection service through their City Services Department.	
Collection process	Recycled material is sorted into separate compartments on the side of the vehicle. Glass is also separated into clear, brown and green. When the troughs are full they are lifted up into separate compartments of the vehicle. Once the vehicle is full it takes the paper directly to SCA Recycling at Cowley Road and unloads it. It then goes to the City Council's depot and unloads the glass and cans into separate bays for storage. The collection of plastic bottles is done with dedicated standard refuse style vehicles with compaction. When the round is complete or the vehicle is full, the bottles are taken to Donarbon and unloaded. They are then baled and stored for onward transportation.	
Vehicles	The Council uses four Kerbsiders to operate the service plus 3 Refuse Collection Vehicles for the plastic bottle collection.	
Contractors receiving recyclable materials (responsible for selling materials to reprocessor)	**Material**	**Process/Where material ends up**
	Magazines and junk mail)	Paper (including newspaper, The paper is taken directly to SCA Recycling based at Cowley Road, Cambridge. The paper is then taken to Aylesford Newsprint's mill in Kent where it is pulped, fibres are cleaned and it is put through paper mills to be turned into newspaper.
	Mixed cans, aerosols and foil	The material is collected by Pearsons, Thetford, where it undergoes the same process as described for bring site material.
	Green, brown and clear glass	Glass is taken to the Mill Road Depot, Cambridge where it is bulked up and stored in its separate colours. It is then collected by Owens-Ilinois and taken for re-processing.
	Plastic bottles	Plastic bottles are taken to Donarbon, Waterbeach, where they are baled and sent on for reprocessing.
Policies	The main policies are: • Receptacles must be on the kerbside for collection by 7 am on the collection day; • Additional boxes are available free of charge; • If a box is stolen, the replacement is free; • Crews will not collect material that is either contaminated or not part of the service; • If a box is contaminated, a member of the crew will post a note through the door on why their box was not emptied; • Plans for new properties are assessed at an early stage of the process and advice is given as to whether a kerbside collection or a communal mini-recycling centre is most appropriate for the development; and • A collect and return service is offered to disabled and elderly residents.	

Dry Recycling Collections for Schools and Educational Premises

The City provides 42 primary schools out of 52 and 30 colleges out of 31, a collection service for paper, cans and glass through mini recycling centres. Schools & Colleges are provided with an appropriate size of bin depending on the space available for the recycling facilities. They receive a bin for each colour of glass (clear, brown and green), a bin for paper and a bin for mixed cans. Bins for plastic and cardboard will be available by the end of 2007/08, once vehicle capacity has been secured.

Ensuring Quality Materials

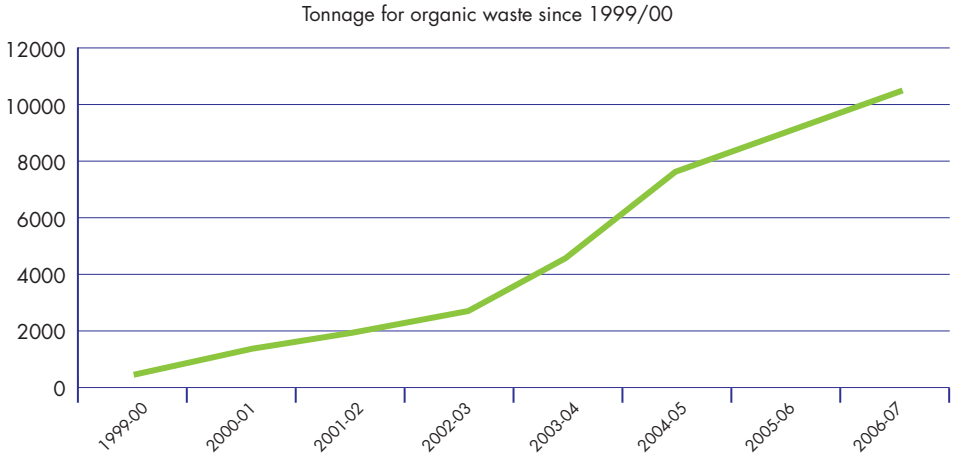
The Council ensures quality of material through extensive ongoing publicity advising residents what can and cannot go into their recycling container, through:

- A collection calendar that is distributed once a year;
- Encouraging school children to get into good recycling habits;
- Regular 'cut-out-and-keep' reminders in Cambridge Matters;
- Recycling information on website and given out at events;
- Training their operators on the types of materials acceptable for reprocessing;
- Not collecting materials that are either contaminated or not part of the collection service; and
- Arranging visits by Rangers or Recycling Technicians to residences that are having problems managing their waste.

8 Kerbside Organic Waste Collections

Households in Cambridge receive a kerbside organic waste collection which accepts both garden and kitchen waste. The Council also currently provide free kitchen waste caddies to households in Cambridge. Some schools are also provided with a bin for organic waste.

Cambridge City Council collected 10,504 tonnes of organic waste at kerbside during 2006/07 – an average of 278kg per household. This is 23% of the total amount of household waste collected in the district in this year. The graph below shows the total organic waste tonnage collected at kerbside in Cambridge, each year, since 1999/00, showing a considerable rise in tonnages collected.



The table below provides detail on the kerbside organic waste collection scheme in Cambridge City:

Coverage	84.6% of all households provided with service (from Baseline Report)
Receptacles	Households are issued a 240-litre green-wheeled bin (140-litre bin option available), with some terraced properties and flats on a 75-litre paper sack collection. A paper liner and caddy is issued with all new bins.
Frequency	Alternate weekly
Materials collected	Garden and kitchen waste. More specifically: • Grass and hedge cuttings; • Vegetable & fruit peelings; • All cooked/uncooked food waste including meat, poultry, fish and dairy (preferably wrapped in newspaper/paper); • Yellow Pages; • Tea bags & coffee filters; • Stale bread; • Bark & untreated wood; • Flowers & all weeds; • All cardboard; • Envelopes (no windows); and • Shredded paper.
Kerbside collection operator/contractor	Cambridge City Council operates the kerbside organic waste collection service through their City Services Department.
Collection process	Cambridge City is broken down into four rounds, which are visited on a fortnightly basis. Crews check the bins for contamination. If a bin is found to be contaminated a sticker is placed on the bin informing the householder and a note made on a round sheet, which is reported at the end of each day. The collected material is loaded on to the collection vehicles and taken straight to Donarbon in Waterbeach where it is made into good quality compost for land remediation and agriculture. Residents are given extra support to encourage them to use this service through the provision of five-litre kitchen caddies and paper liners, in which to collect and wrap waste food before placing it into the green bin or brown sack. There will be a nominal charge introduced for the paper caddy liners during 2007/08.
Vehicles	The City uses two standard Refuse Collection Vehicles and two Rotopresses to operate this service
Policies	The main policies are: • Receptacles must be on the kerbside for collection by 7 am on the collection day; • The collection crew replace the number of paper sacks with clean folded sacks. The householder can request up to six additional sacks; • Residents are encouraged to wrap food waste in newspaper to prevent smells and flies; • The Council will not take side waste from properties with bins; • Where there is obvious contamination the crew do not empty the bins and leave a contamination sticker on the bin. The sticker requests the householder to contact the Council to discuss the problems or reasons for contamination. If the bin is not cleared within 4 weeks, the property will receive a letter asking them to contact the Council regarding the situation; and • New properties receive a free green, wheeled bin along with free black bin for refuse. There is one bin per new property unless it is an exceptional circumstance.

Ensuring Quality Materials

The Council ensures quality of materials by listing materials accepted on the wheeled bins, issuing a quarterly magazine and annual collection calendars to all households and training their crew to inspect the bins before emptying. The council can also arrange for a resident to be visited by a Ranger if further information is required.

9 Refuse Collection

As with dry recycling collections, there are many properties in Cambridge City for which standard kerbside collections are not appropriate. As an alternative, flats, school and college are provided with large communal refuse bins, which are emptied at appropriate frequencies. In 2005 the City Council introduced a new system for the issuing of second black bins in order to make historical second black bins legitimate, in line with Council policy. Properties with a second black bin will be assessed and if there is still a genuine need for a second bin then a red lid is fitted to the container. New applications for a second bin will also follow this process.

Cambridge City sent 21,462 tonnes of biodegradable municipal waste (BMW) to landfill in 2006/07. This is 7,388 tonnes less than the total calculated allowance for the city in this year.

The graph shows the total refuse tonnage collected at kerbside in Cambridge each year since 1999/00, showing a gradual decline as more household waste is diverted, essentially through recycling and composting.

The table below provides detail on the kerbside refuse collection in Cambridge.

Coverage	100% of households are provided with service (from Baseline Report)
Receptacles	Most properties are on a black-wheeled bin service with some terraced housing and flats on a white plastic bag collection and the breakdown is as follows: • 79% of households have a 240-litre wheeled bin; • 20% of households have a 140-litre wheeled bin; • 1% of households use a white plastic bag (the Council supplies sacks to residents in a roll once every six months); and • Small portion of flats use a Chamberlain bin.
Frequency	Alternate weekly except for certain flats which have retained a weekly collection. However new developments will have fortnightly refuse and recycling collections.
Materials collected	All waste that cannot be recycled or composted
Kerbside collection operator/contractor	The Council operates the refuse collection service through its City Services Department.
Collection process	All the material goes to Donarbon, Waterbeach for disposal at land fill.
Vehicles	The City uses five Refuse Collection Vehicles to operate this service
Policies	The main policies are: • The bin must be on the kerbside for collection by 7 am on the collection day; • Side waste is not collected; • Residents can apply for an additional 240-litre wheeled bin if they have 6 or more in the family; • A charge of £50 is made for replacement/additional bins; • Red lids are issued to legitimate second black bins; and • An assisted collect and return service is offered to disabled and elderly residents.

10 Bulky Items Collection

Cambridge City Council's Cleansing Department provides a collection service for bulky items by arrangement. Service charges are the following:

1 item - £20

2-3 items – £26

4-6 items - £30

7-10 items - £40

10+ items - £60

Apart from fridges and electrical appliance, which are recycled, all other items collected are land-filled. Residents are therefore encouraged to send their items to charities or community groups for reuse at the point of contacting the Council.

11 Street Sweepings

The maintenance of Cambridge streets and open spaces is delivered by City Services Department through the Streetscene, City Rangers and Environmental Crime Enforcement teams. Together they provide clean, safe and green streets and open spaces in Cambridge. . The work that City Services carry out includes litter picking, graffiti removal, street sweeping and deep cleaning, grass cutting and public toilet cleaning.

Receptacles	Litter bin and Hand barrows
Frequency	The service runs on a cycle between 7 am and 7 pm daily in identified zones in accordance with the Code of Practice of the Environmental Protection Act.
Materials collected	Street litter and detritus
Contractor	Cambridge City Council's Street scene team collects street sweepings There is no external contractor for this service.
Collection process	The vehicles and staff operate from the Mill Road Depot and the material is taken to Donarbon Landfill Site, Waterbeach for disposal, leaves are taken to Cherry Hinton Hall for composting. There are a range of methods employed for the service between on-street and open spaces: Manual litter picking is done by individuals filling up bags. The full bags are left by litter bins for collection by a caged vehicle. Hand barrows are operated by individuals and they also leave bags of litter in designated places for collection by a caged vehicle. The litter press is a standard compaction vehicle that empties litterbins. Detritus is cleared by three ride on sweepers and a Kerb and Gully Sweeper.
Vehicles	The Council uses a range of vehicles to maintain the quality of the environment that includes three ride on sweepers, one 7 tonne Gully Sweeper vehicle to operate this service and several caged vehicles.
Policies	The Council has an enforcement policy, including the ability to fine under the Clean Neighbourhoods Act and Shopping Trolley Policy to redeem the cost from the owners. The City Council also has a 2-hour rapid response policy to deal with dangerous materials such as needles, glass, and flammable liquids and substances that are discarded.

12 Fly-Tipping

The Council's City Services Department collects fly-tipping. The Council uses a flat bed vehicle to carry out the service.

The service is provided throughout the City and the target for material removals is within one day. The vehicles operate out of the Mill Road Depot and the material is taken to Donarbon Landfill Site, Waterbeach for disposal.

Cambridge City has a dedicated enforcement team, which works on a number of enforcement issues, including fly-tipping. This Team is now working with the Cambridgeshire and Peterborough Waste Partnership who have recently expanded their remit to include a Prevention, Intervention and Enforcement Sub Group. To facilitate the actions of this subgroup a partnership Environment Action Coordinator has been appointed to work on all aspects of environmental crime, including fly-tipping.

13 Commercial Waste

The BREW[2] project will help establish new and expand the existing trade waste recycling schemes. This project aims to increase trade waste recycling throughout the Partnership area. The BREW Project is funding the expansion of the trade recycling collections in Cambridge City. The other authorities in the partnership are also funding activities to improve trade waste recycling through this project. In partnership with the other authorities, this project will fund an awareness campaign throughout the area to promote trade recycling and create awareness of business, "Duty of Care". The trade waste and recycling service runs as required throughout the District.

Coverage	The Council's City Services collects commercial waste across the City, which includes external collections outside of the City.
Receptacles	Trade waste bins.
Frequency	The frequency of collection varies from contract to contract, some daily, twice weekly or weekly and is collected by a Refuse Collection Vehicle. The commercial properties on this service have a range of wheeled bins varying in size or plastic sacks. There is also a bulky unit collection, which consists mainly of cardboard.
Materials collected	All materials are collected. Residual waste is collected for disposal. Trade recycling has recently been introduced and accepts mixed glass and cardboard.
Data	In 2004-05, the Council collected 6,405 tonnes of commercial waste or 13.5% of the total waste collected by the authority[2].
Collection process	The vehicles operate the collection service from the Mill Road Depot. Residual trade waste is taken to Donarbon Landfill Site, Waterbeach for disposal. Glass is bulked up in and then taken by Owens-Illinois for re-processing. Cardboard is taken by SCA for re-processing.
Vehicles	There are four Dennis Eagle Elites.
Trade recycling	There is a trade waste recycling collection that accepts mixed glass and cardboard.

14 Clinical Waste

Domestic Clinical waste is collected free of charge by the council. GPs have to notify the authority of the need for a collection giving details of address etc and collections are made. Yellow bags are provided to the resident and however many bags are put out for collection, the same number of replacements are left. Clinical waste is taken to an incinerator. The County Council contractor pay for disposal.

2 BREW, Business Resource Efficiency and Waste, Centre for Local Authorities

Coverage	The Council's City Services collects clinical waste in all of the District area.
Receptacles	Clinical Waste is collected in yellow sacks – double skinned to prevent leakage and syringes are collected in yellow boxes.
Frequency	Yellow bags are collected weekly from properties that require this service and the boxes are collected on demand. There is also provision of on Street bin and disposal facilities in public toilet for needles.
Materials collected	The NHS provides the yellow bags and contacts the council when a new collection is required or when one is to be discontinued. The Council takes the material to Vetspeed, Thriplow for incineration
Kerbside collection operator/ contractor	There is no contract in place for this service.
Collection process	The on street and public toilet collection of needles is carried out by the Street Scene Team and is sent for incineration.
Vehicles	The council does not use a special vehicle to carry out the service, although this may be necessary in the future.

Coverage	All of the district area is covered.
Environmental Enforcement team	The team consists of two people and an administrator.
Prosecution Polices	Policies exist on all offences relating to the teams work.
Enforcement operator/ contractor	City Services.
Enforcement equipment	Covert CCTV vehicle and PACE interview suite.
Enforcement Vehicles	As above, there is a covert CCTV vehicle and various rented vehicles used for enforcement pursuits.
Policies	
Dog Fouling	Policy governed by Environmental Health
Fly-posting	Policies exist in different departments to tackle this issue under various legislation
Abandoned vehicles	Policy governed by City Services
Littering	Zero tolerance policy with use of FPN's, voluntary code for businesses

15 Enforcement

The Public Realm Enforcement Team at the City Council are responsible for investigating instances of enviro-crime in public places across the city. As well as undertaking enforcement action where necessary, the team also provides advice for children, residents and businesses on 'Duty of Care', S46/47 offences, littering, fly-tipping, fly-posting and illegal waste carriers. The Enforcement team investigates illegal disposal of any waste in the public domain and appropriate action is taken against offending house-holders and commercial properties. The team currently consists of two officers and an administrator, however expansion of this team is required and they are hoping to have new officers in post subject to success bids during the budget process.

16 Training

The City Council runs most waste services and ensures they provide staff training on:

- Health and Safety training;
- Manual Handling; and
- Training offering continuous improvement to the service.

17 Achieving Targets

Cambridge City Council is working to increase the recycling rates of current collection programmes using the following awareness campaigns:

- Providing all residents with an annual calendar of their collection timetables;
- The City launched their 'Cambridge Matters' magazine in December 2004. This magazine was initially dedicated to waste and recycling issues, but has now been broadened to include all sustainability issues. It is distributed to all households in the City;
- Updating and improving the information on the City website regularly;
- Advertising in local magazines, newspapers and radio when opportunities arise;
- Other initiatives have included some face to face surveys on a selection of properties;
- The Council provide talks to schools to promote recycling;
- An Environment Coordinator is employed by the Council. They run SCRAP week (Schools Recycling Awareness Programme) and conduct's talks with schools;
- Supporting the National 'Recycle Now' campaign. This involves staffing road shows to provide local information to the public and promoting recycling and waste minimisation initiatives;
- Promoting the sale of compost bins for £10 from the Mill Road Depot;
- Encouraging home composting as an alternative to using the organic waste kerbside collections through 'Cambridge Matters' magazine;
- Promoting home composting through continued involvement in the Master Composter programme and involvement in home composting offers run by the RECAP Partnership in conjunction with WRAP. Prior to this an offer was through Black Wall which ran for four years;
- Promoting the use of Real Nappies by supporting Real Nappy Week;
- Promoting recycling and waste minimisation at Student Fresher's Fair events;
- Door-stepping with evening meetings with the public to raise awareness and engage residents in their local environment; and
- Giving talks to community groups about the importance of recycling.

East Cambridgeshire (ECDC) – Recycling Plan 2007/08

1 Introduction

This document describes the socio-demographics of the local authority area, together with current municipal waste management infrastructure and performance specific to East Cambridgeshire District Council.

2 East Cambridgeshire – Population and Socio-Demographics

East Cambridgeshire District Council covers an area of 65,516 hectares. The district is predominantly rural in character, stretching from the border with Norfolk in the north to within two miles of Cambridge in the south. Approximately 44% of the population live in the main settlements of Ely, Littleport, Soham, Burwell and Sutton[3].

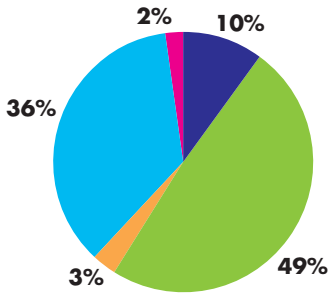
The population for East Cambridgeshire in 2006 was 76,300, which is approximately 10% of the total population in Cambridgeshire and Peterborough. According to mid 2006 forecasts, the population in East Cambridgeshire is predicted to rise by 5.6% between 2006 and 2011 and rise by another 1.5% between 2011 and 2016. The predicted population in East Cambridgeshire for 2016 is 81,800. Presently East Cambridgeshire has the second lowest predicted growth in population over the next 15 years for a district in Cambridgeshire and Peterborough[4].

The table shows the dwelling forecast for East Cambridgeshire, set against dwelling forecasts for Cambridgeshire and Peterborough overall. Cambridgeshire and Peterborough have been earmarked for development by Central Government and are expected to have some of the highest housing increases in the country. Dwelling projections are used in calculations to predict waste growth[5].

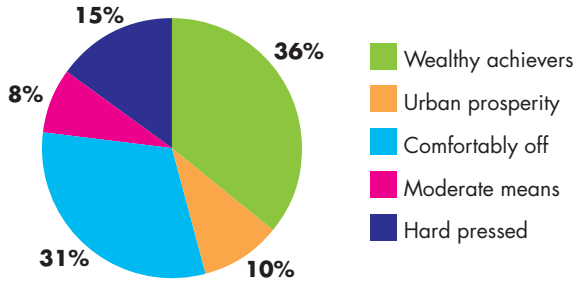
Forecast year	2006	2011	2016	2021	2026	2031
Dwellings in East Cambridgeshire	34,200	37,200	38,900	39,500	40,500	41,600
Dwellings in Cambridgeshire and Peterborough	321,200	350,400	379,400	400,600	420,000	436,100

The pie charts below show ACORN (A Classification of Residential Neighbourhoods) profiling for East Cambridgeshire, compared to profiling for Cambridgeshire and Peterborough as whole, to give an indication of certain socio demographic characteristics of the district. This ACORN profiling is used in waste composition analysis .

ACORN Profile for East Cambridgeshire



ACORN Profile for Cambridgeshire and Peterborough



The profiling shows that the three prevalent groups in East Cambridgeshire are:

Wealthy Achievers – These are some of the most successful and affluent people in the UK. They live in wealthy, high status, rural, semi-rural and suburban areas of the country. Middle-aged of older people predominate, with many empty nesters and wealthy retired. Some neighbourhoods contain large numbers of well-off families with school age children, particularly in the more suburban locations. These people live in large

3 Audit Commission Report District Report 22 July 2004

4 Research Group, OCS – Cambridgeshire County Council, Mid-2006 forecasts

5 Cambridgeshire and Peterborough Waste Partnership Household Kerbside Residual, Recycling and Garden Waste Composition Study, October 2005

houses, which are usually detached with four or more bedrooms. Almost 90% are owner-occupiers, with half of those owning their home outright. They are very well educated and most are employed in managerial and professional occupations. Many own their own businesses.

Comfortably Off – This category contains much of the 'middle-of-the-road' Britain. Most people are comfortably off - they may not be wealthy, but they have few major financial worries. All lifestyles are represented in this category. Younger singles and couples just starting out on their careers are the dominant group in some areas. Other areas have mostly stable families and empty nesters, especially in suburban of semi-rural locations. Most people own their own home, with owner occupation exceeding 80%. Most houses are semidetached or detached. Employment is a mix of professional and managerial, clerical and skilled occupations.

Hard Pressed – This category contains the poorest areas of the UK. Unemployment is well above the national average. Levels of qualifications are low and those in work are likely to be employed in unskilled occupations. Household incomes are low and there are high levels of long-term illness in some areas. Housing is a mix of low-rise estates, with terraced or semi-detached houses and purpose built flats. Properties tend to be small and there is much overcrowding. Over 50% of the housing is rented from the local council or a housing association.

3 Waste Arising and Performance

3.1 General

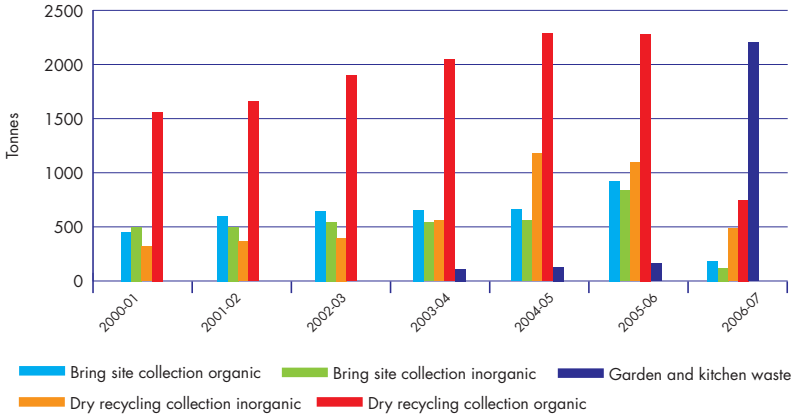
East Cambridgeshire produced 30,205 tonnes of household waste in 2006/07, which is around 7.5% of the total amount of household waste produced in the partnership area in this year. The table below shows a breakdown of this waste as per government Best Value Performance Indicators (BVPIs):

East Cambridgeshire		
BVPI 84a	Kg of household waste collected per head of population	396kg per head of population
BVPI 82a	Total tonnage and % recycled	5,130 / 17%
BVPI 82b	Total tonnage and % composted	5,500 / 18%
BVPI 82a and 82b	Total tonnage and % recycled and composted	10,630 / 35%
BVPI 82d	Total tonnage and % land filled	19,574 tonnes / 65%

East Cambridgeshire District Council did not meet BVPI targets set by government in 2003/04, but exceeded the target of 30% set in 2005/06 by achieving 32% recycling and composting. The RECAP Partnership has agreed voluntary targets for its authorities, exceeding those set by government. The Landfill Allowance issued to Waste Disposal Authorities which set the amount of biodegradable waste permitted to landfill, has also been calculated for each district council (Waste Collection Authority) using the Environment Agency estimator.

3.2 Performance of Waste Collection Schemes

The chart below illustrates the performance of waste collection schemes in East Cambridgeshire over time.



To determine performance the RECAP partnership commissioned a two-phase waste composition analysis in 2004/05. The study provided a detailed assessment of household waste produced in each district and across the partnership as a whole. At a partnership level the results showed that:

- Compostable waste is around 50% of total waste arising. Approximately 30% for which is currently captured within organic waste collections, which leaves around 20% of compostable waste available for potential capture; and
- Materials that are commonly targeted in kerbside recycling schemes account for around 29%. Around 15% of this is currently diverted from the residual waste stream, leaving around 13% of the total arisings available for potential capture.

The table below shows the average composition of the kerbside residual waste stream in East Cambridgeshire and therefore the potential material that could be recycled or composted specifically within this district. It indicates that a high percentage of household waste is paper and that potentially up to 20% of waste within the refuse stream is paper that could potentially be diverted through recycling or composting.

Material	% in Refuse waste stream	% in Dry recycling waste stream	% in Organic waste stream
Kitchen Organics	30	0	9
Garden Organics	7	0	82
Paper	20	76	8
Glass	7	19	0
Metals	4	2	0
Textiles	4	0	0
Plastics	15	1	1
Multi-layer	1	0	0
Hazardous	1	0	0
Sanitary	7	0	0
WEEE	2	0	0
Wood	0	0	0
Miscellaneous	4	1	0
TOTAL	100	100	100

RECAP has commissioned another waste composition analysis, the results of which will be available early 2008. These results will be used, along with other required data, such as predicted waste growth and targets, within a modelling tool commissioned by the RECAP partnership. The tool will model predicted outcomes of pursuing a particular course of action (e.g. targeting a particular material and or participation rates) and will therefore help to determine the most effective action to improve performance and meet recycling and landfill diversion targets.

4 Overview of Services Within East Cambridgeshire

East Cambridgeshire District Council provides the following waste collection services:

- A district wide three-stream kerbside waste collection service for households (dry recycling, organic waste and refuse);
- A chargeable service for the collection for household bulky items; and
- A series of bring sites across the district for household waste.

East Cambridgeshire District Council developed a fortnightly kerbside organic (garden) waste collection service between 2002 and 2005, utilising the Defra Waste Minimisation and Recycling Fund. In 2005 this scheme was expanded to include the collection of kitchen waste. A fortnightly kerbside dry recycling scheme has been running since 1997 and was expanded between November 2005 and January 2007 to cover the entire district. The scheme currently collects paper, glass and cans, but this will be expanded to include the collection of plastics in April 2008. Recycling banks have been installed at sites across the districts for the collection of plastic bottles and drink cartons (TetraPaks), which aren't presently collected at kerbside. In August 2007, East Cambridgeshire made a decision to continue with a weekly collection service for refuse, following trials for alternate collections in four areas - Bottisham, Lode, Long Meadow and Witchford.

East Cambridgeshire District Council provides collections for dry recycling and organic waste to 15 schools in the area. It currently collects plastics from Fordham Primary School and is hoping to expand this to other schools within the district. Recognising the importance of educating young people on waste issues and what they can do, officers from the Council give talks at assemblies and guidance and support to teachers. It further works with teachers from Fordham Primary School to disseminate best practice to other schools across the district.

East Cambridgeshire District Council can provide a trade waste collection service through Veolia Environmental Services, and in partnership with other RECAP authorities, has secured funding from the Business Resource Efficiency and Waste (BREW) trade waste recycling scheme and will look to encourage trade waste recycling in the area.

The Partnership has expanded its remit to cover Environmental Crime and Street Scene issues. The Recycling now reflects the expansion of the partnership, through the addition of the new sections to the plan. Towns and villages in East Cambridgeshire and the city of Ely are divided into 'zones' and the zones, which are busiest and get the dirtiest, are cleaned more often. For example, the centres of Ely, Littleport and Soham are swept and cleaned daily, including the emptying of litter bins, whilst the villages and roads are swept and cleaned on a twenty working day cycle, litter bins are emptied weekly.

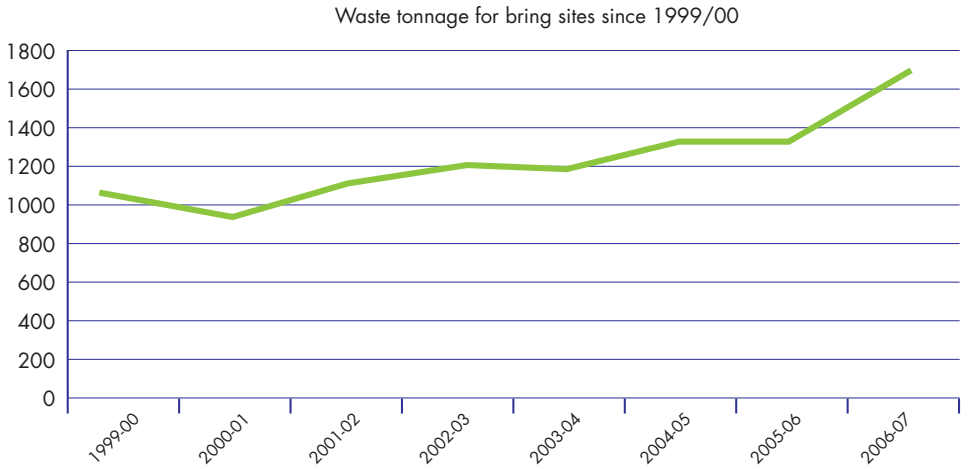
The following sections provide more detail on the waste collection schemes and streetscene services provided in East Cambridgeshire.

5 Bring Sites

There are 63 bring sites (mini recycling centres) in East Cambridgeshire located at public accessible sites, such as supermarkets and village halls across the district. In 2003/04 it was calculated that 89% of households within East Cambridgeshire were within 1km of a bring site. In July 2004 the Council expanded its collection banks to include 40 new banks for plastic bottles, utilising the Defra Waste Minimisation and Recycling Fund.

In 2005 a further five additional banks were installed to collect paper-based drink and liquid food cartons (TetraPaks).

A total of 1,697 tonnes of household waste was recycled at bring sites in East Cambridgeshire in 2006/07, accounting for just under 33% of the total amount of household waste recycled in the district in this year (not including organic waste). In 2004/05 bring sites accounted for 27% of recycled household waste in East Cambridgeshire and in 2003/04, 32%. The graph below shows the recycling tonnage collected at bring sites each year in East Cambridgeshire since 1999.



The table below provides detail on bring sites in East Cambridgeshire.

Materials collected	Number of sites collecting material	Who receives materials	Contracts in place	How material collections are managed
Glass (clear, green, brown and mixed)	46	Waste Recycling Group (WRG), Yorkshire	This is a Joint Waste Contract with other RECAP districts. The contract commenced April 2003 and is presently	WRG supply, maintain and empty banks. The glass collected is takento a transfer station at Red Lodge. It is then bulked up before being transported to a site operated by Berrymans in South Kirkby, West Yorkshire. Here the glass undergoes separation and cleaning and is then transported to a cullet treatment plant in Knottingley, Yorkshire. Approximately 3%-5% of the material has to go to landfill due to contamination. A further 10%-15% is exported depending on requirements of the market. The material that is reprocessed in the UK or abroad is used to make bottles.
Paper (newspapers, junk mail, magazines)	29	Newslitter Ltd, Soham Aylesford Newsprint, Kent	No contract Jan-05 to Jan-10	Newslitter, a local company in Soham, provides, maintains and empties the banks. The paper is taken to Soham where it is shredded for use as animal bedding. Aylesford provides, maintains and empties the banks. The paper and magazines are taken to be cleaned, de-inked and turned into pulp. The pulp is then passed through a process of rollers and drying cylinders at 60mph to produce a new roll of Newsprint, each weighing 40 tonnes. This is then sold to publishers and used to create newspapers. Producing newsprint through recycling uses less energy than using raw wood pulp.
Mixed cans	26	Pearsons, Thetford	No contract	Pearsons, a local family business, provides, maintains and empties the banks. Most of the material is taken to Thetford and processed at one of three modern sites covering over twelve acres. The tins and cans are separated into aluminium and steel by means of a magnetic separation line. They are then compacted into bales and transported to Corus steel and Novellis aluminium. The aluminium is melted and then cooled to form aluminium bars weighing 24 tonnes. These are then cut, rolled into thin sheets and then used to create new aluminium cans. This process is a very energy efficient and economical way of producing cans. The steel is melted down, rolled into sheets and then used to create a range of steel materials and products.
Plastic bottles	45	Donarbon, Waterbeach	No contract	Veolia Environmental Services empties the banks and takes the material to the Donarbon site at Waterbeach where it is baled and sent on for reprocessing.
Books	2	Oxfam	No contract	Oxfam supply, maintain and empty some of the banks. Books are collected and either distributed to local charity shops for resale or recycled.
Textiles	14	Black Country Rag, West Bromwich, West Midlands Salvation Army, Kettering, Northamptonshire	No contract No contract	Black Country Rag supply, maintain and empty some of the banks. Items are taken to their Head Quarters in West Bromwich and weighed. Items are then hand sorted into different grades of clothing and textiles. Once separated into categories, re-useable and recyclable items are then tightly packed and wrapped in protective transport bags before being dispatched. The Salvation Army supply, maintain and empty some of the banks. The textiles are collected and taken to Kettering where they are sorted into materials for recycling and clothes that can be used for aid and distributed to local charity shops.
		Oxfam	No contract	Oxfam supply, maintain and empty a number of the textile banks. Items are taken to a central processing facility in Kettering. After sending some items local charity shops the remainder is packed into large canvas (botany) bags – each holds about 140 kg of clothes. These bags are then loaded onto 40ft trailers for transportation by road and sea to Eastern European Countries, Tunisia and elsewhere.
Foil	9	Pearsons, Thetford	No contract	Branching Out collects materials from banks provided by the Council. Material is taken to Pearsons in Thetford, for reprocessing.

Recycling Banks for Schools

Recycling banks are also provided at the following:

- Burwell Village College recycle glass, cans, paper textiles and plastic;
- Soham Village College recycle plastics, paper and cans;
- Bottisham Village College recycle paper;
- Bottisham Junior School recycle cans, paper, textiles and plastic;
- Ditton Lodge School recycle plastic textiles and paper; and
- Fordham Primary School recycles plastics.

6 Kerbside Dry Recycling Collection

East Cambridgeshire District Council provides a kerbside–sort collection for dry recyclables. Some flats are not currently on the collection system although work is being undertaken to maximise coverage in the future.

East Cambridgeshire collected 3,411 tonnes of dry recycling at kerbside during 2006/07 – an average of 104 kg per household. This is around 11% of the total amount of household waste collected in the district in this year. The graph below shows the dry recycling tonnage collected at kerbside in East Cambridgeshire each year since 1999/00.

The table below provides detail on the kerbside dry recycling collection scheme in East Cambridgeshire:

Coverage	100% of all households are offered the service
Receptacles	Households are issued a 55-litre black box
Frequency	Fortnightly
Materials collected	White paper, Clean drinks cans, Newspapers, Clean foil Magazines, Aerosols (not squashed), Junk Mail Clean glass jars Metal jar lids, Telephone directories, Clean glass bottles (all colours of glass), Clean food cans
Kerbside collection operator/ contractor	The Council operates the kerbside dry collection service through a contract with Veolia Environment Services. The contract commenced April 1997 and was re-awarded in 2007 to commence in April 2008 until 2015, with an option to extend for a further four years.
Collection process	The material is sorted at the kerbside, with residents requested to separate washed cans and glass bottles and jars into separate bags. It is collected by Veolia Environmental Services. All materials are taken to Donarbon at Waterbeach where they are bulked up and sent on for reprocessing.
Vehicles	The Contractor uses three kerbside recycling vehicles to operate the service.
Policies	The main policies are: • Boxes must be placed on the kerbside adjacent to the property for collection by 7 am on the day of collection; • There are no restrictions on the amount of material a household can set out for collection; and • If a household requires an additional recycling box, the Council will issue one free of charge.

Dry Recycling Collections for Schools

Dry recyclables is collected at 15 schools in the district using kerbside black boxes for paper, and organic waste (cardboard and food waste) collected in paper sacks.

Ensuring Quality Materials

The Council ensures the quality of materials collected by ensuring the contractor trains their operators on types of materials acceptable for reprocessing. They will not collect materials that are either contaminated or not part of the collection service.

7 Kerbside Organic Waste Collections

Households in East Cambridgeshire receive a kerbside organic waste collection that accepts both garden and kitchen waste. The Council collected 5,500 tonnes of organic waste at kerbside during 2006/07 – an average of 168kg per household. This is 18% of the total amount of household waste collected in the district in this year. The graph below shows the total organic waste tonnage collected at kerbside in East Cambridgeshire, each year, since 2000/01, showing a considerable rise in tonnages collected.

The table below provides detail on the kerbside organic waste collection scheme in East Cambridgeshire:

Coverage	100% of all households are offered the service
Receptacles	Households are issued with a paper sack
Frequency	Fortnightly
Materials collected	Garden and kitchen waste, more specifically: Grass and hedge cuttings; Vegetable & fruit peelings; All cooked/uncooked food waste including meat, poultry, fish and dairy (preferably wrapped in newspaper/paper); Yellow Pages; Tea bags & coffee filters; Stale bread ;Bark & untreated wood; Flowers & all weeds; All cardboard; Envelopes; and Shredded paper.
Kerbside collection operator/ contractor	Kerbside collection operator/contractor East Cambridgeshire District Council operates the kerbside organic waste collection service through a contract with Veolia Environment Services. Veolia have been providing this service since 2002 and were re-awarded the contract in 2007, which commences in April 2008 until 2015, with an option to extend for a further four years.
Collection process	All the material goes to the Donarbon composting facility in Waterbeach. Here the material is shredded and mixed ready for composting. It is then placed in a concrete container or bay, called a 'compost clamp'. The clamp is filled with organic waste and then sealed with a tarpaulin sheet. Air and water are fed into the material, which is composted at a high temperature for 2-4 weeks. The compost is taken from the clamp and 'matured' outside in a windrow for a further month. The material is then screened, stored and mixed to customer requirements.
Vehicles	Veolia Environmental Services uses three Refuse Collection Vehicles to operate the service
Policies	The main policies are: • Sacks must be on the curtilage of a property for collection by 7 am on the collection day; • The collection crew replace the number of paper sacks presented with the same number of clean folded sacks; • There are no restrictions on the number of paper sacks the householder sets out for collection; and • The Council will not take side waste from properties with bins.

Ensuring Quality Materials

The Council ensures quality of material by listing materials accepted on the paper sacks and training their operators on types of materials acceptable for reprocessing and will not collect materials that are either contaminated or not part of the collection service.

8. Refuse Collection

Nearly all residents in East Cambridgeshire are provided a weekly kerbside collection, except for 92 remote rural properties on a fortnightly collection, which is referred to as the 'Fen Run'. Following alternate-weekly collection trials in these four areas of the district the Council have agreed to maintain a weekly kerbside collection.

East Cambridgeshire sent 12,070 tonnes of biodegradable municipal waste (BMW) to landfill in 2006/07. This is 2,231 tonnes less than the total calculated allowance for East Cambridgeshire for this year. The graph below shows the total refuse tonnage collected at kerbside in East Cambridgeshire, each year, since 1999/00.

The table below provides detail on the kerbside refuse collection in East Cambridgeshire.

Coverage	100% of all households are offered the service
Receptacles	All residents are provided a black plastic sack. The Council provide residents with one black sack per week, which is left after each collection. The Council will provide a resident with a years supply if requested.
Frequency	The majority of households are provided a weekly service, with the exception of 92 households, which are provided an alternate weekly service.
Materials	All household waste that cannot be recycled or composted.
Kerbside collection operator/ contractor	The Council operates the refuse collection service through a contract with Veolia Environmental Services. The contract commenced April 1997 and has recently been re-awarded until 2015, with the option to extend for a further four years.
Collection process	The refuse is taken to Donarbon landfill sites for disposal.
Vehicles	Veolia Environmental Services uses three Refuse Collection Veolia Environmental Services uses seven Refuse Collection Vehicles to operate the service and a 7? tonne caged vehicle for the rural properties.
Policies	The main policies are: • The sacks must be on the kerbside adjacent to the property for collection by 7 am on the day of collection; and • The Council does not restrict the number of bags left for collection, however, they will not collect bags that are too heavy.

9 Bulky Items Collection

The Council offers a bulky domestic refuse collection service for items of household furniture and white goods such as washing machines and cookers. This service is chargeable at £20.00 per three items. Items must be left in an accessible location (not in the street), and collection will normally be made within seven days of the request.

10 Street Sweepings

All towns and villages in East Cambridgeshire and the city of Ely are divided into zones. The zones that are the busiest and therefore get the dirtiest are cleaned more often. Ely town centre is swept twice daily, which includes the emptying of litterbins. Littleport and Soham are swept and cleaned daily, including the emptying of litterbins. Villages and roads are swept and cleaned on a twenty working day cycle, with litterbins emptied weekly. Street sweepings are collected through a contract with Veolia Environment Services. The contract commenced April 1997. The contract was re-awarded inn 2007 and is due to commence in April 2008 until 2015, with an option to extend for a further four years.

11 Fly-Tipping

Fly-tipping is collected through a contract with Veolia Environmental Services. The contract commenced April 1997 and has just been re-awarded to until 2015 with an option to extend for a further four years. The contractor uses a dedicated 7.5 tonne caged vehicle and an 18 tonne grab lorry to carry out the service. The service is run daily, as and when needed, and as directed by East Cambridgeshire. The Contractor takes the material to Donarbon, Waterbeach for disposal.

The Council looks for evidence and conducts follow up investigations to prevent fly-tipping. This is now in partnership with the Cambridgeshire and Peterborough Waste Partnership who have recently appointed an Environment Action Coordinator working on all aspects of environmental Crime, including fly-tipping and also facilitates actions carried out by the new Prevention, Intervention and Enforcement Sub Group.

The Council is looking to issue fixed penalty notices for the illegal disposal of commercial waste and fly-tipping.

12 Clinical Waste

The Council operate a weekly clinical waste collection service throughout the district, which is free of charge for patients that are referred by an NHS hospital or medical practice. The referrer and not the Council provide clinical waste sacks; low grade clinical waste (incontinence pads etc) can be disposed of in the normal refuse collection. Clinical Waste is collected through a contract with Veolia Environmental Services. The contract commenced April and has just been re-awarded to until 2015, with an option to extend for a further four years. The contractor uses a transit van equipped to legal requirements to carry out the service. Clinical Waste collections are referred to the Council by the NHS or local clinic and are collected in yellow plastic bags weekly on Thursdays. The Contractor takes all the waste material to Addenbrookes, Cambridgeshire for incineration.

13 Commercial Waste

The Council does not collect trade waste. However, through the Business Resource Efficiency and Waste (BREW) fund, East Cambridgeshire District Council, in partnership with the other six RECAP authorities, is looking to encourage business waste recycling in the area. The scheme will focus on small-medium enterprises (SME's) and will look at linking up businesses to share resources, for example, by promoting the use of shared storage space for recyclables.

14 Enforcement

There is no specific environmental enforcement team in place. Environmental enforcement issues are spilt between the planning enforcement team and waste management.

15 Training

As Veolia Environmental Services operate all the services in East Cambridgeshire, the Council ensure they provide staff training on:

- On site training for use of the baler and JCB for loading plastics; and
- Health and Safety training.

16 Waste Awareness Activities

East Cambridgeshire is currently working to maintain and increase the recycling rates of current collection programmes through the initiatives below. However, they are looking to expand this through the new contract with Veolia Environmental Services:

- Continuing to provide all new residents with a 'welcome pack' that explains Council services. This includes a recycling box, an explanation of the service and schedules for the year. The package is distributed through local estate agents;
- Twice a year a calendar is distributed for the dry recyclable kerbside collection that lists the material collected and the schedule for the year;
- Providing the A-Z Directory of recycling in conjunction with local schools;
- Advertising in local magazines when opportunities arise;
- Door knocking on households where boxes or paper sacks are not set out for collection;
- Visit schools to promote recycling with teachers from Fordham Primary School to disseminate best practice;
- Supporting the national 'Recycle Now' campaign. This involves staffing of road shows to provide local information to the public and promoting recycling and waste minimisation messages;
- Including articles in the twice-yearly ECDC magazine, which is distributed to all households in the District.
- Promoting home composting through continued involvement in the Master Composter programme with Branching Out and supporting community composting projects, such as the Burwell Community Composting Scheme;
- Taking part in WRAP reduced priced compost bin sales. Including providing bins to schools with talks from Master Composters; and
- Continuing to support and expand its work with community groups such as Branching Out, the Scouts and Ely Volunteers etc.

Fenland (FDC) – Recycling Plan 2007/08

1 Introduction

This document describes the socio-demographics of the local authority area, together with current municipal waste management infrastructure and performance specific to Fenland District Council.

2 Fenland – Population and Socio-Demographics

Fenland's four market towns, Wisbech, March, Whittlesey and Chatteris, are the main service, commercial and social centres and have strong historic character. There are about 850 listed buildings and 10 defined conservation areas. There are 29 villages, often comprising of a 'parent' village with one or two nearby hamlets with houses stretching out along a road or drainage bank. Over 70% of residents live in market towns, and most future growth will be directed to the towns but the villages are facing intense development pressures[6].

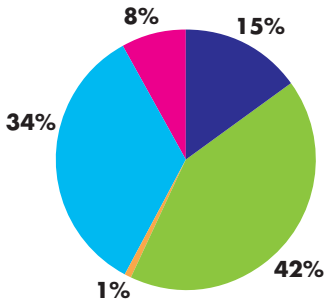
The population for Fenland in 2006 was 89,900, which is approximately 12% of the total population in Cambridgeshire and Peterborough. According to mid 2006 forecasts, the population in Fenland is predicted to rise by 1.9% between 2006 and 2011 and rise by another 3.6% between 2011 and 2016. The predicted population in Fenland for 2016 is 94,900[7].

The table below shows the dwelling forecast for Fenland set against dwelling forecasts for Cambridgeshire and Peterborough overall[8]. Cambridgeshire and Peterborough have been earmarked for development by Central Government and are expected to have some of the highest housing increases in the country. Dwelling projections are used in calculations to predict waste growth.

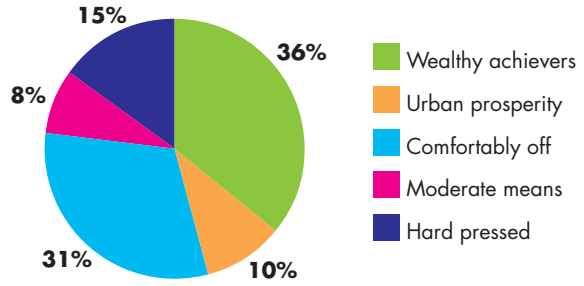
Forecast year	2006	2011	2016	2021	2026	2031
Dwellings in Fenland	40,000	42,100	44,800	47,700	50,100	52,200
Dwellings in Cambridgeshire and Peterborough	321,200	350,400	379,400	400,600	420,000	436,100

The pie charts below show ACORN (A Classification of Residential Neighbourhoods) profiling for Fenland, compared to profiling for Cambridgeshire and Peterborough as whole, to give an indication of certain socio demographic characteristics of the Fenland district. This ACORN profiling is used in waste composition analysis[9].

ACORN Profile for Fenland



ACORN Profile for Cambridgeshire and Peterborough



The profiling shows that the three prevalent groups in Fenland are:

Wealthy Achievers – These are some of the most successful and affluent people in the UK. They live in wealthy, high status, rural, semi-rural and suburban areas of the country. Middle-aged of older people predominate, with many empty nesters and wealthy retired. Some neighbourhoods contain large numbers of well-off families with school age children, particularly in the more suburban locations. These people live in large houses, which are usually detached with four or more bedrooms. Almost 90% are owner-occupiers, with half of those owning their home outright.

6 Fenland District Council Annual Report 2007

7 Research Group, OCS - Cambridgeshire County Council, Mid-2006 forecasts

8 Research Group, OCS - Cambridgeshire County Council, Mid-2006 forecasts and Fenland District Council Forecasts

9 Cambridgeshire and Peterborough Waste Partnership Household Kerbside Residual, Recycling and Garden Waste Composition Study, October 2005

They are very well educated and most are employed in managerial and professional occupations. Many own their own businesses.

Comfortably Off – This category contains much of the 'middle-of-the-road' Britain. Most people are comfortably off - they may not be wealthy, but they have few major financial worries. All lifestyles are represented in this category. Younger singles and couples just starting out on their careers are the dominant group in some areas. Other areas have mostly stable families and empty nesters, especially in suburban of semi-rural locations. Most people own their own home, with owner occupation exceeding 80%. Most houses are semidetached or detached. Employment is a mix of professional and managerial, clerical and skilled occupations.

Hard Pressed – This category contains the poorest areas of the UK. Unemployment is well above the national average. Levels of qualifications are low and those in work are likely to be employed in unskilled occupations. Household incomes are low and there are high levels of long-term illness in some areas. Housing is a mix of low-rise estates, with terraced or semi-detached houses and purpose built flats. Properties tend to be small and there is much overcrowding. Over 50% of the housing is rented from the local council or a housing association.

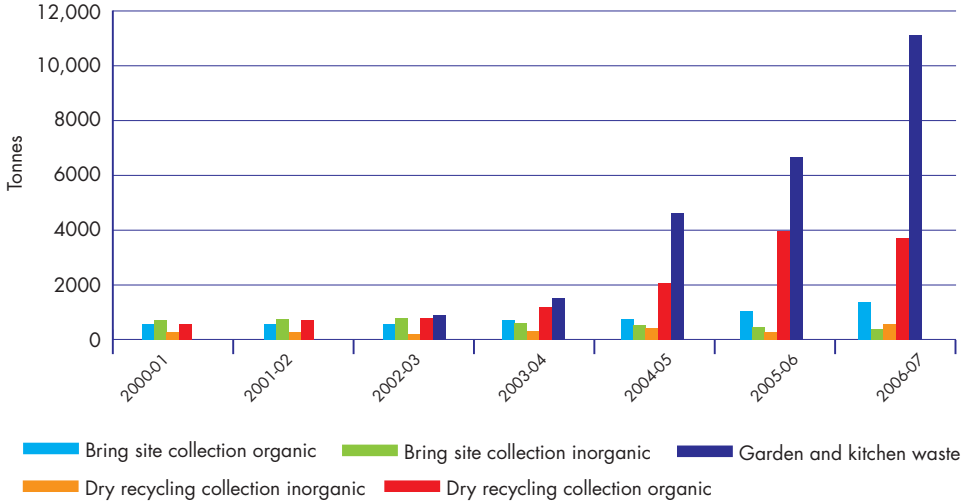
3 Waste Arising and Performance

3.1 General

Fenland produced 40,269 tonnes of household waste in 2006/07, which is around 10% of the total amount of household waste produced in the partnership area in this year. The table below shows a breakdown of this waste as per government Best Value Performance Indicators (BVPIs):

Fenland		
BVPI 84a	Kg of household waste collected per head of population	448kg per head of population
BVPI 82a	Total tonnage and % recycled	7927 tonnes / approx 20%
BVPI 82b	Total tonnage and % composted	11,188 tonnes / approx 28%
BVPI 82a and 82b	Total tonnage and % recycled and composted	19,114 / approx 47%
BVPI 82d	Total tonnage and % land filled	21,155tonnes / approx 53%

Fenland District Council exceeded BVPI targets set by government in 2003/04 and 2005/06 and are now, as illustrated above, recycling and composting just over half of all household waste collected. The RECAP Partnership has agreed voluntary targets for its authorities, exceeding those set by government. The Landfill Allowance issued to Waste Disposal Authorities which set the amount of biodegradable waste permitted to landfill, has also been calculated for each district council (Waste Collection Authority) using the Environment Agency estimator.



3.2 Performance of Waste Collection Schemes

The chart below illustrates the performance of waste collection schemes in Fenland over time

The table below shows the percentage of the number of missed collections reported and collected by the end of the next working day. This is for all kerbside bin collections in Fenland.

Year	2005/06	2006/07	2007/08	2008/09
Target	90%	85%	88%	90%
Actual	87%	88%		

To determine performance the RECAP partnership commissioned a two-phase waste composition analysis in 2004/05. The study provided a detailed assessment of household waste produced in each district and across the partnership as a whole. At a partnership level the results showed that:

- Compostable waste is around 50% of total waste arising. Approximately 30% of which is currently captured within organic waste collections, which leaves around 20% of compostable waste available for potential capture; and
- Materials that are commonly targeted in kerbside recycling schemes account for around 29%. Around 15% of this is currently diverted from the residual waste stream, leaving around 13% of the total arisings available for potential capture.

The table opposite shows the average composition of the kerbside residual waste stream in Fenland and therefore the potential material that could be recycled or composted specifically within this district. It indicates that a high percentage of household waste is paper and that potentially up to 20% of waste within the refuse stream is paper that could potentially be diverted through recycling or composting.

Material	% in Refuse waste stream	% in Dry recycling waste stream	% in Organic waste stream
Kitchen Organics	38	0	0
Garden Organics	7	0	26
Paper	20	87	74
Glass	8	0	0
Metals	3	4	0
Textiles	3	2	0
Plastics	10	7	0
Multi-layer	1	0	0
Hazardous	1	0	0
Sanitary	3	0	0
WEEE	0	0	0
Wood	0	0	0
Miscellaneous	5	0	0
TOTAL	100	100	100

RECAP has commissioned another waste composition analysis, the results of which will be available early 2008. These results will be used, along with other required data, such as predicted waste growth and targets, within a modelling tool commissioned by the RECAP partnership. The tool will model predicted outcomes of pursuing a particular course of action (e.g. targeting a particular material and or participation rates) and will therefore help to determine the most effective action to improve performance and meet recycling and landfill diversion targets.

4 Overview of Services Within Fenland

Fenland District Council provides the following waste collection services:

- a district wide three-stream kerbside waste collection service for households (dry recycling, organic waste and refuse);
- a chargeable Bulky Waste Collection Service is provided for bulky household items and domestic fridges and freezers; and
- a series of bring sites across the district for household waste.

Fenland District Council developed their waste collection service to include kerbside collections for organic (kitchen and garden) waste and dry recycling on an alternate weekly basis in 2005/06, utilising funding from the Defra Waste Minimisation and Recycling fund. The new expanded service, which was branded 'Getting it SORTED', was introduced in four phases between March 2005 and March 2006 with all properties provided with the service. The service replaced previous kerbside collection schemes, which operated in different parts of the district, providing an equal service across the area. The 'Getting it SORTED' scheme includes the promotion of bring sites (local recycling centres) for materials not currently accepted via kerbside recycling services and the promotion of home composting. Fenland District Council are always looking to improve their schemes, for example they have recently secured ROTATE funding for a review of collection rounds to achieve efficiency savings. This review will be completed by the end of 2008.

All schools within the district are offered a dry recycling collection service in line with household collections. A rental fee is applied depending on the number and types of containers required by the school. Classroom recycling bins and posters are provided as part of the service with educational talks on the service and waste issues offered to the schools.

Fenland District Council offers a chargeable trade waste collection scheme. The District hope to expand this scheme through the development of the BREW (Business Resource Efficiency and Waste) programme which provides businesses with the knowledge and expertise required to help to reduce the amount of waste they send to landfill and increase the amount of recyclables. Nationally we are generating some 400m tonnes of waste each year and this is growing by 3% each year. Industrial and commercial waste accounts for around 20% of total waste and over half of this goes to landfill. Neither landfilling or incineration provides sustainable long term solutions for dealing with the level of waste on this scale.

The remit of the Cambridgeshire and Peterborough waste partnership has been expanded to incorporate the Streetscene and Environmental Crime. This recycling now includes details on this area of work in the District. The District Council has a responsibility to ensure that the adopted roads, pavements and publicly owned open areas of the district are cleansed and maintained as set out in the Environmental Protection Act 1990 (EPA), to standards prescribed by the Code of practice for Litter and Refuse (COPLAR). Fenland District Councils Street Cleansing Team have achieved an exceptional performance rate over the past 2 years obtaining a 96 % rate of response clearing litter, emptying litter bins and sweeping the streets. The Council's streets are divided into areas of priority for cleansing, depending on the volume of traffic, pedestrians using the streets each day and the number of commercial premises. The more frequently the road is used, the more often it will be swept.

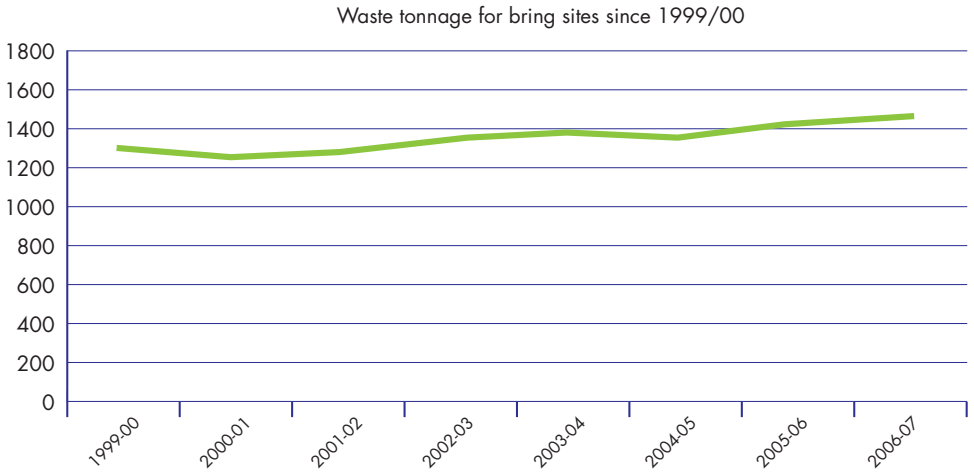
The following sections provide more detail on the waste collection schemes provided in Fenland and Streetscene services.

5 Bring Sites

There are 61 bring sites (mini recycling centres) located at public accessible sites, such as supermarkets, public car parks and community grounds across Fenland. In 2003/04 it was calculated that more than 90% of households in Fenland were within 1km of a bring site. During 2006/07 five additional glass recycling banks were installed at different locations in Fenland. Signage has also been refreshed at recycling centres within the four market towns.

A total of approximately 1,612 tonnes of household waste was recycled at bring sites in Fenland in 2006/07, accounting for only around 20% of the total amount of household waste recycled in Fenland in this year (not including garden and kitchen waste). In 2004/05 bring sites accounted for 39% of household waste recycled in the district and in 2003/04 around 46%.

The graph below shows the recycling tonnage collected at bring sites each year in Fenland since 1999, illustrating, on average, an increase in tonnage collected.



The table below provides detail on bring sites in Fenland.

Materials collected	Number of sites collecting material	Who receives materials	Contracts in place	How material collections are managed
Glass (clear, green, brown and mixed)	53	Waste Recycling Group (WRG), Yorkshire	This is a Joint Waste Contract with other RECAP districts. The contract commenced April 2003 and is presently	WRG supply, maintain and empty banks. The glass collected is takento a transfer station at Red Lodge. It is then bulked up before being transported to a site operated by Berrymans in South Kirkby, West Yorkshire. Here the glass undergoes separation and cleaning and is then transported to a cullet treatment plant in Knottingley, Yorkshire. Approximately 3%-5% of the material has to go to landfill due to contamination. A further 10%-15% is exported depending on requirements of the market. The material that is reprocessed in the UK or abroad is used to make bottles.
Paper (newspapers, junk mail, magazines)	19	Aylesford Newsprint, Kent	No contract	Aylesford provide and maintain the banks and collect the material. The paper and magazines are cleaned, de-inked and turned into pulp. The pulp is then passed through a process of rollers and drying cylinders at 60mph to produce a new roll of Newsprint, each weighing 40 tonnes. This is then sold to publishers and used to create newspapers. Producing newsprint through recycling uses less energy than using raw wood pulp.
	7	Newslitter, Soham		Newslitter, a local company in Soham, provides, maintains and empties the banks. The paper is taken to Soham where it is shredded for use as animal bedding.
Mixed cans (including aerosols)	14	Pearsons, Thetford	No contract	Pearsons, a local family business, provides, maintains and empties the banks. Most of the material is taken to Thetford and processed at one of three modern sites covering over twelve acres. The tins and cans are separated into aluminium and steel by means of a magnetic separation line. They are then compacted into bales and transported to Corus steel and Novellis aluminium. The aluminium is melted and then cooled to form aluminium bars weighing 24 tonnes. These are then cut, rolled into thin sheets and then used to create new aluminium cans. This process is a very energy efficient and economical way of producing cans. The steel is melted down, rolled into sheets and then used to create a range of steel materials and products.
Textiles	9	Salvation Army, Kettering, Northamptonshire	No contract	The Salvation Army supply, maintain and empty some of the banks. The textiles are collected and taken to Kettering where they are sorted into materials for recycling and clothes that can be used for aid and distributed to local charity shops.
	5	Oxfam	No contract	Oxfam supply, maintain and empty a number of the textile banks. Items are taken to a central processing facility in Kettering. After sending some items local charity shops the remainder is packed into large canvas (botany) bags – each holds about 140 kg of clothes. These bags are then loaded onto 40ft trailers for transportation by road and sea to Eastern European Countries, Tunisia and elsewhere.
	5	Planet Aid, Corby	No contract	Planet Aid supply, maintain and empty some of the banks. Textiles are collected and sorted. Material is used for aid.

Recycling Banks for Schools

Six schools within Fenland have paper banks sited within the grounds. No charge is made for the collection of recyclable material from these sites.

6 Kerbside Dry Recycling Collection

Fenland District Council provides a co-mingled kerbside collection of dry recyclables. All households within the district receive this service. In response to contamination issues with some communal dry recycling bins provided, thirteen mini under cover recycling centres are due to be installed within existing communal properties in Wisbech before November 2007.

Fenland collected 6,238 tonnes of dry recycling at kerbside during 2006/07 – an average of 171 kg per household. This is 15.5% of the total amount of household waste collected in the district in this year. To date the council has a 6.5% rejection rate from the Materials Recycling Facility.

The graph below shows the dry recycling tonnage collected at kerbside in Fenland each year since 1999/00.

The table below provides detail on the kerbside dry recycling collection scheme in Fenland:

Coverage	100% of all households are offered the service.
Receptacles	Households are issued with a 240-litre blue wheeled bin for dry recyclables. Flats are given 660/1100 litre bulk recycling bins. Communal 660/1100 litre recycling bins are currently provided at over 120 sites. Where a property is unsuitable for bins, or where there is excessive contamination, households receive a clear sack collection.
Frequency	Fortnightly
Materials collected	Newspapers; Magazines; Cardboard; Junk Mail; White paper; Clean drinks cans; Clean food cans; Aerosols (not squashed); Clean foil; and Paper-based drink and liquid food cartons (TetraPaks). All Plastic Bottles (PET, HDPE and PVC) including: Water, squash and fizzy drink bottles; and all cleaning, shampoo and bleach bottles.
Kerbside collection operator/contractor	Fenland District Council operates the kerbside dry recycling collection service through their Environmental Services Team.
Collection process	Fenland is divided into ten collection rounds, visited once every fortnight. Material is collected and loaded into the vehicle mixed and delivered to Donarbon's Waste Transfer Station in Wisbech. Material is then collected by Community Waste's Transport Contractor and delivered to their Material Recycling Facility (MRF) in Milton Keynes. At the MRF all materials are transferred to a conveyor belt and mechanically and manually sorted. The recyclable materials are separated into large steel cages where they await compaction and baling. They are then taken to reprocessing plants where the materials are broken down and used to make new products.
Vehicles	Fenland District Council uses five Refuse Collection Vehicles for the collection of the material.
Contractors receiving recyclable materials	Community Waste Ltd is responsible for sending all materials for re-processing.
Policies	The main policies are: • Households must have the material out for collection on the curtilage of the property by 7 am on the collection day; • The council will not accept any side waste on this service; • Additional dry recycling bins are available to households with 6 or more residents, the bin is delivered free of charge upon receipt of proof of household numbers or following visit from Council Officer; • New properties are supplied with bins free of charge; • Bins containing incorrect materials are not collected, incorrect materials must be removed from the bin and the bin will be emptied on the next scheduled collection. Recycling crews carry out a cursory inspection of bins during collection and where there is obvious contamination a sticker is placed onto the bin explaining why the material has not been collected. The sticker informs residents of the problem and requests the householder to contact the Council to discuss the problem, using the Council's contact centre telephone number. Incidents of incorrectly sorted bins are highlighted on the collection drivers log with the reason for non collection highlighted. Letters are then sent out to residents the next day highlighting the problem and advising that incorrect materials will have to be removed before the next scheduled collection. The letter also carries information on the reverse providing details on how to use the recycling bins. Also standard community language strap lines are included; and • Collection staff carries a full range of scheme literature including service guides in community languages and collection calendars which can be provided to members of the public upon request and delivered to properties which staff feel may require more information.

Dry Recycling Collections for Schools

A dry recycling service is available to all schools across Fenland, with different bins provided to meet the needs of the schools. Bins are collected fortnightly, in line with normal household dry recycling collections. The scheme carries a rental fee per bin required. As part of the service recycling bins for classrooms are provided along with display posters. Schools are also offered presentations on the service and waste related issues. An initial supply of clear recycling sacks are provided to line classroom bins, with a charge made for further supplies to encourage reuse.

Ensuring Quality Materials

The Council ensures quality of material through extensive ongoing publicity, advising residents what can and cannot go into their recycling container, through:

- The 'Getting it sorted' Refuse and Recycling information pack, which is circulated to all new properties along with bins for the property;
- Recycling roadshows and presentations at community events across the district and as part of RECAP partnership promotions;
- Full range of scheme information available via the council's one stop shops in the four market towns;
- Supply of scheme information to estate agents/letting agents;
- Letters sent to residents explaining the service following incidents of incorrect materials being presented;
- Annual recycling newsletter carrying scheme information;
- Annual collection calendars which carry details of what materials can be placed into the bins using Recycle Now material icons;
- Training of customer service staff (contact centre and one stop shop staff) to ensure accurate and consistent information is provided to residents;
- Collection staff carrying full range of scheme information;
- Adverts on the scheme in local publications;
- Encouraging school children to get into good recycling habits via the school dry recycling service; and
- Training their collection staff on types of materials acceptable for reprocessing and not to collect materials that are either contaminated or not part of the collection service.

7 Kerbside Organic Waste Collections

Households in Fenland receive a kerbside organic waste collection which accepts both garden and kitchen waste. The Council also offers households in Fenland a reduced price 'Getting it SORTED…In the kitchen' waste caddy, together with biodegradable paper sack liners, for separating and storing kitchen waste before composting in the garden or through the collection service. Householders are encouraged to compost at home through promotion and campaigns such as Compost Awareness Week and currently through the promotion of reduced price compost bins, supported by WRAP. Fenland are also planning to supply a wheelie bin liner to householders, in response to requests from the public. This will encourage more food waste to be placed in the organic bin and make it easier for collection crews to empty.

Fenland collected 11,188 tonnes of organic waste at kerbside during 2006/07 – an average of 309 kg per household. This is around 28% of the total amount of household waste collected in the district in this year. The graph below shows the total organic waste tonnage collected at kerbside in Fenland each year since 2000/01, showing a considerable rise in tonnages collected.

The table below provides detail on the kerbside organic waste collection scheme in Fenland.

Coverage	100% of all households are offered the service
Receptacles	Households are issued with a 240-litre brown, wheeled bin for organic waste. For properties where bins are not suitable a 75 litre brown paper sack is provided.
Frequency	Alternate weekly with refuse.
Materials	Garden and kitchen waste (including shredded paper, and paper and cardboard soiled with food).
Kerbside collection operator/contractor	Fenland District Council operates the kerbside organic waste collection service through their Environmental Services Team.
Collection process	Fenland is divided into ten collection rounds, visited once every fortnight. The collected waste is taken to the Donarbon waste transfer station in Wisbech before being transferred to Donarbon's main site at Waterbeach. Here the material is shredded and mixed ready for composting. It is then placed in a concrete container or bay, called a 'compost clamp'. The clamp is filled with biodegrad able waste and then sealed with a tarpaulin sheet. Air and water are fed into the material, which is composted at a high temperature for 2-4 weeks. The compost is taken from the clamp and 'matured' outside in a windrow for a further month. The material is then screened, stored and mixed to customer requirements.
Vehicles	Fenland District Council uses ten Refuse Collection Vehicles for the collection of the material.
Policies	The main policies are: • The bin must be on the curtilage of the property for collection by 7 am on the collection day; • The council does not take side waste. The only exception is at Christmas, when trees that will not fit into the bin are taken; • Additional bins are not provided. Residents with large gardens are advised on home composting and the use of Household Recycling Centres to deal with excess garden waste; • All new properties are provided with bins free of charge; • All households receive a garden waste recycling wheeled bin unless their property is not suitable for a bin collection service; • Recycling crews carry out a cursory inspection of bins on collection and where there is obvious contamination a sticker is placed onto the bin explaining why the material has not been collected. The sticker informs residents of the problem and requests the householder to contact the Council to discuss the problem, using the Council's contact centre telephone number; • Incidents of incorrectly sorted bins are highlighted on the collection drivers log with reason for non collection highlighted. Letters are then sent out to residents highlighting the problem and advising that incorrect materials will have to be removed before the next scheduled collection. The letter also carries information on the reverse providing details on how to use the recycling bins; and • Collection staff carries a full range of scheme literature including service guides in community languages and collection calendars which can be provided to members of the public upon request and delivered to properties which staff feel may require further information.

Ensuring Quality Materials

The Council ensures quality of material by extensive ongoing publicity advising residents through:

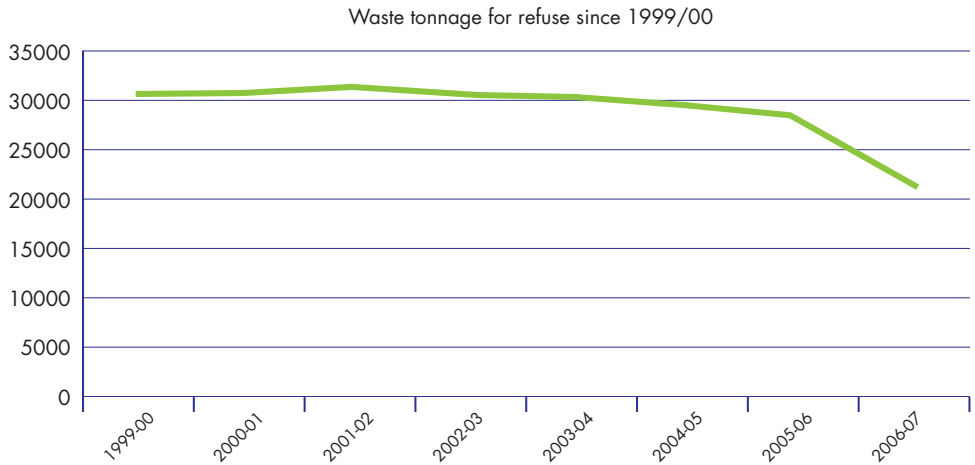
- The 'Getting it sorted' Refuse and Recycling information pack, which is circulated to all new properties along with bins for the property;
- Recycling road shows and presentations at community events across the district and as part of RECAP partnership promotions;
- Full range of scheme information available via the council's one stop shops in the four market towns;
- Supply of scheme information to estate agents/letting agents;
- Letters sent to residents explaining the service following incidents of incorrect materials being presented;
- Annual recycling newsletter carrying scheme information;
- Annual collection calendars which carry details of what materials can be placed into the bins using Recycle Now material icons;
- Training of customer service staff (contact centre and one stop shop staff) to ensure accurate and consistent information is provided to residents;
- Collection staff carrying full range of scheme information;
- Adverts on the scheme in local publications;
- Training their operators on types of materials acceptable for reprocessing; and
- Not collecting materials that are either contaminated or not part of the collection service

8 Refuse Collection

The table below provides detail on the kerbside refuse collection in Fenland. A refuse collection service is also provided to schools and is operated along with the collection for commercial waste.

Fenland sent 11,928 tonnes of biodegradable municipal waste (BMW) to landfill in 2006/07. This is 7,186 tonnes less than the total calculated allowance for Fenland in this year.

The graph below shows the total refuse tonnage collected at kerbside in Fenland each year since 1999/00.



The table below provides detail on the kerbside refuse collection in Fenland.

Coverage	100% of all households are offered the service
Receptacles	Most households receive a 240-litre green wheeled bin for the collection of refuse. Flats and properties with communal collection facilities are provided with 660/1100 litre, green, wheeled bins. For properties where the use of wheeled bins is not suitable black sacks are provided.
Frequency	Alternate weekly with organic waste.
Materials	All household waste that cannot be recycled or composted.
Kerbside collection operator/ contractor	Fenland District Council operates the refuse waste collection service through their Environmental Services Team.
Collection process	Currently all collected material goes to landfill. Material either goes to Donarbon Transfer Station in Wisbech, where it is then transferred to the Donarbon site at Waterbeach or to the WRG landfill site in March.
Vehicles	Fenland District Council uses ten Refuse Collection Vehicles for the collection of material
Policies	The main policies are: • Refuse must by on the curtilage of the property for collection by 7 am on the collection day; • Excess waste is not taken as part of the wheeled bin service; • Side waste is not collected. When there is additional waste, the crew place a sticker on the additional sacks, asking the resident to get in touch to discuss the problem if they regularly have additional waste, using the Council's contact centre telephone number; • Additional refuse bins are not provided; and • Free bins are provided to new properties.

9 Bulky Items Collection

Fenland District Council provides a collection service for bulky items by arrangement. Service Charges are £20.60 for up to two items, with £10.30 for each additional item. Fridges and Freezers are priced at £15.45 per unit. Items are required to be on the curtilage of the property for collection by 7 am on the arranged collection day and are collected between 7.00am and 5.00pm. Currently all non-hazardous items collected are landfilled, residents are therefore encouraged to send their items to charities or community groups for reuse.

10 Street Sweepings

The Code of Practice for Litter and Refuse (COPLAR) sets out minimum standards of cleanliness for relevant land under the control of a duty body, and the maximum response times for a duty body to return land to be free from litter and refuse, if it falls below the minimum standard. The following are implemented to make Fenland Cleaner, Safer and Greener: -

- Mechanical sweeping, using both large and small sweepers, sweeping along planned routes that can be daily, weekly or monthly, depending on the need;
- Manual cleansing, (employees that physically pick litter and empty litter bins); and
- Rapid Response teams that can go anywhere in the district where a litter/fly-tipping problem occurs.

Contract	Street sweepings are collected by the Council's Environmental Services Team.
Receptacles	Various types and styles of litterbins are in use across the district.
Frequency	The frequency of service is dependent on classification of roads/areas concerned.
Operation location	The vehicles operate out of Melbourne Avenue Depot, March.
Disposal location	The Council takes the material to Donarbon Transfer Station, Wisbech.
Vehicles	The council uses a variety of mechanical sweepers and light goods vehicles as necessary to carry out the service.
Collection Process	The Council's Environmental Services Team collects street sweepings.
Disposal	Street sweepings are delivered to Donarbon Transfer Station, Wisbech. The material is then transferred for landfill at Donarbon Site at Waterbeach.

11 Fly-Tipping

Fly-tipping is collected by the Council's Environmental Services Team. The council uses a range of light commercial and heavy goods vehicles, as appropriate, to carry out the service. Two Rapid Response Teams are in place to deal with fly-tipping incidents across the district using light commercial vehicles. The vehicles operate from Melbourne Avenue Depot March and are both a proactive and response service. The Council takes the material to Donarbon's Transfer Station, Wisbech. It is then transferred to Donarbon's site at Waterbeach for disposal.

The Council monitors known 'hot spots' to prevent fly-tipping. Fenland District Council also supports the Cambridgeshire and Peterborough Waste Partnership who have recently appointed an Environment Action Coordinator working on all aspects of environmental crime. This work includes fly-tipping and facilitates actions coordinated via the new Prevention, Intervention and Enforcement Sub Group.

12 Commercial Waste

A Commercial Waste collection service is offered by the Council to businesses within the district and is a chargeable service.

The District, in partnership with the six other RECAP authorities, is looking at encouraging more business waste recycling using funding received from the Business Resource Efficiency and Waste (BREW) fund. The scheme will focus on Small/Medium sized enterprises.

Coverage	The Commercial Waste collection service is in operation throughout the District.
Receptacles	The commercial properties using this service are provided with skips, wheeled bins (240/360/660/1100 litre) or blue sacks depending on the needs of the business. One off clearances of waste or bulky items can also be arranged.
Frequency	Frequency is dependent on the needs of the business, collections are generally once per week.
Materials collected	All non hazardous waste.
Kerbside collection operator/contractor	Commercial waste is collected by the Council's Environmental Services Team.
Collection process	This waste is collected as required (generally a minimum weekly collection) using a dedicated RCV or light commercial vehicle.
Vehicles	The vehicles operate from Melbourne Avenue Depot, March and the material is taken to Donarbon's Transfer Station in Wisbech for disposal.
Data	In 2006/07, the Council collected 2,411 tonnes of commercial waste.

13 Clinical Waste

Clinical Waste is collected by the Council's Environmental Services Team. The council uses a 3.5 tonne cube type special purpose vehicle to carry out the service. Clinical Waste is collected in tiger sacks, yellow sacks, sharps containers or fempaks depending on the type of material. The Council takes the material to Addenbrookes Hospital Cambridge for incineration.

Coverage	The scheme is in operation throughout the district and includes some areas outside of the Fenland boundary where the relevant local authority does not provide the service.
Receptacles	Dependent of type of clinical waste.
Frequency	Dependent on needs of customer.
Materials collected	• human or animal tissue; • blood or other bodily fluids; • excretions; • drugs or other pharmaceutical products; • swabs or dressings; and • syringes, needles or other sharp instruments.
Kerbside collection operator/contractor	Clinical waste is collected by Council's Environmental Services Team.
Collection process	This waste is collected as required by a 3.5 tonne vehicle.
Vehicles	The vehicle operates from Melbourne Avenue, March and the material is taken to Addenbrookes Hospital for Incineration.
Data	In 2006/07, the Council collected approx 32t of clinical waste.

14 Enforcement

The Safer Fenland Team coordinates environmental enforcement within Fenland. This team works on campaigns and publicity, and works with the different council teams to develop enforcement work. Policies are currently being developed by the various teams, which follow the PIE principal (Prevention, Intervention, Enforcement).

Fenland District Council has supported the appointment of a Partnership Environment Action Coordinator along with other member authorities. The post began in June 2007 and is funded through the RECAP partnership.

Coverage	All of the district area is covered
Environmental Enforcement team	Environmental Enforcement is coordinated by the Safer Fenland Team
Prosecution Polices	Prosecution policies are currently being finalised, an overall corporate enforcement policy is in place.
Enforcement operator/contractor	Fenland District Council Departments (Environmental Protection and Environmental Services)
Enforcement equipment	Mobile surveillance equipment, CCTV cameras in Chatteris, March, Whittlesey and Wisbech with centralised control room.
Enforcement Vehicles	Branded street scene enforcement van and Dog Warden van.
Policies	
Dog-fouling	Known Dog Fouling hotpots are monitored by the Environmental Protection Team. Anti dog fouling signs are displayed in parts of the district where problems are known. Under the Dogs Fouling of Land Act 1996 FPNs are issued to those found not cleaning up after their dogs.
Fly-posting	Policy being developed
Abandoned vehicles	Fenland District Council complies with the statutory duty under the Refuse Disposal Amenity Act 1978 and subsequent legislation. Fenland will ensure that abandoned vehicles collected are disposed of correctly and that the disposal contractor is licensed to do so. Fenland recently combined with East Cambridgeshire and South Cambridgeshire in an ESPO coordinated contract for the joint collection and disposal of abandoned vehicles, complying with the new ELV regulations. Fenland will investigate reports of abandoned vehicles, recover costs wherever possible and work with external partners in order to reduce the fear of crime and arson caused by abandoned vehicles.
Littering	Policy Being developed
Graffiti	Policy being developed

15 Training

The Council runs most waste services in Fenland and ensures they provide staff with full training on:

- Recycling awareness campaigns;
- Health and Safety training;
- NVQ 2 training on refuse Collection and Street Cleansing; and
- Key stage 2 skills training on numeracy and literacy.

16 Awareness and Waste Minimisation Activities

Fenland District Council is working to increase the recycling rates of current collection programmes by producing literature on services they offer, press releases and through awareness campaigns:

- The Council has a 'Fenland Eye' column in the local press. This allows the Refuse & Recycling Service to publish information relating to current recycling campaigns and collection information;
- The authority actively participates in the Master Composter programme and supports the Compost Awareness Week events;
- The Council has promoted home composting through a series of one-day sales, run in conjunction with Cambridgeshire County Council and through the sale of cut-price compost bins at HRCs during the summer months. Any residents enquiring about home composting are provided with advice and information about successful home composting. To date around 2,000 home compost bins have been sold in Fenland;
- Press releases relating to any aspect of recycling in the District, whenever the opportunity arises;
- Annual Waste and Recycling Newsletter delivered to all properties carrying information on the service and general waste minimisation information; and
- Christmas collection tag delivered to all properties providing information on Christmas collections and seasonal recycling and waste minimisation advice.

Huntingdonshire (HDC) – Recycling Plan 2007/08

1. Introduction

This document describes the socio-demographics of the local authority area, together with current municipal waste management infrastructure and performance specific to Huntingdonshire District Council.

2. Huntingdonshire – Population and Socio-Demographics

Huntingdonshire is a rural area of nearly 350 sq miles. Around half of its population is in the four market towns of Huntingdon, St Neots, St Ives and Ramsey. It is predominantly a prosperous area, benefiting from higher than average earnings, low unemployment and crime.

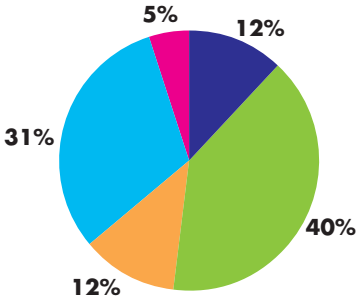
The population for Huntingdonshire in 2006 was 160,700, which is approximately 22% of the total population of Cambridgeshire and Peterborough. According to mid 2006 forecasts, the population in Huntingdonshire is predicted to increase by 4.6% between 2006 and 2011, but decrease by 1.5% between 2011 and 2016. The predicted population in Huntingdonshire for 2016 is 165,500. Huntingdonshire has the lowest forecasted population growth in Cambridgeshire and Peterborough over the next 15 years.

The table below shows the dwelling forecast for Huntingdonshire set against dwelling forecasts for Cambridgeshire and Peterborough overall. Cambridgeshire and Peterborough have been earmarked for development by Central Government and are expected to have some of the highest housing increases in the country. Dwelling projections are used in calculations to predict waste growth.

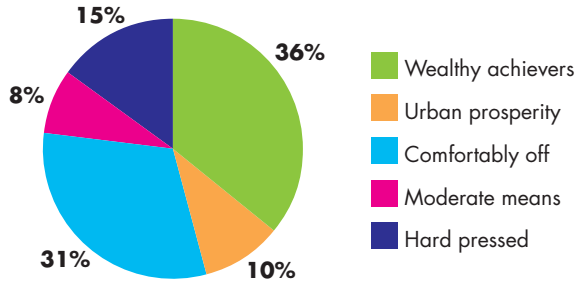
Forecast year	2006	2011	2016	2021	2026	2031
Dwellings in Huntingdonshire	68,600	73,100	75,000	76,900	78,100	78,800
Dwellings in Cambridgeshire and Peterborough	321,200	350,400	379,400	400,600	420,000	436,100

The pie charts below show ACORN (A Classification of Residential Neighbourhoods) profiling for Huntingdonshire, compared to profiling for Cambridgeshire and Peterborough as whole, to give an indication of certain socio demographic characteristics of the district. This ACORN profiling is used in waste composition analysis.

ACORN Profile for Huntingdonshire



ACORN Profile for Cambridgeshire and Peterborough



Wealthy Achievers – These are some of the most successful and affluent people in the UK. They live in wealthy, high status, rural, semi-rural and suburban areas of the country. Middle-aged and older people predominate, with many empty nesters and wealthy retired. Some neighbourhoods contain large numbers of well-off families with school age children, particularly in the more suburban locations. These people live in large houses, which are usually detached with four or more bedrooms. Almost 90% are owner-occupiers, with half of those owning their home outright. They are very well educated and most are employed in managerial and professional occupations. Many own their own businesses.

Comfortably Off – This category contains much of the 'middle-of-the-road' Britain. Most people are comfortably off - they may not be wealthy, but they have few major financial worries. All lifestyles are represented in this category. Younger singles and couples just starting out on their careers are the dominant group in some areas. Other areas have mostly stable families and empty nesters, especially in suburban and semi-rural locations. Most people own their own home, with owner occupation exceeding 80%. Most houses are semidetached or detached. Employment is a mix of professional and managerial, clerical and skilled occupations.

Hard Pressed – This category contains the poorest areas of the UK. Unemployment is well above the national average. Levels of qualifications are low and those in work are likely to be employed in unskilled occupations. Household incomes are low and there are high levels of long-term illness in some areas. Housing is a mix of low-rise estates, with terraced or semi-detached houses and purpose built flats. Properties tend to be small and there is much overcrowding. Over 50% of the housing is rented from the local council or a housing association.

3 Waste Arising and Performance

3.1 General

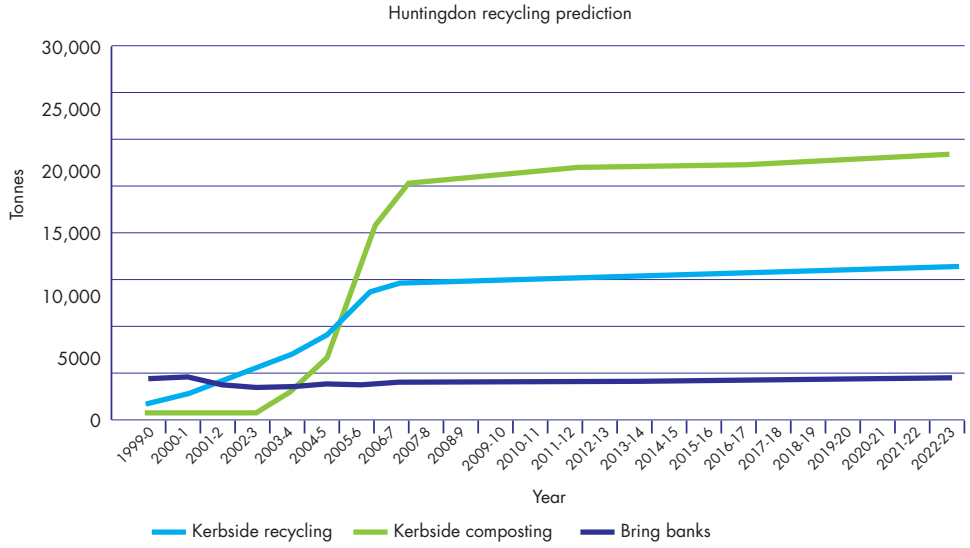
Huntingdonshire produced 71,162 tonnes of household waste in 2006/07, which is around 18% of the total amount of household waste produced in the partnership area in this year. The table below shows a breakdown of this waste as per government Best Value Performance Indicators (BVPIs):

Huntingdonshire		
BVPI 84a	Kg of household waste collected per head of population	443kg per head of population
BVPI 82a	Total and % recycled	17,827 tonnes / 25%
BVPI 82b	Total and % composted	19,771 tonnes / 28%
BVPI 82a and 82b	Total and % recycled and composted	37,598 tonnes / 53%
BVPI 82d	Total and % landfilled	33,564 tonnes / 47%

Huntingdonshire District Council exceeded BVPI targets set by government in 2003/04 by 8% and by 28% in 2005/06. The RECAP Partnership has agreed voluntary targets for its authorities, exceeding those set by government. The Landfill Allowance issued to Waste Disposal Authorities which set the amount of biodegradable waste permitted to landfill, has also been calculated for each district council (Waste Collection Authority) using the Environment Agency estimator.

3.2 Performance of Waste Collection Schemes

The last 5 years have seen a big improvement in the provision of the management of Huntingdonshire's waste that has led to an increase in the recycling rate across the District. The graph below highlights the past and expected performance of bring banks, dry kerbside and kerbside compost tonnages. Due to the roll out of the wheeled bin collection scheme in the district over the past few years, we have seen a dramatic increase in tonnage, however, this is expected to even out in the future and increase by a small percentage and by population increase.



To determine performance the RECAP partnership commissioned a two-phase waste composition analysis in 2004/05. The study provided a detailed assessment of household waste produced in each district and across the partnership as a whole. At a partnership level the results showed that:

- Compostable waste is around 50% of total waste arising. Approximately 30% of which is currently captured within organic waste collections, which leaves around 20% of compostable waste available for potential capture; and
- Materials that are commonly targeted in kerbside recycling schemes account for around 29%. Around 15% of this is currently diverted from the residual waste stream, leaving around 13% of the total arisings available for potential capture.

The table opposite shows the average composition of the kerbside residual waste stream in Huntingdonshire and therefore the potential material that could be recycled or composted specifically within this district. It indicates that a high percentage of household waste is paper and that potentially, up to 20% of waste within the refuse stream is paper that could be diverted through recycling or composting.

RECAP has commissioned another waste composition analysis, the results of which will be available early 2008. These results will be used, along with other data, such as predicted waste growth and targets, within a modelling tool commissioned by the RECAP partnership. The tool will model predicted outcomes of pursuing a particular course of action (e.g. targeting a particular material and or participation rates) and will therefore help to determine the most effective action to improve performance and meet recycling and landfill diversion targets.

Material	% in Refuse waste stream	% in Dry recycling waste stream	% in Organic waste stream
Kitchen Organics	37%	1%	4%
Garden Organics	1%	0%	96%
Paper	20%	78%	0%
Glass	7%	0%	0%
Metals	3%	4%	0%
Textiles	4%	2%	0%
Plastics	14%	12%	0%
Multi-layer	1%	1%	0%
Hazardous	1%	0%	0%
Sanitary	5%	1%	0%
WEEE	0%	0%	0%
Wood	0%	0%	0%
Miscellaneous	7%	1%	0%
TOTAL	100%	100%	100%

4 Overview of Services Within Huntingdonshire

Huntingdonshire District Council provides the following waste collection services:

- a district wide three-stream kerbside waste collection service for households (dry recycling, organic waste and refuse);
- a chargeable Bulky Waste Collection Service is provided for bulky household items and domestic fridges and freezers; and
- a series of bring sites across the district for household waste, including some underground recycling centres.

In 2005 the kerbside garden waste collection service was expanded to include the collection of kitchen waste, utilising the Defra Waste Minimisation and Recycling Fund. The kerbside waste collection service was developed to include an alternate weekly collection of garden waste and refuse, therefore providing the residents of Huntingdonshire a weekly collection of food waste. Having developed waste collection infrastructure across the district, Huntingdonshire, together with all other RECAP partners are focusing on continually improving the performance of schemes. Huntingdonshire completed a re-scheduling of the kerbside waste collection in September 2007 to maximise the effectiveness of the service.

Huntingdonshire District Council also provides a dry recycling collection service, using 240 litre bins, to County Schools in the district. 77 schools (77% of schools in the district) are currently us the service.

The development of the BREW (Business Resource Efficiency and Waste) programme provides businesses with the knowledge and expertise required to help to reduce the amount of waste they send to landfill, as well as reducing the amount of materials required to achieve production of goods and services, and showing the best ways to achieve this. Nationally we are generating some 400m tonnes of commercial waste each year and this is growing by 3% each year. This waste accounts for around 20% of total waste and over half of it goes to landfill. Neither landfilling nor incineration provides sustainable long term solutions for dealing with this level of waste.

The remit of the Cambridgeshire and Peterborough waste partnership has been expanded to incorporate Streetscene and Environmental Crime. This plan now includes details on this area of work in the district. The District Council has a responsibility to ensure that the adopted roads, pavements and publicly owned open areas of the district are cleansed and maintained as set out in the Environmental Protection Act 1990 (EPA), to standards prescribed by the Code of practice for Litter and Refuse (COPLAR).

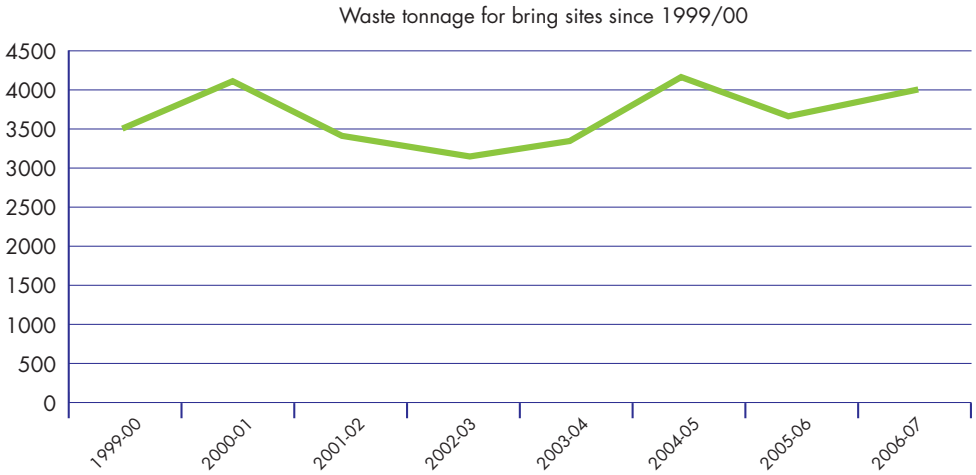
The council Street Scene service has a team of Street Rangers to help improve the quality of life and act as the eyes and ears of the community. The Street Rangers act as a visible point of contact, provide a sense of security and help to keep the streets, car parks and open spaces clean, tidy and well maintained.

The following sections provide more detail on the waste collection schemes and Streetscene services provided in Huntingdonshire.

5 Bring Sites

There are 92 bring sites (mini-recycling centres) located through Huntingdonshire at supermarkets, car parks and other specific areas to maximise usage. These bring sites usually consist of five 1100 litre wheeled bins, collecting a range of materials. In 2003/04 it was calculated that 97% of households within Huntingdonshire were within 1km of a bring site.

A total of 3,995 tonnes of household waste was recycled at bring sites in Huntingdonshire in 2006/07, accounting for just over 22% of the total amount of household waste recycled in Huntingdonshire in this year. In 2005/06 bring sites accounted for just under 12% of recycled household waste in Huntingdonshire and in 2004/05 just over 21%. The graph below shows the recycling tonnage collected at bring sites each year in Huntingdonshire since 1999.



The table below provides detail on bring sites in Huntingdonshire.

Materials collected	Number of sites collecting material	Who receives materials	Contracts in place	How material collections are managed
Glass (clear, green, brown and mixed)	87	Waste Recycling Group (WRG), Yorkshire	This is a Joint Waste Contract with other RECAP districts. The contract commenced April 2003 and is presently	WRG supply, maintain and empty banks. The glass collected is takento a transfer station at Red Lodge. It is then bulked up before being transported to a site operated by Berrymans in South Kirkby, West Yorkshire. Here the glass undergoes separation and cleaning and is then transported to a cullet treatment plant in Knottingley, Yorkshire. Approximately 3%-5% of the material has to go to landfill due to contamination. A further 10%-15% is exported depending on requirements of the market. The material that is reprocessed in the UK or abroad is used to make bottles.
Paper (newspapers, junk mail, magazines)	59	Aylesford Newsprint, Kent	No contract	Paper is taken to Buckden transfer facility, which is operated by Waste Recycling Group.
Mixed cans	69	County Recycling, Peterborough MR	No contract	Mixed cans are bulked up at the Alms Close transfer station in Huntingdon operated by the District Council.
Books	5	Oxfam/BHF	No contract	Oxfam supply, maintain and empty some of the banks. Books are collected and either distributed to local charity shops for resale or recycled.
Textiles	15	Black Country Rag, West Bromwich, West Midlands	No contract	Black Country Rag supply, maintain and empty some of the banks. Items are taken to their Head Quarters in West Bromwich and weighed. Items are then hand sorted into different grades of clothing and textiles. Once separated into categories, re-useable and recyclable items are then tightly packed and wrapped in protective transport bags before being dispatched.
		The Salvation Army Kettering, Northamptonshire	No contract	The Salvation Army supply, maintain and empty some of the banks. The textiles are collected and taken to Kettering where they are sorted into materials for recycling and clothes that can be used for aid and distributed to local charity shops.
		Oxfam	No contract	Oxfam supply, maintain and empty a number of the textile banks. Items are taken to a central processing facility in Kettering. After sending some items local charity shops the remainder is packed into large canvas (botany) bags – each holds about 140 kg of clothes. These bags are then loaded onto 40ft trailers for transportation by road and sea to Eastern European Countries, Tunisia and elsewhere.
Foil	13	Richmond Fellowship, Huntingdon	No contract	

Underground Recycling Banks

With funding from the Round 3 Defra Waste Minimisation and Recycling Fund, the Council commenced a trial of underground recycling banks at three sites in Huntingdon in Summer 2005. Huntingdonshire District worked in close Partnership with Peterborough City Council on this scheme. Banks are for mixed glass and mixed dry recyclables and are positioned close to flats that have been difficult to service using conventional bins or sacks.

The trial has suffered from operational issues regarding vandalism and not being able to receive a frequent enough collection of the recyclables. More funding is required if these banks are to be rolled out across other areas of the District.

6 Kerbside Dry Recycling Collection

Huntingdonshire provides a co-mingled kerbside collection of dry recyclables. At the present time very rural households and some flats are not currently on the collection system, although work is being undertaken to maximise coverage in the future. This material is taken to the Waste Recycling Group site at Buckden where it is taken in bulk to the Community Waste Ltd Materials Recycling Facility (MRF) in Milton Keynes.

In 2005 there were 2298 missed dry kerbside collections reported. In 2006 this figure dropped to 1698, which is a decrease of 27%.

The graph below shows the trend of kerbside recycling tonnage over the past 8 years in Huntingdonshire.

The table below provides detail on the kerbside dry recycling collection scheme:

Coverage	100% of all households are offered the service
Receptacles	Households have 240-litre blue-wheeled bins (a 140-litre bin option is available); flats are on a clear sack collection and the remaining on a 55-litre green box collection (no longer issued).
Frequency	The dry kerbside collection service is fortnightly
Materials collected	Paper (including newspaper, magazines, cardboard and junk mail) Plastic bottles (PET, HDPE and PVC) Mixed cans, tins and foil TetraPak and other drinks cartons
Kerbside collection operator/ contractor	The Councils Operations Division (an internal service) collects the material from households
Vehicles	The Council uses standard 6 Refuse Collection Vehicles to carry out this service
Collection process	From kerbside the mixed material is loaded into the vehicle and sent to the Materials Recovery Facility (MRF) for sorting and bulking before onward transportation for reprocessing. The first bulky facility is at Buckden and is operated by Waste Recycling Group and the second is at Alconbury and is run by Donarbon Ltd. The Council sends the recyclate to a MRF operated by Community Waste Ltd (Cutts), where the materials are sorted and sent for onward reprocessing. Mixed recyclables are bulked up and transported to a Material Recycling Facility (MRF) under this contract. To date the council has a 6.5% rejection rate from the MRF.
Contractors receiving recyclable materials from Materials Recycling Facility (responsible for selling materials to reprocess)	Material: Paper; Cardboard; Mixed cans; TetraPaks and other drinks cartons; Aerosols Contractor: Abitibi Consolidated Europe Ltd; Mondi Packaging and Senoco; Viridor, Alucan and Corus

Ensuring Quality Materials

The Council ensures quality of material through extensive ongoing publicity advising residents what can and cannot go into their recycling container, through:

- Quarterly District Wide newsletter issued to all residents which contains information regarding collection dates, recycling initiatives, Streetscene information, compost bin offers etc.
- Training their operators on types of materials acceptable for reprocessing,
- Not collecting materials that are either contaminated or not part of the collection service; and
- Use of the Internet site to educate and inform residents of waste types collected.

Huntingdonshire District Council is currently investigating the possibility of including a kerbside glass collection.

7 Kerbside Organic Waste Collections

Households in Huntingdonshire receive a kerbside organic waste collection that accepts both garden and kitchen waste. The Council collected 19,771 tonnes of organic waste at kerbside during 2006/07. This is 28% of the total amount of household waste collected in the district in this year. The graph below shows the total organic waste tonnage collected at kerbside in Huntingdonshire since 1999/00 and shows a considerable increase in tonnages collected.

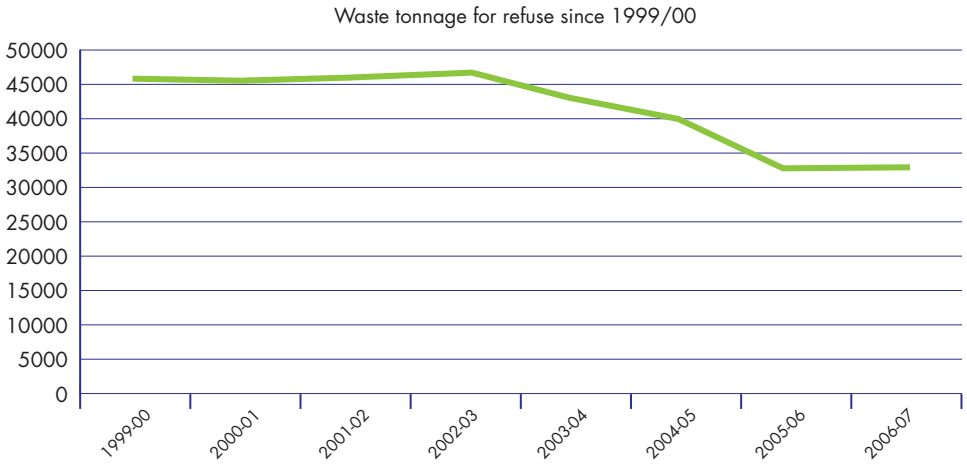
The table below provides detail on the kerbside organic waste collection scheme in Huntingdonshire:

Coverage **Receptacles**	100% of households are offered this service Households and flats are issued a 240-litre green-wheeled bin, with a 140-litre bin option available.
Frequency	Alternate weekly basis.
Materials collected	Garden and kitchen waste.
Kerbside collection operator /contractor	The Councils Operations Division collects the material.
Collection process	Vehicles operate from Bridge Place Depot, Godmanchester and materials collected are taken for composting at Huntingdon Recycling (Marshall's) Ellington. Currently the compost is used by local farmers, bagged and sold to members of the public for £1 per bag.
Vehicles	The Council uses standard 7 Refuse Collection Vehicles to carry out this service

8 Refuse Collection

Huntingdonshire sent 16,302 tonnes of biodegradable municipal waste (BMW) to landfill in 2006/07. This is 12,853 tonnes less than the total calculated allowance for Huntingdonshire for this year. In 2005 there were 3343 missed collections of refuse/green waste. In 2006 this figure dropped to 2633, which is a decrease of 22%.

The graph below shows the total refuse tonnage collected at kerbside in Huntingdonshire, each year, since 1999/00.



The table opposite provides detail on the kerbside refuse collection in Huntingdonshire. This service is also provided to 8% of the schools in the district who are provided a white sack for the collection.

Coverage	100% of households are offered this service
Receptacle	Households and flats are issued a 240-litre green-wheeled bin, with a 140-litre bin option available.
Frequency	Alternate weekly basis.
Materials collected	Garden and kitchen waste.
Kerbside collection operator/ contractor	The Councils Operations Division collects the material.
Collection process	Vehicles operate from Bridge Place Depot, Godmanchester and materials collected are taken for composting at Huntingdon Recycling (Marshall's) Ellington. Currently the compost is used by local farmers, bagged and sold to members of the public for £1 per bag.
Vehicles	The Council uses standard 7 Refuse Collection Vehicles to carry out this service

9 Refuse & Recycling Service Policies

Assisted Collections

An assisted collection is where the collection team come and collect a householders waste or recycling from its normal storage place, take it to the collection vehicle for emptying and then return the container where appropriate. Assisted collections are only available for householders that are unable to take their waste out for collection themselves. This may include:

- People with disabilities;
- The infirm or elderly; and
- The visually impaired.

The Council is unable to provide this service where there is a person living in the household that can take the waste out on collection day

Sharing Bins

If residents request to do so, then they may share bins with their neighbour if both are in agreement. One resident must claim overall responsibility for the bin as a bin can be allocated to one address only. It is the responsibility of the named household if the bin is contaminated, misused or needs replacing.

Collection

The waste should be presented at the edge of a resident's property, closest to where the premise meets the public highway. It must be at the correct collection point by 6.00am on the day of collection.

Stolen Bins

In the event that a bin is lost or damaged beyond use, the householder will be required to report the theft to the police and obtain a crime number before a new bin will be provided.

Lost & Damaged Bins

In the event that a bin is lost or damaged beyond use, the householder will be charged the cost of a replacement bin.

Issuing Wheeled Bins

Under the Environmental Protection Act 1990 the local authority can designate the method of collection, frequency of collection and receptacle type. Anyone who does not wish to use the service can opt out; however they will be responsible for disposing of their own refuse. Householders are requested to sign a form acknowledging the fact that they will be responsible for their own waste disposal before the wheeled bins are removed.

Use of Blue Sacks for Domestic Waste Collection

Smaller properties with storage and access issues may be deemed unsuitable to use the wheeled bins for the collection of waste from their property. Such properties may include:

- Terraced properties with no rear access;
- Flats without garden areas; and
- Farms with long private drives.

The suitability of a property to use wheeled bins will be decided by Huntingdonshire District Council after a visit from an inspecting officer. These properties are issued blue sacks for the collection of their domestic waste. The number of blue sacks issued is limited to the equivalent capacity of a 240litre wheeled bin collected on a fortnightly basis. Only domestic waste in blue sacks will be collected from these properties. Residents may request additional blue sacks but these will only be issued after following the same procedure for the issuing of additional grey wheeled bins. Residents may request green sacks for the collection of their garden waste. Such residents may use green boxes or clear sacks for the collection of their dry recyclable material.

Communal Bins

At appropriate locations with adequate storage, communal bins may be provided with the agreement of residents / managing agents. In such cases, responsibility for the correct use of bins will rest with either a named person or the representative of the managing agent / housing association.

10 Bulky Items Collection

Huntingdonshire District Council offers residents a bulky household waste collection service. The service is based on a pre-arranged appointment. Appointments can be made for collections on Monday to Friday excluding public holidays. Collections are based on first come first serve basis. Service charges are £23.70 for six items or less and £30.00 per hour for more than six items. Huntingdonshire also provide a commercial bulky waste service which is charged at £64 per hour plus VAT.

11 Street Sweepings

The Council owns 3 compact and 2 large street sweeping vehicles.

In 2004/05 Huntingdonshire District Council (HDC) was responsible for the collection and disposal of 2,138.50 tonnes of street sweepings, which was the equivalent of 5.5% of all household waste sent to landfill. In 2005/06 the tonnage was 2,330.71, 7% of household waste landfilled.

In 2006/07 HDC collected and disposed of 2,225.44, which was equivalent to 6.5% of the total amount of household waste to landfill.

The District Council has a responsibility to ensure that the adopted roads, pavements and publicly owned open areas of the district are cleansed and maintained as set out in the Environmental Protection Act 1990 (EPA), to standards prescribed by the Code of practice for Litter and Refuse (COPLAR). This code sets out minimum standards of cleanliness for relevant land under the control of a duty body, and the maximum response times for a duty body to return land to a free from litter and refuse condition, if it falls below the minimum standard. Response times are determined by intensity of use for relevant land, and zoned accordingly. There are a number of duty bodies affected by this code of practice.

Members of the public can request an appointment to view details of relevant land within the district, its intensity of use zone, and associated cleansing response time at Huntingdonshire District Council Offices. Members of the public can also make a formal complaint if land is not being maintained in accordance with the EPA and COPLAR, and have the right to seek redress in the courts if the litter duty is not met, through issue of a Litter Abatement Order.

To keep the district clean, Huntingdonshire District Council have three separate methods of working:-

- Mechanical sweeping, using both large and small sweepers, sweeping along planned routes that can be daily, weekly or monthly, depending on the need;
- Manual cleansing, (employees that physically pick up litter all day); and
- Mobile teams that can go anywhere in the district where a litter problem occurs.

The service is regularly monitored and reviewed in the following ways to ensure a high quality, efficient and cost effective service:-

- Monitoring the volume of cleansing reports received; and
- Undertaking surveys based on government standards.

Initiatives currently being undertaken by Huntingdonshire District Council regarding Street Scene include:-

- The installation of gum targets in Huntingdon and St Ives for the disposal of chewing gum; and
- The quick removal of graffiti, fly-posting and illegal signs.

12 Fly-Tipping

Fly-tipping causes a nuisance to residents, has a negative impact on the environment and is costly for the council to remove. In 2007 Huntingdonshire District Council ran a campaign to help tackle fly-tipping. The campaign aimed to educate and increase awareness amongst residents of the correct way to dispose of their rubbish. Information leaflets were made available and road shows were held where the public could meet council officers to discuss waste and recycling.

Fly-tipping hotspots in the district are being targeted in the campaign and officers are out and about using CCTV and other methods to catch offenders who spoil the environment for everyone else. Residents are also being encouraged to report incidents of fly-tipping and if possible give details of offenders. Offenders who are caught are prosecuted and could be fined up to £5,000.

In the year 2004/05 Huntingdonshire District Council (HDC) collected a total of 730.76 tonnes of fly-tipped waste. In 2005/06 this figure was 557.84 and in 2006/07 HDC collected 554.44 tonnes of fly-tipped waste which was disposed of at a landfill site.

13 Commercial Waste

Huntingdonshire District Council does not provide a Commercial/Trade Waste recycling programme. The District is, however, working in partnership with Cambridgeshire County Council and BREW in order to encourage business linking by liaising with recycling companies to promote trade waste recycling.

14 Clinical Waste

There are 2 destinations for the clinical waste collected by Huntingdonshire District Council. The low-grade clinical waste is taken to the Buckden landfill site, operated by Waste Recycling Group. In 2004/05 HDC disposed of 71.22 tonnes, in 2005/06 76.6 tonnes and 79.43 tonnes in 2006/07.

The second destination is the incineration facility at Addenbrooke's hospital in Cambridge. This contract is for high-grade clinical waste and is held between Addenbrooke's and Cambridgeshire County Council, with a reserve destination being Vetspeed UK, based in Royston, Hertfordshire. In 2004/05 Huntingdonshire DC collected and disposed of 5.69 tonnes of high-grade clinical waste. In 2005/06 this figure rose to 7.59 tonnes and in 2006/07 the total collected was 6.63 tonnes.

15 Enforcement

The Enforcement Team currently deals with fly-tipping, abandoned vehicles, trade waste compliance and the domestic household waste policy. Since the evolvement of the team 87 fixed penalty notices have been issued and four prosecutions are in progress. The team have recently completed a fly-tipping campaign on the Oxmoor estate, which included distributing educational literature, workshops, road shows and door knocking to ensure the message was clear. All educational literature was made available in different languages and a Polish student was employed in the door knocking exercise to communicate to residents effectively. Signage is now being erected around the areas together with covert cameras in hot spots.

16 Training

The Council runs most waste services in Huntingdonshire and ensures they provide staff with full training on:

- Recycling awareness campaigns; and
- Health and Safety training.

17 Awareness and Waste Minimisation Activities

Huntingdonshire District Council is working to sustain the recycling rates of current collection programmes by producing literature on services they offer, press releases and through awareness campaigns:

- The Council produces the newsletter 'District Wide' which is distributed to local residents giving information relating to current recycling campaigns and collection information;
- The Council has promoted home composting through a series of one-day sales, run in conjunction with Cambridgeshire County Council and through the sale of cut-price compost bins at Household Recycling Centres (HRCs) during the summer months. Any residents enquiring about home composting are provided with advice and information about successful home composting;
- Participating in the countywide promotion of the Master Composter programme for home composting, offering reduced priced home composters;
- Press releases relating to any aspect of recycling in the District, whenever the opportunity arises; and
- The 'District Wide' quarterly magazine issued by the Council and goes to all households in the District has been used extensively for the promotion of waste minimisation and recycling initiatives.

Peterborough (PCC) – Recycling Plan 2007/08

1 Introduction

This document describes the socio-demographics of the local authority area, together with current municipal waste management infrastructure and performance specific to Peterborough City Council.

2 Peterborough – Population and Socio-Demographics

Peterborough's population is predominantly urban, with only about 12% of residents living in the rural parishes and wards of the city area. However the urban wards make up only about 23% of the actual land area of the authority. Estimates from 2004 suggest that ethnic minorities make up approximately 12% of the population of Peterborough, with the largest ethnic minority group being Pakistani[10].

The population for Peterborough in 2006 was 166,000, which is approximately 22% of the total population in the Cambridgeshire and Peterborough area. According to mid 2006 forecasts, the population in Peterborough is predicted to rise by 5.5% between 2006 and 2011 and rise further by another 7.8% between 2011 and 2016, which is the third highest growth in population in the RECAP partnership area. The predicted population for Peterborough in 2016 is 188,900[11].

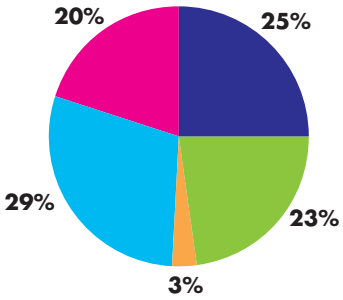
The table below shows the dwelling forecast for Peterborough, set against dwelling forecasts for Cambridgeshire and Peterborough overall2. Cambridgeshire and Peterborough have been earmarked for development by Central Government and are expected to have some of the highest housing increases in the country. Dwelling projections are used in calculations to predict waste growth.

Forecast year	2006	2011	2016	2021	2026	2031
Dwellings in Peterborough	74,000	79,600	87,200	95,300	101,600	107,200
Dwellings in Cambridgeshire and Peterborough	321,200	350,400	379,400	400,600	420,000	436,100

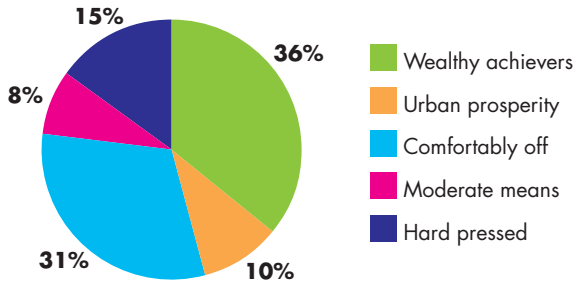
In 2006 the average household income in the city was £26,500. Unemployment in the city was 3.5% in April 2007: this is higher than the national average of 2.5% and the rate in Cambridgeshire of 1.4%.

The pie charts below show ACORN (A Classification of Residential Neighbourhoods) profiling for Peterborough compared to profiling for Cambridgeshire and Peterborough as whole, to give an indication of certain socio demographic characteristics of the district. This ACORN profiling is used in waste composition analysis[12].

ACORN Profile for Peterborough



ACORN Profile for Cambridgeshire and Peterborough



The pie charts show that Peterborough has a diverse, but fairly even mix of profiles, with the three most prevalent groups being:

Comfortably Off – This category contains much of the 'middle-of-the-road' Britain. Most people are comfortably off - they may not be wealthy, but they have few major financial worries. All lifestyles are represented in

10 http://www.peterborough.gov.uk/PDF/env-plan-pop-2005popdwellingreport.pdf

11 Research Group, OCS - Cambridgeshire County Council, Mid-2006 forecasts

12 Cambridgeshire and Peterborough Waste Partnership Household Kerbside Residual, Recycling and Garden Waste Composition Study, October 2005

this category. Younger singles and couples just starting out on their careers are the dominant group in some areas. Other areas have mostly stable families and empty nesters, especially in suburban of semi-rural locations. Most people own their own home, with owner occupation exceeding 80%. Most houses are semidetached or detached. Employment is a mix of professional and managerial, clerical and skilled occupations.

Hard Pressed – This category contains the poorest areas of the UK. Unemployment is well above the national average. Levels of qualifications are low and those in work are likely to be employed in unskilled occupations. Household incomes are low and there are high levels of long-term illness in some areas. Housing is a mix of low-rise estates, with terraced or semi-detached houses and purpose built flats. Properties tend to be small and there is much overcrowding. Over 50% of the housing is rented from the local council or a housing association.

Wealthy Achievers – These are some of the most successful and affluent people in the UK. They live in wealthy, high status, rural, semi-rural and suburban areas of the country. Middle-aged of older people predominate, with many empty nesters and wealthy retired. Some neighbourhoods contain large numbers of well-off families with school age children, particularly in the more suburban locations. These people live in large houses, which are usually detached with four or more bedrooms. Almost 90% are owner-occupiers, with half of those owning their home outright. They are very well educated and most are employed in managerial and professional occupations. Many own their own businesses.

3 Waste Arising and Performance

3.1 General

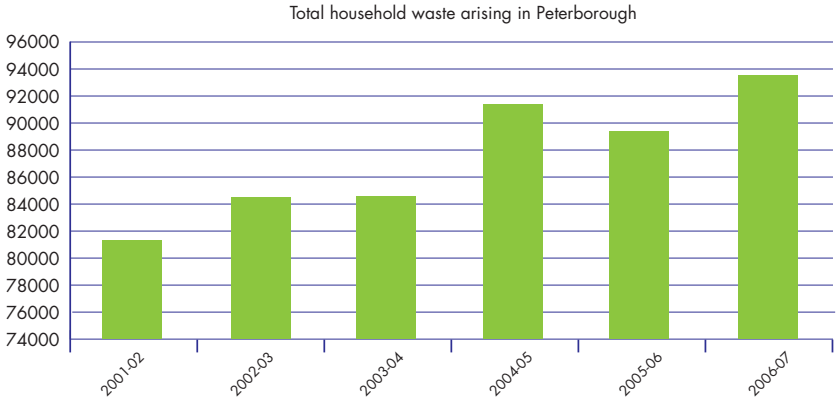
Peterborough produced 93,676 tonnes of household waste in 2006/07, which is around 24% of the total amount of household waste produced in the partnership area in this year. The table below shows a breakdown of this waste as per government Best Value Performance Indicators (BVPIs):

Peterborough		
BVPI 84a	Kg of waste collected per household (including waste collected at Household Recycling Centre)	564kg per head of population
BVPI 82a	Total tonnage and % recycled	18,001 tonnes / 19.22%
BVPI 82b	Total tonnage and % composted	22,983 tonnes / 24.53%
BVPI 82a and b	Total tonnage and % recycled and composted	40,984 tonnes / 43.7%
BVPI 82d	Total tonnage and % landfilled	52,254 tonnes / 55.78%

Peterborough did not meet BVPI targets set by government in 2003/04, but exceeded the target of 30% set in 2005/06, reaching a rate of 35%.

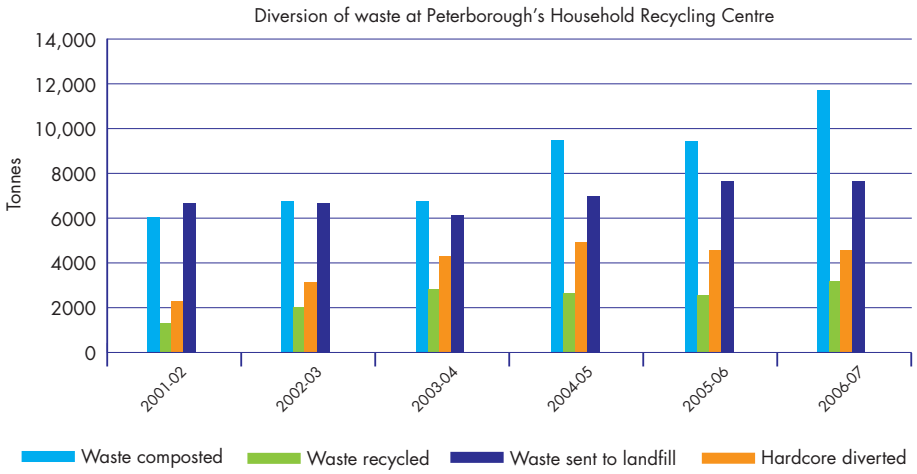
In 2006/07 Peterborough used approximately 9,800 less than its allocated allowance of landfill permits under the Landfill Allowance Trading Scheme (LATS). This was achieved largely through the full implementation of the three-bin scheme, which has succeeded in diverting large amounts of biodegradable waste such as garden waste and paper to be recycled or composted.

The bar chart below shows the total amount of household waste collected in Peterborough every year since 2001/02.



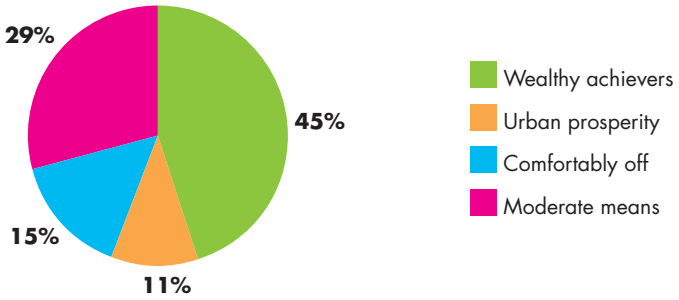
3.2 Household Recycling Centre Performance

The bar chart below shows the amount of waste recycled, composted and sent to land fill each year at the Household Recycling Centre in Peterborough. It includes tonnage for the amount of hardcore that was reused.



The pie chart below shows the percentage of waste diverted at the Household Recycling Centre in Peterborough in 2006/07.

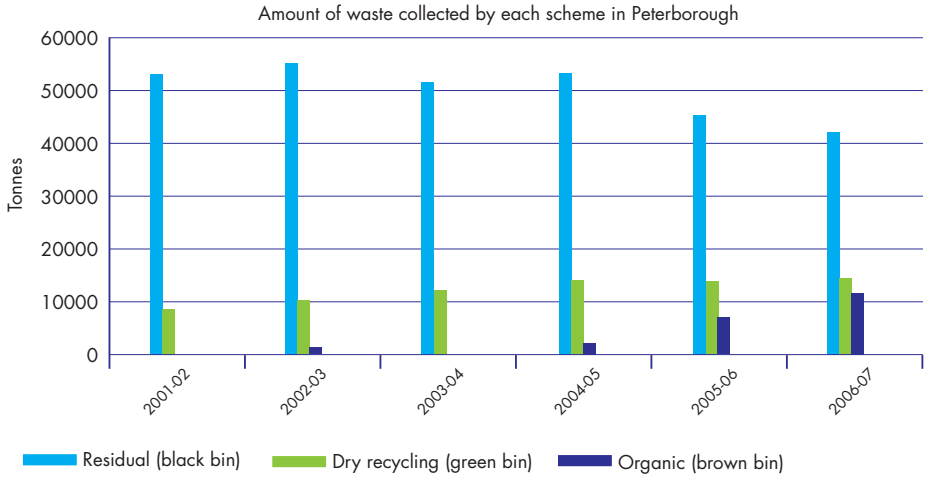
Percentage of waste diverted at Houshold Recycling Centre in 2006/07



Peterborough, along with its RECAP partners, has commissioned a waste analysis at its Household Recycling Centre in Dogsthorpe, which will be completed at the beginning of 2008. The results of this analysis will inform work to increase the recovery of materials at the centre.

3.3 Performance of Waste Collection Schemes

The bar chart below illustrates the performance of waste collection schemes in Peterborough over time.



To improve performance the RECAP partnership commissioned a two-phase waste composition analysis in 2004/05. The study provided a detailed assessment of household waste produced in each district and across the partnership as a whole. At a partnership level the results showed that:

- Compostable wastes is around 50% of total waste arising. Approximately 30% for which is currently captured within organic waste collections, which leaves around 20% for potential capture; and
- Materials that are commonly targeted in kerbside recycling schemes account for around 29%. Around 15% of this is currently diverted from the residual waste stream, leaving around 13% of the total arisings available for potential capture.

The table below shows the average composition of the kerbside residual waste stream in Peterborough and therefore the potential material that could be recycled or composted specifically within this authority area. It indicates that a high percentage of household waste is paper and that potentially up to 16% of waste within the refuse stream is paper that could potentially be diverted through recycling or composting.

Material	% in Refuse waste stream	% in Dry recycling waste stream	% in Organic waste stream
Kitchen Organics	38	1	0
Garden Organics	1	0	100
Paper	16	83	0
Glass	10	2	0
Metals	2	3	0
Textiles	2	1	0
PET, HDPE and PVC plastic bottles	2	5	0
All other plastics, including carrier bags and refuse sacks	11	3	0
Multi-layer	1	1	0
Hazardous	1	0	0
Sanitary	13	0	0
WEEE	0	0	0
Wood	1	0	0
Miscellaneous	3	1	0
TOTAL	100	100	100

RECAP has commissioned another waste composition analysis, the results of which will be available early 2008. These results will be used, along with other required data, such as predicted waste growth and targets, within a modelling tool commissioned by the RECAP partnership. The tool will model predicted outcomes of pursuing a particular course of action (e.g. targeting a particular material and or participation rates) and will therefore help to determine the most effective action to improve performance and meet recycling and landfill diversion targets.

4 Overview of Services Within Peterborough

Peterborough City Council is different from all other RECAP partners in that as a unitary authority it is responsible for both waste collection and waste disposal. It provides/utilises the following provisions for the treatment and disposal of waste:

- A Materials Recycling Facility (MRF) located to the east of the city;
- A composting facility at Dogsthorpe and a site at Crowland;
- A Household Recycling Centre at Dogsthorpe located to the North of the City; and
- One non-hazardous waste land fill site at Dogsthorpe, operated by the Waste Recycling Group. A small amount of hazardous waste is also sent to King's Cliffe land fill site, run by Augean.

It further provides the following waste collection services for householders in the area:

- A district wide three-stream kerbside waste collection service for households (dry recycling, garden waste and refuse);
- A free service for the collection of household bulky items and electrical goods; and
- A series of bring sites across the district for household recycling.

Peterborough City Council's three-bin scheme was developed and rolled out across the city between 2003 and 2005. The Materials Recycling Facility (MRF) was established in 1997 for the sorting of dry recyclables at the same time that Peterborough phased in the collection of dry recyclables from kerbside. Initially dry recyclables were collected weekly, commingled, in a box. This was later changed over to a wheeled bin collection for

commingled dry recyclables. A kerbside wheeled bin collection for garden waste was also introduced and all collection schemes changed to an alternate weekly system. Funding from Defra's Waste Minimisation and Recycling Fund supported the expansion of the enhanced waste collection schemes. In 2004, Peterborough began operating the Electrical Appliance Recycling Project with its partners to allow many of the waste electrical items from the HRC and bulky collections to be reused or recycled.

The Council is continually looking at ways to improve performance, for example it has sought to improve bring bank services by encouraging the inclusion of underground banks in new developments. In cooperation with Grosvenor, the contractor who operates the Materials Recycling Facility (MRF), Peterborough is developing the facility to enable glass to be processed alongside other dry materials. This development is due to be completed in Spring 2007/08 and allow residents to be able to add glass to the materials they put in their green, recycling bins. Incentives are also included within contracts to drive performance. For example, there are incentives for Peterborough City Council and Grosvenor to increase tonnage for dry recyclables through the MRF.

Like other local authorities, Peterborough now needs to consider additional ways to manage waste disposal. The EU Landfill Directive has set decreasing annual landfill allowance targets, for local authorities and will impose fines of £150 for each tonne of waste that is landfilled above these limits, plus a share of a daily fine imposed by the EU if the nation collectively exceeds its total target. On top of this, available landfill space in Peterborough is due to run out in about four years. In response to these pressures, Peterborough has recently undergone a process to identify new treatment and disposal methods for waste and has committed to proposals to raise recycling levels to over 65%, by continuing to educate the public, expanding the range of materials that are collected in the green bin and developing further recycling infrastructure. The remaining residual waste will be disposed of at a modern energy resource recovery facility.

Peterborough City Council recognises the importance of educating younger generations about waste and environmental issues. They have a community engagement team whose duties include giving assemblies and lessons in schools in the Peterborough area. In February 2006 they launched a comprehensive education pack for teachers to use within primary schools. This was followed with the creation of a similar tool for secondary schools, due to be launched in 2008. The MRF also has an education room which hosts visiting school parties and community groups, who can then see first hand what happens to their recycling, after being collected in the green bin.

Peterborough City Council offers a trade recycling service alongside its trade waste collection service. Materials are collected co-mingled, in the same manner as the household kerbside scheme, and are sent to the MRF to be separated into individual material streams. In 2007 BREW funding was used to purchase on board weighing equipment for trade recycling collection vehicles so that businesses can be charged by weight rather than a flat fee. This encourages smaller businesses, which only produce a small amount of waste, to take up recycling, as recycling collection/disposal prices are set lower than that of residual waste collection/disposal.

Peterborough City Council employs enforcement officers to target environmental crimes such as fly-tipping, and has recently seen several successful prosecutions in this area.

The RECAP partnership has recently expanded to cover streetscene issues. Peterborough City Council's streetscene services such as street sweeping are generally provided in-house by Peterborough City Services.

The following sections provide more detail on specific waste and streetscene services provided in Peterborough.

5 Household Recycling Centres

Peterborough City Council is responsible for the Householders Recycling Centre (HRC), at Welland Road, Dogsthorpe (a centre for the free disposal of household waste). The disposal of any commercial or trade waste at the centre is illegal. The site will be operated by H.W Martains from November 2007. Peterborough's composting facility is located next door to the HRC at Dogsthorpe and is operated by Organic Recycling. It is a conventional open air site which handles around 12,000 tonnes of waste each year.

The centre is open to the public all year round, seven days a week. Opening times are extended during the summer months. The centre has designated skips where the public can sort recyclable material, including wood, metals and car batteries and also dispose of excess residual waste. The service is free for members of the public and permits can be obtained for vans and large trailers (trailers over four feet six inches long) for the deposit of household waste.

In 2006/07:

- 26,413 tonnes of waste, or around 25% of all waste generated in Peterborough was disposed of at the HRCs;
- A total of 18,808 tonnes of this waste (including hardcore) was recovered through reuse, recycling and composting; and
- The overall recycling rate for the HRCs was around 71% (including hardcore).

In 2004/05:

- 23,615 tonnes of waste at HRCs in 2004/05, around 23% of the total amount of waste generated in Peterborough;
- A total of 16,803 tonnes of this waste (including hardcore) was recovered through reuse, recycling and composting; and
- The recycling rate in this year was around 71% (including hardcore).

The following materials are accepted at the Dogsthorpe HRC:

Paper	Fridges/Freezers	Green waste
Car Batteries	Glass	Other electrical items
Fluorescent tubes	Wood	Other scrap metal
TVs/monitors	Engine Oil	Rubble
Cardboard	Co-mingled recyclables (same materials as green bin)	
Textiles	Paint and other hazardous household chemicals	

6 Bring Sites

There are 31 bring sites (mini recycling centres) in Peterborough, located at large supermarkets and other publicly accessible sites in and around the city. In 2003/04 it was calculated that 95% of households within Peterborough were located within 1km of a bring site.

A total of 2,128 tonnes of textiles and glass was recycled at bring sites in Peterborough in 2006/07, accounting for about 12% of the total amount of household waste recycled in the city in this year. In 2004/05 these materials at bring sites accounted for 1,594 tonnes, about 11% of recycled household waste in Peterborough

The table on the following page provides detail on bring sites in Peterborough

Underground Recycling Banks

In Spring 2005 Peterborough undertook a trial of underground recycling banks, collecting mixed glass and mixed dry recyclables, at flats in the city, funded through the Defra Waste Minimisation and Recycling Fund. These banks have been successful in keeping bring areas tidy.

Recycling Banks for Schools

Peterborough City Council is keen to offer schools more opportunity to recycle and is currently developing this service with Grosvenor as a partner.

Materials collected	Number of sites collecting material	Who receives materials	Contracts in place	How material collections are managed
Mixed glass	31	Peterborough City Services take to MRF (Grosvenor)	Berrymans, London	Peterborough City Council's City Services department collects the glass, which is taken to the MRF for bulking and storing. Berrymans then collect the glass and takes it for reprocessing at one of their cullet treatment plants. Glass is the easiest of all materials to recycle. Every 1000 tonnes of recycled glass that is used to make new bottles and jars saves 345,000 kwh of energy, 314,000 tonnes of CO^2, 1200 tonnes of raw material and 1000 tonnes of landfill.
Books	3	Peterborough City Services	Materials Recycling Facility (MRF)	A charity provides, maintains and empties the banks.
Textiles	20	Scope and Planet Aid	Scope and Planet Aid	Scope and Planet Aid provide, maintain and empty the banks. The collected material is used for aid or recycled.
Commingled recyclables (as green bin)	8	Peterborough City Services	Materials Recycling Facility (MRF)	Peterborough City Council's City Services department provide, maintain and empty the banks. The material is taken to the MRF in the city for sorting and bulking.
Waste electrical and electronic equipment (WEEE)	3	Electrical Appliance Recycling Project, Peterborough	Electrical Appliance Recycling Project (MRF)	Peterborough City Council's City Services department provide, maintain and empty the banks. The WEEE is taken directly to the Electrical Appliance Recycling Facility, where it is made fit for reuse or broken down into parts for recycling.

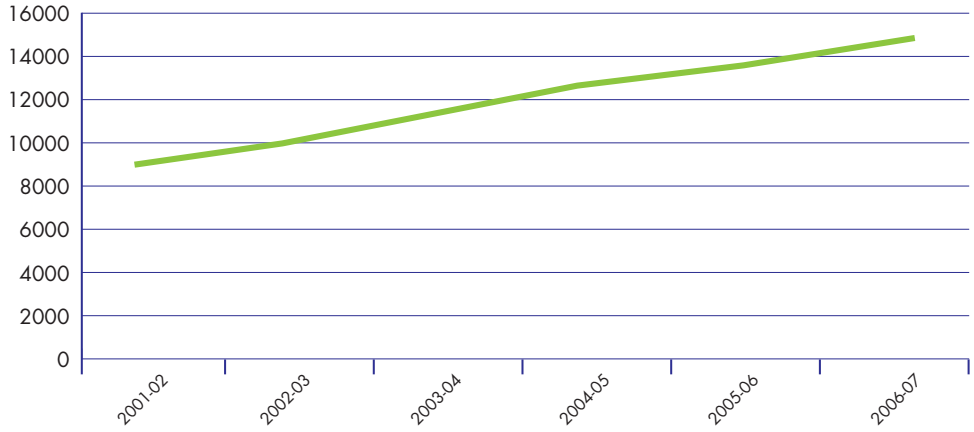
7 Kerbside Dry Recycling Collection

Peterborough City Council provides a co-mingled kerbside collection of dry recyclables to householders. Certain high-density dwellings with unsuitable bin collection points and storage facilities are not currently included within this scheme; however, the council continues to pursue options for these areas.

Peterborough City Council works with developers to ensure that suitable space in new developments is allocated for bin provision. There is also a requirement for developers to contribute towards the cost of bin provision and off-site waste infrastructure, which the council implements under Section 106 of Planning Policy Guidance (PPG).

The graph below shows the total amount of dry recycling collected at kerbside in the Peterborough area since 1999/2000.

Waste tonnage for dry recycling collected at kerbside since 2001/02



The table below provides detail on the kerbside dry recycling collection scheme:

Coverage	93.6% of all households are offered this service.
Receptacles	Households are issued a green 240-litre wheeled bin and flats are generally issued a 1100-litre wheeled bin or 5m? underground banks
Frequency	Alternate weekly collection.
Materials collected	• All paper and cardboard; • Food and drinks cans; • Aerosols; • Cartons; and • Plastic bottles.
Kerbside collection operator/contractor	Peterborough City Council's City Services operate the in house collection service from the depot at Nursery Lane, Fengate.
Collection process	Peterborough City Council's City Services department collects the material, which is then taken to the Materials Recycling Facility (MRF) to the east of the city. Here the material is sorted mechanically and manually into the different material types before being sent for reprocessing. The current MRF rejection rate for materials collected is approximately 10-15%. Some of the rejects are sent to landfill while the reject fraction with a high calorific value is sent for energy recovery.
Vehicles	The Contractor uses six kerbside recycling vehicles to operate the service
Contractors receiving recyclable materials	The MRF operator is currently Grosvenor. Grosvenor sends materials to a variety of re-processors according to market demands.
Policies	The main polices are: • Green bins must be placed on the kerbside adjacent to the property for collection by 7am on the day of collection; • Peterborough City Council introduced a 'No side waste' policy in 2005. No side waste is accepted and bin lids must be shut; • If a household requires an additional recycling wheeled bin, the Council will issue one free of charge, providing they can demonstrate a need due to the size of the family, i.e. 6 family members or more; • Contaminated bins are rejected and stickers placed on bins. The sticker requests the resident to contact the City Council to discuss the problem. If the problem persists, a visit from an enforcement officer will be arranged and the matter will be dealt with under the guidance of the Environmental Protection Act. However, on the majority of occasions the officer will work with the resident to ensure that they understand the system and its requirements; • Bins that obstruct the highway other than on collection days may be issued a £100 fixed penalty notice; • The council offers an assisted collection service on request for residents with mobility difficulties; and • The council works with developers to ensure that sufficient space for bin provision for both refuse and recycling is allocated in new builds.

Dry Recycling Collections for Schools

Peterborough City Council is keen to offer schools more opportunity to recycle and is currently developing a co-mingled recycling service for schools in the area, whilst investigating opportunities to collect other recyclable materials such as mobile phones, cartridges and textiles.

Ensuring Quality Materials

The Council ensures quality of materials by: -

- Training their collection crew on types of material acceptable and not collecting from bins that are contaminated;
- Conducting door stepping campaigns; and
- Promotional activities (for example, press releases, education, roadshows, leaflets, talks to interested groups and open days)

8 Kerbside Organic Waste Collections

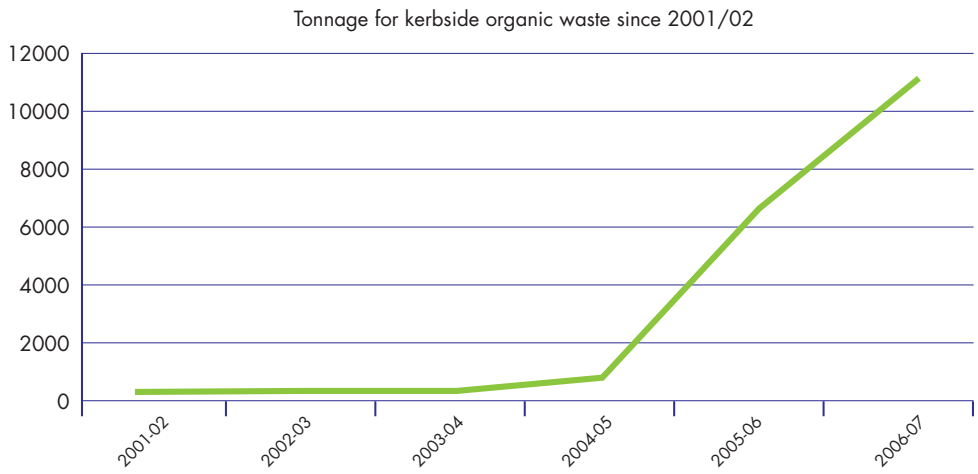
Households in Peterborough receive a kerbside organic waste collection that accepts garden waste. Flats and a small area of high density housing in the city are not currently included within this scheme. As a unitary authority it is responsible for the treatment of the organic waste collected, for which it has a three-year contract with Organic Recycling, with an option to extend for a further two years.

Peterborough City Council is currently examining the options for diverting food waste from landfill. Two of the options currently under consideration are:

- To collect kitchen waste with garden waste in the existing brown bins and send the materials for in-vessel composting; and
- To collect kitchen waste separately in a small caddy and send the material for anaerobic digestion.

Peterborough is also working with developers to ensure that suitable space in new developments is allocated for bin provision. There is a requirement for developers to contribute towards the cost of bin provision and off-site waste infrastructure, which the council implements under Section 106 of Planning Policy Guidance (PPG).

The graph below shows the total tonnage of organic waste collected in Peterborough since 2001/02.



The table on the following page provides detail on the kerbside organic waste collection scheme in Peterborough:

Coverage	83.6% of all households offered this service.
Receptacles	Households are issued with a 240 litre brown wheeled bin.
Frequency	Alternate weekly
Materials collected	Garden waste, more specifically: Grass cuttings; Leaves; Shrubs; Weeds; Bedding plants; Hedge trimmings; Dead flowers; Prunings and Twigs/branches.
Kerbside collection operator/contractor	Peterborough City Council's City Services operate the in house collection service from the depot at Nursery Lane, Fengate.
Collection process	The kerbside organic material is taken to Dogsthorpe and then transferred to Organic Recycling at Crowland where it is composted over a period of 12-16 weeks. Material is shredded and formed into 'windrows' for composting. This material is then sold to the landscape industry and 40 litre bags are sold back to residents at the HRC at Dogsthorpe. This closed loop system is widely promoted within Peterborough.
Vehicles	City Services uses six Refuse Collection Vehicles to operate this service.
Policies	• Households must have the brown bins placed at the curtilage of the property for collection by 7am on the collection day; • For health and safety reasons excessively heavy bins will not be collected; • Peterborough City Council introduced a 'No side waste' policy in 2005. No side waste is accepted and bin lids must be shut; • Additional brown bins are not offered to any household but excess green waste may be taken to the HRC free of charge; • The crew will not collect material that is contaminated including material contained within bags or sacks; • The council offers an assisted collection service on request for residents with mobility difficulties; and • The council works with developers to ensure that sufficient space for bin provision for both refuse and recycling is allocated in new builds.

Organic Waste Collections for Schools

There is not currently an organic waste collection for schools; however the council has offered all schools in the area a free compost bin along with a composting assembly and help on how to use it.

Ensuring Quality Materials

The Council ensures quality of materials by: -

- Training their collection crew on types of material acceptable and not collecting from bins that are contaminated;
- Conducting door stepping campaigns; and
- Promotional activities (for example, press releases, education, roadshows, leaflets, talks to interested groups and open days).

9 Refuse Collection

The table opposite provides detail on the kerbside refuse collection in Peterborough. This service is also provided to all schools in and around Peterborough. As a unitary authority, Peterborough is also responsible for the disposal of refuse. All refuse collected at kerbside, and Household Recycling Centres currently goes to the land fill at Dogsthorpe.

Peterborough City Council works with developers to ensure that suitable space in new developments is allocated for bin provision. There is also a requirement for developers to contribute towards the cost of bin provision and off-site waste infrastructure, which the council implements under Section 106 of Planning Policy Guidance (PPG).

Peterborough sent 34,285 tonnes of biodegradable municipal waste (BMW) to landfill in 2006/07. This is 9,769 tonnes less than the total calculated allowance for Peterborough in this year.

Tonnage for kerbside refuse since 2001/02

Coverage	100% of households are offered the service.
Receptacles	Households are provided a 240 litre black wheeled bin as standard, with flats generally receiving a 1100 litre wheeled bin or underground banks for communal collections.
Frequency	An alternate weekly service
Materials collected	All household waste that cannot be recycled or composted through the green and brown bin collections.
Kerbside collection operator/contractor	Peterborough City Council's City Services operate the collection service from the depot at Nursery Lane, Fengate. A Service Level Agreement (SLA) is in place between Peterborough City Council's City Services and Environment and Planning.
Collection process	Vehicles operate from the Council's depot at Nursery Lane, Peterborough and waste is taken directly to Dogsthorpe landfill sites for disposal.
Vehicles	City Services uses eight Refuse Collection Vehicles for the collection of the material.
Policies	• Black bins must be placed at the curtilage of the property for collection by 7am on the collection day; • Additional bins are not offered to residents unless they can demonstrate the need due to the size of the family or for medical reasons; a large family constitutes more than 5 residents; • Peterborough City Council introduced a 'No side waste' policy in 2005. No side waste is accepted and bin lids must be shut; • The council offers an assisted collection service on request for residents with mobility difficulties; and • The council works with developers to ensure that sufficient space for bin provision for both refuse and recycling is allocated in new builds.

10 Street Sweepings

The Council's City Services department undertakes street sweeping in house. A core part of the work is educating and campaigning to change people's behaviour and attitudes towards the street environment, encouraging people to adopt a responsible attitude towards their own rubbish. The street cleansing team also carries out work to clear fly-tipping, fly-posting and graffiti, alongside street cleaning and litter picking.

Receptacles	Litter Bins
Frequency	As required
Operations	The service is run daily out of the council's depot at Nursery Close, Peterborough.
Vehicles	Various 1 tonne to 16 tonnes vehicles are used to carry out the service
Policies	To keep streets to within expected Environmental Protection Act specification.
Disposal	The Council takes the material to Dogsthorpe landfill site for disposal or composting as appropriate.
Collection process	Both manual and mechanical means employed as appropriate.

11 Fly-Tipping

The Councils City Services department collects fly-tipping in house. Various 3 tonne to 7.5 tonnes vehicles, tractors and trailers are used to carry out the service.

The service runs as required but at least 5 days a week. The vehicles operate out of the Council's depot at Nursery Lane, Peterborough, with the material taken to Dogsthorpe landfill site for disposal.

Peterborough City Council supports the Cambridgeshire and Peterborough Waste Partnership who have an Environment Action Co-ordinator working on all aspects of environmental crime, including fly-tipping and also facilitates actions undertaken by the new Prevention, Intervention and Enforcement (PIE) Sub Group.

12 Commercial Waste

The Councils City Services department collects commercial waste and recycling in house. This waste is collected up to six times a week, depending on customer requirements, in a Refuse Collection Vehicle (RCV) compactor.

Peterborough City Council, through the Business Resource Efficiency & Waste Programme (BREW) scheme, is establishing a trial weighing system linked with a Graphical Information System (GIS) system. This system will monitor the effectiveness of the trade recycling campaign, implement a polluter pays policy and increase the productivity of the recycling collection vehicle running costs.

Coverage	The Peterborough City Council area.
Receptacles	The commercial properties on this service are issued 240-litre to 1100-litre wheeled bins as required.
Frequency	Up to 6 times a week based on customer requirements.
Materials collected	Residual waste for landfill disposal, mixed dry recyclable materials (paper, card, plastic bottles, and cans) and one off special collections of bulky items.
Operations	The vehicles operate out of the council's depot at Nursery Lane, Peterborough. The Council takes the material to Dogsthorpe landfill site for disposal, or to its Materials Recycling Facility (MRF) for recycling.
Vehicles	7.5 Tonnes to 32 tonnes.
Policies	Collection only fees for charities/schools and other relevant premises, all other customers charged rates to include collection and disposal.
Disposal	In 2006/07, the Council collected 552 tonnes of recyclables and 1,936 tonnes of commercial refuse, which is an increase on previous years.
Collection process	Compaction vehicles from wheeled bin containers.

13 Clinical Waste

The NHS provides yellow bags and contacts the Council when a new collection is required or when one is to be discontinued. The Council takes the material to Edith Cavel Hospital Transfer Station for transfer onwards to high temperature incineration.

Contract The Council's City Services department collects Clinical Waste. The contract commenced in 1997 and there is no end date specified. The council uses a 3.5 tonne enclosed van to carry out this service.

Receptacles	Bags and/or boxes as specified by the customer or household
Frequency	Clinical Waste is collected in yellow sacks weekly from households or businesses that require this service
Materials collected	Clinical waste
Kerbside collection operator/ contractor	City Services
Vehicles	3.5 Tonne vehicle
Collection process	Non compacted box van

14 Enforcement

Illegal disposal of any waste is identified by refuse collection teams, street cleansing crews, members of the public and other parties and appropriate action is taken against offending people and businesses.

Peterborough City Council has a dedicated enforcement team, which consists of three enforcement officers and one senior enforcement officer, alongside which are a number of specialist team covering other environmental issues. Their work focuses on combating all aspect of environmental crime, which includes fly-tipping, littering, trade waste and fly-posting. There are also litter wardens, who have the power to issue fixed penalty notices for relevant offences. In addition to this, within the environmental health team at the council, there are officers who have powers to prosecute people that are breaching other environmental legislation.

Coverage	All of the City Council area is covered
Environmental Enforcement team	Both dedicated teams covering different aspects, alongside the key functions of the Environmental Health team.
Prosecution Polices	Various policies covering the range from written warnings through to prosecution.
Enforcement operator/ contractor	In house teams
Enforcement equipment	Vehicles, cameras and other associated equipment.
Enforcement Vehicles	Two dedicated and others available through separate sections.

All enforcement action is carried out in line with the enforcement agreement, along with the City Councils own enforcement policy, Corporate Policy and procedures in accordance with Regulation of Investigatory Powers Act 2000 (RIPA).

15 Awareness and Waste Minimisation Activities

Peterborough City Council is currently working to increase the recycling rates of the current schemes in place through active involvement in awareness campaigns, some examples of which are detailed below:

- A dedicated team of officers use a variety of methods to improve awareness/education;
- Distributing literature to residents for the dry kerbside and organic waste collection that list materials collected and the collection calendar;
- Advertising in local magazines and newspapers when the opportunities arise;
- Distributing bi-monthly magazines to residents on their waste services in the area;
- Conducting radio interviews with local radio stations;

- Supporting the national 'Recycle Now' campaign. This involves staffing of road shows to provide local information to the public and promoting recycling and waste minimisation activities. Peterborough City Council also has a 'Recycling Trailer' for use at promotional events;
- Door-knocking households in the City to promote the services. This includes participation surveys and participation monitoring;
- A dedicated team of officers visit schools to promote recycling and waste minimisation. An annual competition is held at Christmas to get children involved in recycling. Schools are also offered compost bins along with a composting assembly;
- Subsidised home-compost bin scheme to bring about an increase in the number of home composters being sold to the public;
- An education room at the MRF is used to give tours of the facility to schools and other sectors of the community;
- The authority has been actively involved in promoting waste reduction and reuse in the community. Supporting a community organisation that runs projects recovering paint, WEEE, furniture and runs a re-use scrapstore; and
- Promotion of Real Nappies by supporting the Real Nappy Network.

In addition the City supports national programmes: -

- The 'Recycle Now Week' which is an annual event to promote recycling as part of the 'Recycle Now' campaign;
- National Composting Week;
- Real Nappy Week;
- Woodland Trust Christmas Recycling; and
- Alupro Trees for UK and Africa Campaign.

South Cambridgeshire (SCDC) – Recycling Plan 2007/08

1 Introduction

This document describes the socio-demographics of the local authority area, together with current municipal waste management infrastructure and performance specific to South Cambridgeshire District Council.

2 South Cambridgeshire Population and Socio Demographics

South Cambridgeshire is a predominately rural district of 902 square kilometers surrounding the city of Cambridge. The district has a dispersed pattern of population with 101 villages and no towns. The majority of villages have populations of fewer than 1,000 people and population density for the district is low at 145 people per square kilometre[13].

The population for South Cambridgeshire in 2006 was 138,000, which is approximately 18% of the total population in Cambridgeshire and Peterborough. According to mid 2006 forecasts, the population in South Cambridgeshire is predicted to increase by 8.7% between 2006 and 2011, and rise again by another 7.3% between 2011 and 2016. The predicted population in the district for 2016 is 160,900 occupying 72,000 properties some of which will be in new town developments. South Cambridgeshire has the second highest predicted growth in population over the next 15 years for a district in Cambridgeshire and Peterborough[14].

The table below shows the dwelling forecast for South Cambridgeshire set against dwelling forecasts for Cambridgeshire and Peterborough overall2. Cambridgeshire and Peterborough have been earmarked for development by Central Government and are expected to have some of the highest housing increases in the country. Dwelling projections are used in calculations to predict waste growth.

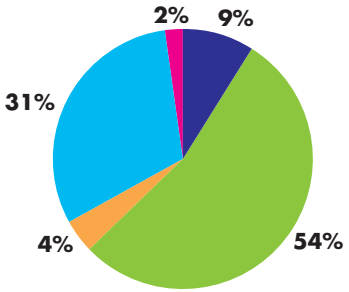
13 South Cambridgeshire District Comprehensive Performance Assessment Report, July 2004

14 Research Group, OCS – Cambridgeshire County Council, Mid-2006 forecasts

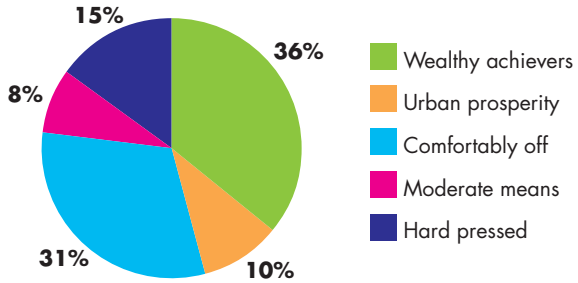
Forecast year	2006	2011	2016	2021	2026	2031
Dwellings in South Cambridgeshire	57,700	65,000	72,000	77,700	82,200	86,500
Dwellings in Cambridgeshire and Peterborough	321,200	350,400	379,400	400,600	420,000	436,100

The pie charts below show ACORN (A Classification of Residential Neighbourhoods) profiling for South Cambridgeshire, compared to profiling for Cambridgeshire and Peterborough as whole, to give an indication of certain socio demographic characteristics of the South Cambridgeshire district. This ACORN profiling is used in waste composition analysis .

ACORN Profile for South Cambridgeshire



ACORN Profile for Cambridgeshire and Peterborough



The profiling shows that the three prevalent groups in South Cambridgeshire are:

Wealthy Achievers – These are some of the most successful and affluent people in the UK. They live in wealthy, high status, rural, semi-rural and suburban areas of the country. Middle-aged of older people predominate, with many empty nesters and wealthy retired. Some neighbourhoods contain large numbers of well-off families with school age children, particularly in the more suburban locations. These people live in large houses, which are usually detached with four or more bedrooms. Almost 90% are owner-occupiers, with half of those owning their home outright. They are very well educated and most are employed in managerial and professional occupations. Many own their own businesses.

Comfortably Off – This category contains much of the 'middle-of-the-road' Britain. Most people are comfortably off - they may not be wealthy, but they have few major financial worries. All lifestyles are represented in this category. Younger singles and couples just starting out on their careers are the dominant group in some areas. Other areas have mostly stable families and empty nesters, especially in suburban of semi-rural locations. Most people own their own home, with owner occupation exceeding 80%. Most houses are semidetached or detached. Employment is a mix of professional and managerial, clerical and skilled occupations.

Hard Pressed – This category contains the poorest areas of the UK. Unemployment is well above the national average. Levels of qualifications are low and those in work are likely to be employed in unskilled occupations. Household incomes are low and there are high levels of long-term illness in some areas. Housing is a mix of low-rise estates, with terraced or semi-detached houses and purpose built flats. Properties tend to be small and there is much overcrowding. Over 50% of the housing is rented from the local council or a housing association.

3 Waste Arising and Performance

3.1 General

South Cambridgeshire produced 59,942 tonnes of household waste in 2006/07, which is around 14% of the total amount of household waste produced in the partnership area in this year. The table below shows a breakdown of this waste as per government Best Value Performance Indicators (BVPIs):

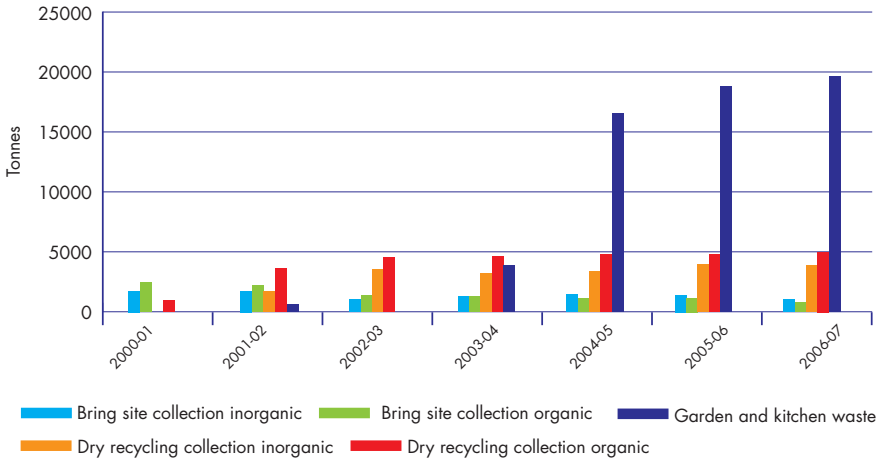
South Cambridgeshire		
BVPI 84a	Kg of household waste collected per head of population	434kg per head of population
BVPI 82a	Total tonnage and % recycled	10,943 tonnes / 18%
BVPI 82b	Total tonnage and % composted	19,611 tonnes / 33%
BVPI 82a and 82b	Total tonnage and % recycled and composted	30,553 /51%
BVPI 82d	Total tonnage and % landfilled	29,389 tonnes / 49%

15 Cambridgeshire and Peterborough Waste Partnership Household Kerbside Residual, Recycling and Garden Waste Composition Study, October 2005

South Cambridgeshire District Council exceeded BVPI targets set by government in 2003/04 and 2005/06 and are now, as illustrated above, recycling and composting roughly half of all household waste collected. The RECAP Partnership has agreed voluntary targets for its authorities, exceeding those set by government. The Landfill Allowance issued to Waste Disposal Authorities, which set the amount of biodegradable waste permitted to landfill, has also been calculated for each district council (Waste Collection Authority) using the Environment Agency estimator.

3.2 Performance of Waste Collection Schemes

The chart below illustrates the performance of waste collection schemes in South Cambridgeshire over time.



The table below shows the number of collections missed per 100,000 collections of household waste (residual waste and recyclate collections).

Year	2005/06	2006/07	2007/08	2008/09
Target	50 / 100,000	50 / 100,000	45 / 100,000	not available
Actual	45 / 100,000	39 / 100,000		

To determine performance the RECAP partnership commissioned a two-phase waste composition analysis in 2004/05. The study provided a detailed assessment of household waste produced in each district and across the partnership as a whole. At a partnership level the results showed that:

- Compostable waste is around 50% of total waste arising. Approximately 30% of which is currently captured within organic waste collections, which leaves around 20% of compostable waste available for potential capture.
- Materials that are commonly targeted in kerbside recycling schemes account for around 29%. Around 15% of this is currently diverted from the residual waste stream, leaving around 13% of the total arisings available for potential capture.

The table overleaf shows the average composition of the kerbside residual waste stream in South Cambridgeshire and therefore the potential material that could be recycled or composted specifically within this district. It indicates that a high percentage of household waste is paper and that potentially up to 19% of waste within the refuse stream is paper that could potentially be diverted through recycling or composting.

Material	% in Refuse waste stream	% in Dry recycling waste stream	% in Organic waste stream
Kitchen Organics	39	1	5
Garden Organics	1	5	61
Paper	19	68	31
Glass	3	14	2
Metals	3	5	0
Textiles	3	1	0
Plastics	20	5	0
Multi-layer	2	1	0
Hazardous	1	0	0
Sanitary	4	0	0
WEEE	0	0	0
Wood	1	0	1
Miscellaneous	5	0	0
TOTAL	100	100	100

RECAP has commissioned another waste composition analysis, the results of which will be available early 2008. These results will be used, along with other required data, such as predicted waste growth and targets, within a modelling tool commissioned by the RECAP partnership. The tool will model predicted outcomes of pursuing a particular course of action (e.g. targeting a particular material and or participation rates) and will therefore help to determine the most effective action to improve performance and meet recycling and landfill diversion targets.

4 Overview of Services Within South Cambridgeshire

South Cambridgeshire District Council provides the following waste collection services:

- a district wide three-stream kerbside waste collection service for households (dry recycling, organic waste and refuse);
- a series of bring sites across the district for household waste; and
- a service for the collection of household bulky items.

In October 2000, South Cambridgeshire District Council introduced the first phase of a kerbside collection of dry recyclables covering 20% of properties in the district. The following year this was quickly expanded to cover the rest of the district due to public take-up and support for the scheme. In 2002 the only garden waste collection services in the district was run by a volunteer community service within five villages. At the end of 2003 the Council rolled out an alternate-weekly wheeled bin collection of garden waste with refuse, utilising funds awarded through the Defra Waste Minimisation and Recycling fund. In August 2004 the garden waste collection service was expanded to accept kitchen waste. South Cambridgeshire, together with all other RECAP partners, continually look for opportunities to improve performance. In August 2007 South Cambridgeshire and Cambridge City worked on a project with Tetra Pak Ltd to establish carton collection points at supermarkets and other local recycling centres across Cambridge and South Cambridgeshire. The Council is also currently investigating the potential expansion of its kerbside dry recycling scheme to include plastics and recycling collections for schools.

Commercial Waste

The Council's Direct Service Organisation (DSO) collects commercial waste. In 2006/07, the Council collected 2,201 tonnes of commercial waste or 3.5% of the total waste collected by the authority.

Nationally we are generating some 400m tonnes of waste each year and this is growing by 3% each year. Industrial and commercial waste accounts for around 20% of total waste and over half of this goes to landfill. Neither landfilling nor incineration provide sustainable long term solutions for dealing with the level of waste on this scale. However, through the Business Resource Efficiency and Waste (BREW) founded trade waste recycling scheme, South Cambridgeshire District Council is working in partnership

with the six other authorities. The scheme that South Cambridgeshire is working on is a partnership scheme that is Rural District based. The four Rural Districts are working in partnership together focusing on small-medium enterprises (SME's) and will look at linking up businesses to share recourses to, for example, to promote the use of shared storage space for waste.

Street Scene

The Cambridgeshire and Peterborough Waste Partnership has expanded its remit to incorperate Streetscene and Environmental Enforcement. South Cambridgeshire District street cleansing service is designed to meet the standards in the Department of the Environment, Transport and the Region's Code of Practice on Litter and Refuse. The Code sets out grades of cleanliness, divides land into zones according to usage and volume of traffic, and sets target response times within which areas falling below set grades of cleanliness should be restored to. Copies of the Code may be obtained from HMSO or any good bookshop. Litter Picking areas falling below a set grade of cleanliness are restored to the grade within the time period specified in the Code of Practice for that particular zone. In addition, areas will be litter picked at minimum set intervals, ranging from every six months to weekly, depending on the Code of Practice zone.

The following sections provide more detail on the waste collection schemes provided in South Cambridgeshire and Streetscene services.

5 Bring Sites

There are 91 bring sites (mini recycling centres) located at public accessible sites, such as village halls, public car parks and community grounds across South Cambridgeshire. In 2003/04 it was calculated that more than 85% of households in the district were within 1km of a bring site. In August 2007 four further bring banks were set up within the district for the collection of food and drink cartons.

A total of approximately 1,861 tonnes of household waste was recycled at bring sites in South Cambridgeshire in 2006/07, accounting for only around 17% of the total amount of household waste recycled in South Cambridgeshire (not including garden and kitchen waste) in this year. In 2004/05 bring sites accounted for 18.5% of household waste recycled in the district and in 2003/04, 19% (not including garden and kitchen waste). The graph below shows the recycling tonnage collected at bring sites each year in South Cambridgeshire since 1999/00, illustrating, on average, a decrease in tonnage collected.

The table below provides detail on bring sites in South Cambridgeshire.

Materials collected	Number of sites collecting material	Who receives materials	Contracts in place	Process
Glass (clear, green, brown and mixed)	Green - 15 Clear - 26 Brown - 12 Mixed - 48	Waste Recycling Group (WRG), Yorkshire	This is a Joint Waste Contract with other RECAP districts. The contract commenced April 2003 and is presently under review.	WRG supply, maintain and empty banks. The glass collected is taken to a transfer station at Red Lodge. It is then bulked up before being transported to a site operated by Berrymans in South Kirkby, West Yorkshire. Here the glass undergoes separation and cleaning and is then transported to a cullet treatment plant in Knottingley, Yorkshire. Approximately 3%-5% of the material has to go to landfill due to contamination. A further 10%-15% is exported depending on requirements of the market. The material that is reprocessed in the UK or abroad is used to make bottles.
Paper (newspaper, junk mail, magazines, telephone books)	69	Newslitter Ltd, Soham Premier Waste Management, Durham	Contract until August 2010 Contract until August 2010	Newslitter, a local company in Soham, provides, maintains and empties the banks. The paper is taken to Soham where it is shredded for use as animal bedding. Holmans Recycling transports the paper to France where it is made into Newsprint. The paper and magazines are cleaned, de-inked and turned into pulp. The pulp is then passed through a process of rollers and drying cylinders at 60mph to produce a new roll of Newsprint, each weighing 40 tonnes. This is then sold to publishers and used to create newspapers. Producing newsprint through recycling uses less energy than using raw wood pulp.
Mixed cans and aerosols	22	Pearsons, Thetford		Contractual arrangements extended to facilitate future options.Pearsons, a local family business, provides, maintains and empties the banks. Most of the material is taken to Thetford and processed at one of three modern sites covering over twelve acres. The tins and cans are separated into aluminium and steel by means of a magnetic separation line. They are then compacted into bales and transported to Corus steel and Novellis aluminium. The aluminium is melted and then cooled to form aluminium bars weighing 24 tonnes. These are then cut, rolled into thin sheets and then used to create new aluminium cans. This process is a very energy efficient and economical way of producing cans. The steel is melted down, rolled into sheets and then used to create a range of steel materials and products.
Plastic bottles	16 Thetford	Pearsons, until 2008	Contract	Plastic bottles are baled on the Pearson's site in Thetford. The material is then traded through Recoup services. The bales are put into shipping containers that are taken to Felixstowe and exported to Hong Kong. They are then segregated in Hong Kong before being shipped to mainland China for reprocessing. The reprocessing involves shredding, cleaning and melting back into a fibre product for reuse in a variety of products including clothing and toys.
Books	4	Oxfam, Cambridge	No Contract	Oxfam provides, maintains and empties the banks. The books are sorted and distributed to local charity shops.
Textiles	12	Black Country Rag, West Bromwich, West Midlands Salvation Army, Kettering, Northamptonshire Oxfam, Cambridge	 No contracts	Black Country Rag supply, maintain and empty some of the banks. Items are taken to their Head Quarters in West Bromwich and weighed. Items are then hand sorted into different grades of clothing and textiles. Once separated into categories, re-useable and recyclable items are then tightly packed and wrapped in protective transport bags before being dispatched. The Salvation Army supply, maintain and empty some of the banks. The textiles are collected and taken to Kettering where they are sorted into materials for recycling and clothes that can be used for aid, and distributed to local charity shops. Oxfam supply, maintain and empty a number of the textile banks. Items are taken to a central processing facility in Kettering. After sending some items to local charity shops the remainder is packed into large canvas (botany) bags – each holds about 140 kg of clothes. These bags are then loaded onto 40ft trailers for transportation by road and sea to Eastern European Countries, Tunisia and elsewhere.
Paper-based drink and liquid food cartons (TetraPaks)	4	Recresco (on behalf of TetraPak), Nottinghamshire	No contract – free trial	TetraPak supply, maintain the banks. Banks are emptied by Recresco and material is baled and stored in 25 tonne containers, which when full are shipped for reprocessing to the Orebro paper mill in Sweden

6 Kerbside Dry Recycling Collection

South Cambridgeshire District Council provides a kerbside–sort collection for dry recyclables to all residents in the district. Up until October 2005 the service included the collection of textiles. These materials are now collected from bring banks across the district because quality material could not be ensured through this collection method. The Council is currently looking at expanding the scheme to include the collection of various types of plastics.

South Cambridgeshire collected 9,046 tonnes of dry recycling at kerbside during 2006/07 – an average of 157kg per household. This is 15% of the total amount of household waste collected in the district in this year.

The table below provides detail on the kerbside dry recycling collection scheme in South Cambridgeshire:

Coverage	93.6% of all households are offered this service.
Receptacles	Households are issued a green 240-litre wheeled bin and flats are generally issued a 1100-litre wheeled bin or 5m? underground banks
Frequency	Alternate weekly collection.
Materials collected	• All paper and cardboard; • Food and drinks cans; • Aerosols; • Cartons; and • Plastic bottles.
Kerbside collection operator/contractor	Peterborough City Council's City Services operate the in house collection service from the depot at Nursery Lane, Fengate.
Collection process	Peterborough City Council's City Services department collects the material, which is then taken to the Materials Recycling Facility (MRF) to the east of the city. Here the material is sorted mechanically and manually into the different material types before being sent for reprocessing. The current MRF rejection rate for materials collected is approximately 10-15%. Some of the rejects are sent to landfill while the reject fraction with a high calorific value is sent for energy recovery.
Vehicles	The Contractor uses six kerbside recycling vehicles to operate the service
Contractors receiving recyclable materials	The MRF operator is currently Grosvenor. Grosvenor sends materials to a variety of re-processors according to market demands.
Policies	The main polices are: • Green bins must be placed on the kerbside adjacent to the property for collection by 7am on the day of collection; • Peterborough City Council introduced a 'No side waste' policy in 2005. No side waste is accepted and bin lids must be shut; • If a household requires an additional recycling wheeled bin, the Council will issue one free of charge, providing they can demonstrate a need due to the size of the family, i.e. 6 family members or more; • Contaminated bins are rejected and stickers placed on bins. The sticker requests the resident to contact the City Council to discuss the problem. If the problem persists, a visit from an enforcement officer will be arranged and the matter will be dealt with under the guidance of the Environmental Protection Act. However, on the majority of occasions the officer will work with the resident to ensure that they understand the system and its requirements; • Bins that obstruct the highway other than on collection days may be issued a £100 fixed penalty notice; • The council offers an assisted collection service on request for residents with mobility difficulties; and • The council works with developers to ensure that sufficient space for bin provision for both refuse and recycling is allocated in new builds.

Dry Recycling Collections for Schools

Currently a number of schools receive a green box recycling collection. In 2007/08 South Cambridgeshire will be rolling out a comprehensive schools recycling collection service.

Ensuring Quality Materials

The Council ensures quality of material through:

- Extensive ongoing publicity;
- Advising residents through the Councils quarterly 'South Cambs' magazine which is delivered to all residents;
- Training their operators on types of materials acceptable for reprocessing; and
- Not collecting materials that are either contaminated nor part of the collection service.

7 Kerbside Organic Waste Collections

Households in South Cambridgeshire receive a kerbside organic waste collection, which accepts cardboard, garden and kitchen waste. The service is operated as an alternate weekly collection with residual waste.

South Cambridgeshire collected 19,611 tonnes of organic waste at kerbside during 2006/07 – an average of 347kg per household. This is 33% of the total amount of household waste collected in the district in this year.

The graph shows the total organic waste tonnage collected at kerbside in South Cambridgeshire each year since 2000/01.

The table provides detail on the kerbside organic waste collection scheme in South Cambridgeshire.

Coverage	100% of all households are offered this service.
Receptacles	Households are issued with a 240 litre green wheeled bin for organic waste and are offered a 10 litre kitchen caddy. The 710 households that are either unable to accommodate a wheeled bin, or where access for collection vehicles is restricted, receive a weekly sack collection of organic waste. Replacement sacks are delivered to households on a regular basis.
Frequency	Alternate weekly with refuse.
Materials collected	Garden, kitchen food waste and cardboard (including shredded paper and paper soiled with food).
Kerbside collection operator/contractor	South Cambridgeshire District Council operates their kerbside organic waste collection service internally through their Direct Service Organisation (DSO).
Collection process	The district is divided into 5 areas. Organic waste is collected from a wheeled bin by Refuse Collection Vehicles and from paper sacks by a caged vehicle. Contaminated wheeled bins or sacks are not collected. DSO collects the organic waste and takes it to the Donarbon site at Waterbeach. Here the material is shredded and mixed ready for composting. It is then placed in a concrete container or bay, called a 'compost clamp'. The clamp is filled with organic waste and then sealed with a tarpaulin sheet. Air and water are fed into the material, which is composted at a high temperature for 2-4 weeks. The compost is taken from the clamp and 'matured' outside in a windrow for a further month. The material is then screened, stored and mixed to customer requirements.
Vehicles	The Council uses seven Refuse Collection Vehicles, one caged vehicle and one van to carry out the green waste and refuse alternate weekly service. The vehicles are cleaned thoroughly between the different collection services. Vehicles operate from the Waterbeach Depot.
Policies	• The bin must be on the curtilage of the property for collection by 7 am on the collection day; • The Council does not take side waste; • Only bins supplied by SCDC are emptied; • A householder can have an additional green bin for £60 (incl. VAT) that will be delivered to their property; • Residents moving into a new property are also charged £60 for the delivery of one green bin and one black bin; • Recycling crews inspect bins and sacks before emptying so that the risk of contamination is reduced. Where there is obvious contamination the crew do not empty the bins and leave a contamination sticker on the bin. The sticker requests the householder to contact Environmental Services to discuss the problems or reasons for contamination; • Flats on new developments are assessed with the developer prior to occupation to determine the best wheeled bin solution. New flats are not issued with sacks. If the annexe is classed as a separate household to the main property and paying separate council tax, an individual bin will be provided. If classified as the same household a communal bin will be provided; and • The district provide an assisted collection for residents who, due to disability or physical impairment, are unable to place their bins at their collection point and where nobody else in the household can assist them.

Ensuring Quality Materials

The Council ensures quality of material through:

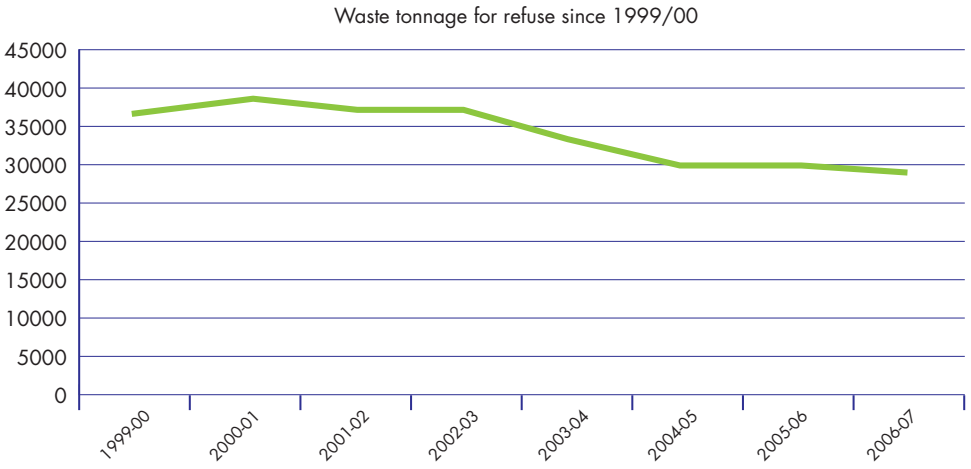
- Extensive ongoing publicity;
- Advising residents through the Council's quarterly 'South Cambs' magazine which is delivered to all residents;
- Training their operators on types of materials acceptable for reprocessing; and
- Not collecting materials that are either contaminated nor part of the collection service.

8 Refuse Collection

South Cambridgeshire collects residual waste on alternate weeks to organic waste.

South Cambridgeshire sent 17,350 tonnes of biodegradable municipal waste (BMW) to landfill in 2006/07. This is 8,043 tonnes less than the total calculated allowance for South Cambridgeshire for this year.

The graph below shows the total refuse tonnage collected at kerbside in South Cambridgeshire each year since 1999/00.



The table below provides detail on the kerbside refuse collection in South Cambridgeshire.

Coverage	100% of households are offered the service.
Receptacles	Households are issued with a 240 litre black wheeled bin for refuse. Apartments and flat complexes are provided with either 240 litre wheeled bin or 1100 litre communal bins. 710 household that are either unable to accommodate a wheeled bin or where access for collection vehicles is restricted, receive a weekly sack collection of residual waste, which are delivered to households on a regular basis.
Frequency	Alternate weekly with organic waste.
Materials collected	All household waste that cannot be recycled or composted.
Kerbside collection operator/contractor	South Cambridgeshire District Council operates their kerbside refuse collection service internally through their Direct Service Organisation (DSO).
Collection process	The district is divided into 5 areas. Refuse is collected from wheeled bins by Refuse Collection Vehicles, and in black sacks by a caged vehicle. All the material goes to Donarbon, Waterbeach where all such waste is currently landfilled.
Vehicles	The Council uses seven Refuse Collection Vehicles, one Transit Van and one van to carry out this service. The vehicles are cleaned thoroughly between the different collection services. Vehicles operate from the Waterbeach Depot.
Policies	• Refuse must be on the curtilage of the property for collection by 7 am on the collection day; • Side waste is not accepted; • Resident's can apply for additional 240-litre wheeled bin if they can demonstrate the need. Only families with at least 5 or more in the household will be assessed by one of the Council's Environmental Officers. If the officer is satisfied that the family's recycling habits are acceptable, the Council will issue them a bin. There is a charge of £60 incl. VAT; • Residents moving into a new property are charged £60 for the delivery of one green bin and one black bin; • Flats on new developments are assessed with the developer prior to occupation to determine the best wheeled bin solution. New flats are not issued with sacks. If the annexe is classed as a separate household to the main property and paying separate council tax, an individual bin will be provided. If classified as the same household a communal bin will be provided; and • The district provide an assisted collection for residents who, due to disability or physical impairment, are unable to place their bins at their collection point and where nobody else in the household can assist them.

9 Bulky Items Collection

South Cambridgeshire District Council provides a collection service for bulky items by arrangement. Service charges are £30 for up three items, with £5 for each additional item collected at the same time. Items are required to be on the curtilage of the property for collection by 7 am on the arranged collection day. Currently all items collected are landfilled, residents are therefore encouraged to send their items to charities or community groups for reuse.

10 Street Sweepings

The Council's Direct Service Organisation (DSO) collects street sweepings. The Council uses two Swingo Precinct Sweepers, three Scarab Major Highway Sweepers and five caged vehicles for litter pick-up, dog-bin emptying and fly-tipping work.

Frequency	The cleansing schedule operates three times a week for some villages and to six monthly in outlying areas.
Operations	The vehicles operate out of the Waterbeach Depot and the material is taken to Donarbon's Landfill Site, Waterbeach for disposal.
Vehicles	The Council uses two Swingo Precinct Sweepers, three Scarab Highway Sweepers and five caged vehicles.
Disposal	Street sweepings are taken for disposal to Donarbons Landfill Site, Waterbeach.
Collection process	Manual and mechanical.

11 Fly-Tipping

The Council's Direct Service Organisation (DSO) collects fly-tipping. The Council uses a caged tipper, or specialist contractor with the appropriate plant, for major or asbestos fly-tipping. The service runs as required throughout the District. The vehicles operate out of the Waterbeach Depot and the material is taken to Donarbon Landfill Site, Waterbeach for disposal.

The Council has erected signs that state that fly-tipping is illegal to help deter fly-tipping. South Cambridgeshire District Council also supports the wider partnership, which has recently appointed an Environment Action Coordinator to work on all aspects of environmental crime, including fly-tipping, and facilitates actions carried out by the new Prevention, Intervention and Enforcement sub-group.

12 Commercial Waste

The Council's Direct Service Organisation (DSO) collects commercial waste. In 2006/07, the Council collected 2,201 tonnes of commercial waste or 3.5% of the total waste collected by the authority.

The BREW project will help to establish new and expand existing trade waste recycling schemes. This is a RECAP Partnership wide project that aims to increase trade waste recycling throughout the Partnership area.

Coverage	The service runs as required throughout the District
Receptacles	The commercial properties on this service have a range of wheeled bins from 240-litre to 1100-litre and plastic sacks for which a suitable charge is made. It is anticipated that a recycling service will be in place by the end of 2007.
Frequency	Commercial waste collections are made on a weekly/monthly basis, depending on the customer's requirements.
Materials collected	Refuse
Operations	The vehicles operate out of the Waterbeach Depot and the material is taken to Donarbon's landfill site, Waterbeach, for disposal.
Vehicles	This waste is collected in 26-tonne Refuse Collection Vehicle.
Disposal	Commercial waste is taken for disposal to Donarbons landfill site, Waterbeach.
Collection process	The dedicated commercial waste collections are carried out using one Refuse Collection Vehicle with one driver, which operates from the Waterbeach depot.

13 Clinical Waste

The Council's Direct Service Organisation (DSO) collects clinical waste.

Contract	The Councils Direct Service Organisation (DSO) provide this service.
Receptacles	Clinical waste is collected from properties that require this service in yellow sacks (double skinned to prevent leakage), weekly, on Wednesdays, Thursdays and Fridays. The NHS provides the yellow bags and contacts the Council when a new collection is required, or when one is to be discontinued.
Frequency	Weekly
Materials collected	Clinical waste
Collection process	The Council takes the material to Addenbrookes Hospital for incineration, or Donarbon's landfill site, Ely Road, Waterbeach for disposal.
Vehicles	The Council uses a van to carry out the service.

14 Enforcement

South Cambs have appointed an Enforcement Officer, who covers the whole of South Cambridgeshire who is supported by other officers from within the environmental services and health section.

Coverage	All of the district area is covered.
Environmental Enforcement team	Enforcement activities are carried out by the Environmental Enforcement Officer, supported by officers from within the environmental services and health section (e.g. pest control officers, refuse & recycling support officer, contracts officer, DSO operatives etc).
Prosecution Polices	All enforcement is carried out in accordance with the Council's Enforcement Policy.
Enforcement operator/contractor	Abandoned Vehicles are removed under contract by Charlton Recycled Autoparts Ltd, Thriplow, Cambs.
Enforcement equipment	A range of surveillance equipment is used in the investigation of environmental crime.
Policies	All enforcement activities are carried out in accordance with RIPA 2003 and the Council's enforcement policy.

15 Waste Awareness Activities

South Cambridgeshire is working to maintain and increase the recycling rates of current collection programmes through the following:

- The Council's 'South Cambs' Magazine is used as a tool to inform residents of the collection services. This magazine has been in distribution since 1999 and all waste and recycling information is provided within the centre pages for easy removal;
- The South Cambridgeshire District Council website, which provides details on schemes that includes materials that are accepted within schemes and information on Household Recycling Centres;
- A complete collection calendar (that is included in the South Cambs magazine);
- A dedicated call centre number that handles all waste issues;
- Supporting the national 'Recycle Now' campaign. This involves staffing of road shows to provide local information to the public and promoting recycling and waste minimisation messages;
- Advertising in local media when opportunities arise;
- Updating the recycling directory that lists bring recycling sites throughout the district;
- Promoting home composting through continued involvement in the Master Composter programme and supporting community composting projects. In 2006/07 along with other RECAP partners it took part in a WRAP scheme selling reduced price compost bins; and
- Providing information on the South Cambridgeshire District Council website on recycling and waste topics.

Appendix 5

RECAP's Review Regime

Appendix 5: Review Regime

This is a regime set by RECAP to review sections and related plans and policies of the JMWMS. It sets out years (counting 2006/07 as year 1) and the months for review in each stated year.

Main RECAP Documents	Monitoring level	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12
LAA priorities	Not applicable	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
LSP Priorities	Not applicable	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Corporate Objectives	Not applicable	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Service plans	Not applicable	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
JMWMS	Every 5 years												
Legislative Appendix	Yearly												
Baseline Appendix	Yearly												
LATS Strategy	Yearly												
RECAP Action Plan	Yearly												
Recycling plans	Formulates Action Plan		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Risk Register	Quarterly	Qtrly	Qtrly	Qtrly	Qtrly	Qtrly	Qtrly	Qtrly	Qtrly	Qtrly	Qtrly	Qtrly	Qtrly
Ops panel Work Plan	Yearly Ad Hoc	Ad Hoc	Ad Hoc	Ad Hoc	Ad Hoc	Ad Hoc	Ad Hoc	Ad Hoc	Ad Hoc	Ad Hoc	Ad Hoc	Ad Hoc	Ad Hoc
Data Group Work Plan	Yearly Ad Hoc	Ad Hoc	Ad Hoc	Ad Hoc	Ad Hoc	Ad Hoc	Ad Hoc	Ad Hoc	Ad Hoc	Ad Hoc	Ad Hoc	Ad Hoc	Ad Hoc
Marketing Group Work Plan	Yearly Ad Hoc	Ad Hoc	Ad Hoc	Ad Hoc	Ad Hoc	Ad Hoc	Ad Hoc	Ad Hoc	Ad Hoc	Ad Hoc	Ad Hoc	Ad Hoc	Ad Hoc
PIE Group Work Plan	Yearly Ad Hoc	Ad Hoc	Ad Hoc	Ad Hoc	Ad Hoc	Ad Hoc	Ad Hoc	Ad Hoc	Ad Hoc	Ad Hoc	Ad Hoc	Ad Hoc	Ad Hoc
Partnership Team Work Plan	Yearly Ad Hoc	Ad Hoc	Ad Hoc	Ad Hoc	Ad Hoc	Ad Hoc	Ad Hoc	Ad Hoc	Ad Hoc	Ad Hoc	Ad Hoc	Ad Hoc	Ad Hoc

Yearly timetable

Main RECAP Documents	Jan	Feb	March	April	May	June	July	Aug	Sep	Oct	Nov	Dec
LAA priorities	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
LSP Priorities	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Corporate Objectives	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Service plans	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
JMWMS												
Planning Process Review (Partnership Team)												
WEF 12 months Meeting Dates Confirmed												
JWOG 12 months Meeting Dates Confirmed												
Sub-Group 12 months Meeting Dates Confirmed												
Legislative Appendix												
Baseline Appendix												
LATS Strategy												
RECAP Action Plan												
Recycling plans	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Risk Register												
Ops panel Work Plan												
Data Group Work Plan												
Marketing Group Work Plan												
PIE Group Work Plan												
Partnership Team Work Plan												

Yearly timetable

Appendix 6

Foundation of the revised strategy from the original strategy

Appendix 6:
Foundation of the revised strategy from the original strategy

This appendix shows the comparison of Themes & Strategy Objectives within the new revised JMWMS to the original strategy (Chapter 2 Policies and Plans and Appendix A – Strategic Principles and Key Issues Adopted).

Each theme and following objective is linked to the original passage written in the previous strategy.

Theme: *Underlying Strategic Principles for the Joint Municipal Waste Management Strategy (Waste Strategy)*

Objective 1
We will aim to minimise our environmental impact in line with the principles of proximity, self sufficiency, polluter pays and the precautionary principle

This objective / theme is derived from or related to:

Chapter 2 Policies and Plans

2.1.4 "The authorities will, acting together, consider the best ways to group together and organise waste services, to achieve strategic objectives and provide best value. They will take into account:

- Prospects for joining together collection, recycling and disposal services.
- Prospects for joint work with neighbouring authorities (e.g. recent discussions with Lincolnshire County Council).
- Strategic alliances with the commercial sector and compliance organisations such as Valpak."

2.2.10 "identify commercial waste which is finding its way into the household stream …and to re-direct it…Commercial waste collection facilities are available in all parts of the strategy area…and the partners intend to ensure that generators of commercial waste use these facilities, rather than the household waste stream."

2.3.1 "…very careful targeting of the waste producers is necessary to achieve significant waste reduction."

2.3.2 "They [Strategy Partners] particularly welcome the packaging regulations and look forward to working more closely with compliance organisations…The strategy partners will:

- Do what they can to promote the 're-use' and 'buy loose' messages
- Work with forward looking supermarkets to introduce 'take-back' schemes"

2.4 "The establishment of the Waste and Resources Action Programme (WRAP) is welcomed, and the partners look forward to this organisation's business plans coming to fruition, and hopefully bringing about an increase in demand for post consumer recyclate. In particular the partners recognise the importance of regional market development and see it as an action to promote from 2004 onwards.

2.16 "…reference is made to the likelihood of the residual waste stream being dealt with in '…smaller geographical areas, with a small local plant serving each area.'"

Appendix A – Strategic Principles and Key Issues Adopted

1.2 "Sustainable future waste management and the protection of the environment, including the adoption of the following environmental principles: applying 'Best Practical Environmental Option' BPEO, in a way that enables the minimising of overall environmental impacts to be quantified:

- The 'proximity principle', minimising unnecessary waste transport
- 'Self-sufficiency' in the strategy area, with minimal waste exports and imports
- The 'waste hierarchy'
- The 'polluter pays principle', by passing on the cost to waste producers where ever possible, and
- The 'precautionary principle', by managing waste so as to prevent risks to human health, avoid unnecessary negative impacts and/or unknown risks."

4.1 "The councils will aim to:

- Arrange delivery points for recycling/waste that are reasonably convenient to major centres of population
- Ensure that initial processing or composting of material takes place, where practical, within the Joint Strategy Area (JSA)
- Dispose of virtually all residual municipal waste within the JSA.

Objective 2
We will aim to achieve efficient use of resources for all Partners and deliver high quality services that represent value for money

This objective / theme is derived from or related to:

Chapter 2 Policies and Plans

2.1.3 "The need to obtain 'value for money' and demonstrate that the 'best value' legislation is being complied with is considered, by the partners, to be easier in a group of authorities than individually…To obtain the full benefits of closer working, a group has been established to consider how joint waste services might be procured, to achieve strategic objectives and for the benefit of the user.

2.9.1 "Wherever possible joint procurement will be considered to generate economies of scale and to allow consistency of operation."

Appendix A – Strategic Principles and Key Issues Adopted

1.1 "The delivery of quality services which achieve best value, by applying 'the 4Cs test' (Challenging, Comparing, Consulting, and effective Competition) to future waste and recycling work and contracts."

1.3 "The need to achieve best value for money in service provision taking into account:

- costing alternatives over the whole strategy period, and
- making the most of the financial benefits of joint working.

Total costs to council tax payers will, unavoidably, be significantly higher than current costs for waste management. The key question will be 'by how much?'

Overall costs also need to be affordable to all councils, and fair in the way that costs are shared between the councils. Funding and cost allocation will also need to take account of the likelihood that new waste management methods may develop faster in some parts of the strategy than others."

13.4 "Joint working on shared recycling provision will be developed where advantageous. Where possible, councils will work jointly to secure advantageous contracts with councils outside the area."

Objective 3
We will ensure our Waste Strategy is consistent with local, regional and national waste and planning principles, policies and strategies

This objective / theme is derived from or related to:

Chapter 2 Policies and Plans

2.1.3 "Similarly the partners' ability to achieve the statutory targets for recycling, minimisation and diversion from landfill are considered to be much more achievable as a group than as individual authorities."

2.1.4 "The authorities will, acting together, consider the best ways to group together and organise waste services, to achieve strategic objectives and provide best value. They will take into account:

- Prospects for joining together collection, recycling and disposal services.
- Prospects for joint work with neighbouring authorities (e.g. recent discussions with Lincolnshire County Council).
- Strategic alliances with the commercial sector and compliance organisations such as Valpak."

2.2.4 "The Partner Authorities believe that only by adopting a system of Integrated Waste Management can all of the targets that lie before them be achieved."

2.4 "The Strategy Partners are keen to work with community groups, where these can be established, and to support them in taking up their role in society as far as recycling and composting is concerned."

Appendix A – Strategic Principles and Key Issues Adopted

1.4 "The minimisation of financial, technological, market and other future risks faced by participating councils in relation to waste management.

5 Integration with the Cambridgeshire and Peterborough Waste Local Plan

17 Integration with councils in neighbouring counties

Objective 4
We will aim to drive the management of waste up the waste hierarchy of reduction, re-use, recycling and composting, and energy recovery. Where waste is produced it should be viewed as a resource to be put to good use – disposal (i.e. landfill) should be the last option for dealing with it

This objective / theme is derived from or related to:

Chapter 2 Policies and Plans

2.1.3 "Similarly the partners ability to achieve the statutory targets for recycling, minimisation and diversion from landfill are considered to be much more achievable as a group than as individual authorities…Whilst most of the waste strategy will provide "end of pipe" solutions there is a very definite need to target the generation of waste at source and, therefore, encourage waste minimisation."

2.2.4 "By Integrated Waste Management the Strategy Partners believe that it is important to maximise those treatments that are at the higher end of the Waste Hierarchy (i.e. Reduce, Re-use, Recycle and extract energy)."

2.3.1 "…very careful targeting of the waste producers is necessary to achieve significant waste reduction."

2.3.2 "They [Strategy Partners] particularly welcome the packaging regulations and look forward to working more closely with compliance organisations…The strategy partners will:

- Do what they can to promote the 're-use' and 'buy loose' messages
- Work with forward looking supermarkets to introduce 'take-back' schemes"

…Mention has already been made of plans to increase the existing awareness campaigns for waste minimisation and recycling, these will continue and will contribute towards waste reduction."

2.4 "The Partner Councils support recycling and intend to recycle as much waste as possible within the bounds of resources and markets…The establishment of the Waste and Resources Action Programme (WRAP) is welcomed, and the partners look forward to this organisation's business plans coming to fruition, and hopefully bringing about an increase in demand for post consumer recyclate.

In particular the partners recognise the importance of regional market development and see it as an action to promote from 2004 onwards."

Objective 5
We will ensure our waste and environmental services are designed to accommodate planned growth within the Joint Strategy Area (JSA)

This objective / theme is derived from or related to:

Chapter 2 Policies and Plans

2.1.4 "The authorities will, acting together, consider the best ways to group together and organise waste services, to achieve strategic objectives and provide best value. They will take into account:

- Prospects for joining together collection, recycling and disposal services.
- Prospects for joint work with neighbouring authorities (e.g. recent discussions with Lincolnshire County Council).
- Strategic alliances with the commercial sector and compliance organisations such as Valpak."

Appendix A – Strategic Principles and Key Issues Adopted

3 Integrated analysis, costings and funding

5.2 Waste strategy decisions will, where appropriate, be consistent with:

- The policies and principles in the Cambridgeshire and Peterborough Waste Local Plan
- Regional planning guidance and Environment Agency guidance

9 Using scenarios to assess future options

10 Considering needs of catchments within the strategy area

11 Developing an assessment model to evaluate future options

Objective 6
We will aim to deliver sufficient waste infrastructure to meet our strategy objectives

This objective / theme is derived from or related to:

Chapter 2 Policies and Plans

2.1.4 "The authorities will, acting together, consider the best ways to group together and organise waste services, to achieve strategic objectives and provide best value. They will take into account:

Prospects for joining together collection, recycling and disposal services.

Prospects for joint work with neighbouring authorities (e.g. recent discussions with Lincolnshire County Council).

Strategic alliances with the commercial sector and compliance organisations such as Valpak."

2.6 The Strategy Partners recognise that the level of residual waste is, therefore not less than 40% and that to achieve the obligations of the landfill directive alternatives that prevent biodegradable waste entering landfill need to be pursued.

2.7 The immediate priorities are as follows:

- To provide the right mix of landfill capacity and contracts to 2007 by the procurement exercise commenced in December 2001.
- To provide this capacity within catchment areas without exporting waste.
- To provide the right mix of residual capacity for 2007 to 2027 by means of the next procurement, the focus of which will be on recycling and recovery.

Appendix A – Strategic Principles and Key Issues Adopted

2.5 Some decisions will continue to be best taken locally, provided they are consistent with the overall strategy. These decisions will include choices on street cleaning and local recycling.

4 Achieving self sufficiency and the proximity principle

5 Integration with the Cambridgeshire and Peterborough Waste Local Plan

18 Likely focus on long term but flexible procurement methods

Objective 7
We will aim to meet or exceed national and local waste and environment targets

This objective / theme is derived from or related to:

Chapter 2 Policies and Plans

2.1.3 "Similarly the partners ability to achieve the statutory targets for recycling, minimisation and diversion from landfill are considered to be much more achievable as a group than as individual authorities."

2.2.4 "The Partner Authorities believe that only by adopting a system of Integrated Waste Management can all of the targets that lie before them be achieved."

2.6 The Strategy Partners recognise that the level of residual waste is, therefore not less than 40% and that to achieve the obligations of the landfill directive alternatives that prevent biodegradable waste entering landfill need to be pursued.

Appendix A – Strategic Principles and Key Issues Adopted

6 Reducing landfill to achieve EU landfill directive targets

7 Strategy to also achieve UK national targets

Theme: *Joint Working, Partnership*

Objective 8
We will work together to share best practice and manage waste performance to drive continuous improvement

This objective / theme is derived from or related to:

Chapter 2 Policies and Plans

2.1.3 "The need to obtain 'value for money' and demonstrate that the 'best value' legislation is being complied with is considered, by the partners, to be easier in a group of authorities than individually."

2.1.4 "The authorities will, acting together, consider the best ways to group together and organise waste services, to achieve strategic objectives and provide best value. They will take into account:

- Prospects for joining together collection, recycling and disposal services.
- Prospects for joint work with neighbouring authorities (e.g. recent discussions with Lincolnshire County Council).
- Strategic alliances with the commercial sector and compliance organisations such as Valpak."

2.4 "The Strategy Partners are keen to work with community groups, where these can be established, and to support them in taking up their role in society as far as recycling and composting is concerned."

Appendix A – Strategic Principles and Key Issues Adopted

2 Joint Decision Making

3.1 The strategy will analyse alternative future scenarios using a 'cradle to grave' approach, assessing both the implications and costs to all councils and the public from collection right through to delivery for recycling, composting, processing or disposal, comparing with benchmarks elsewhere.

3.2 Each council will compile and share relevant data openly, e.g. on collection, recycling, composting and disposal tonnages and costs, and prepare information to a common format, developing data currently collected for Performance Indicator reporting etc. In principle 'transparency' will apply to all data.

Objective 9
We will work together to secure funding to achieve the objectives set out in this Strategy

This objective / theme is derived from or related to:

Chapter 2 Policies and Plans

2.9.1 "…the partners will seek every opportunity to encourage central government to provide adequate funding for the strategy area…"

Appendix A – Strategic Principles and Key Issues Adopted

12 Investigating innovative funding, and other options to minimize net costs

Theme: *Climate Change*

Objective 10
We will aim to minimise greenhouse gas emissions from municipal and non-municipal waste management activities in the Joint Strategy Area (JSA)

This objective / theme is derived from or related to:

Appendix A – Strategic Principles and Key Issues Adopted

1.2 "Sustainable future waste management and the protection of the environment, including the adoption of the following environmental principles: applying 'Best Practical Environmental Option' BPEO, in a way that enables the minimising of overall environmental impacts to be quantified:

- The 'proximity principle', minimising unnecessary waste transport
- 'Self-sufficiency' in the strategy area, with minimal waste exports and imports
- The 'waste hierarchy'
- The 'polluter pays priniciple', by passing on the cost to waste producers where ever possible, and
- The 'precautionary principle', by managing waste so as to prevent risks to human health, avoids unnecessary negative impacts and/or unknown risks."

Theme: *Environmental Protection*

Objective 11
We will develop and implement policies on local Enviro- crimes (including dog fouling, litter, flytipping, fly posting, graffiti and abandoned vehicles.) to provide cleaner streets and a healthy environment

This objective / theme is derived from or related to:

Chapter 2 Policies and Plans

2.9 These policies are designed to ensure environmental, economic and social sustainability and cover a range of issues such as managing commercial and industrial waste, implementing charging schemes and, developing and maintaining links with commercial reprocessors.

2.9.1 "This pro-active stance is intended to reduce the negative effects of abandoned vehicles on the environment and to ensure equitable treatment across the strategy area."

2.9.2 "…partners will continue to work in accordance with the Fly-Tipping Protocol that identifies the responsibilities of both local authorities and the Environment Agency and, to seek to reduce the effects of fly-tipping through the Local Government Association and the Fly-Tipping Stakeholders Forum."

Appendix A – Strategic Principles and Key Issues Adopted

16.2 Any waste service changes will need to consider wider impacts, e.g. extra collections and the risk of increased flytipping.

Theme: *Waste Prevention & Reuse*

Objective 12
We will work together to reduce the amount of waste produced per person within the Joint Strategy Area (JSA) by actively promoting waste prevention, reduction and re-use activities

This objective / theme is derived from or related to:

Chapter 2 Policies and Plans

2.1.3 "Whilst most of the waste strategy will provide "end of pipe" solutions there is a very definite need to target the generation of waste at source and, therefore, encourage waste minimisation."

2.2.4 "The Partner Authorities believe that only by adopting a system of Integrated Waste Management can all of the targets that lie before them be achieved…By Integrated Waste Management the Strategy Partners believe that it is important to maximise those treatments that are at the higher end of the Waste Hierarchy (i.e. Reduce, Re-use, Recycle and extract energy)."

2.3.1 "…very careful targeting of the waste producers is necessary to achieve significant waste reduction."

2.3.2 "They [Strategy Partners] particularly welcome the packaging regulations and look forward to working more closely with compliance organisations… The strategy partners will:

- Do what they can to promote the 're-use' and 'buy loose' messages
- Work with forward looking supermarkets to introduce 'take-back' schemes"
- Mention has already been made of plans to increase the existing awareness campaigns for waste minimisation and recycling, these will continue and will contribute towards waste reduction.

2.3.3 "Waste Minimisation"

Local Authorities have a duty placed on them under the Best Value regime to seek to reduce the growth in waste, and indeed to seek to reverse the trend. They also have a broader, community leadership role, to encourage the most efficient use of resources, from cost and environmental perspectives. However, the scope for minimisation of household waste is limited because, at present, the consumer has little choice in respect of 'low waste' products. The methods available to Local Authorities are as follows:

- By the reduction in garden and kitchen waste through the provision of home composters and food digesters.
- By awareness and education programmes, to maximise participation in recycling, and composting, and encourage re-use.
- By restricting the amount of residual waste that is collected from householders.
- By rigorously preventing trade waste from being introduced into the household waste stream.
- By introducing variable charging for waste.
- By lobbying Central Government.

2.4 "The Strategy Partners are keen to work with community groups, where these can be established, and to support them in taking up their role in society as far as recycling and composting is concerned."

Theme: *Recycling & composting*

Objective 13
We will work together to reduce the amount of waste sent to landfill by maximising recycling and composting to achieve the national waste strategy targets as a minimum and work towards achieving the aspirational targets of household waste:
*** 45 to 50% by 2010,**
*** 50 to 55% by 2015**
*** 55 to 60% by 2020 with Peterborough aspiring to achieve 65%+**

This objective / theme is derived from or related to:

Chapter 2 Policies and Plans

2.1.3 "Similarly the partner's ability to achieve the statutory targets for recycling, minimisation and diversion from landfill are considered to be much more achievable as a group than as individual authorities."

2.2.4 "The Partner Authorities believe that only by adopting a system of Integrated Waste Management can all of the targets that lie before them be achieved…By Integrated Waste Management the Strategy Partners believe that it is important to maximise those treatments that are at the higher end of the Waste Hierarchy (i.e. Reduce, Re-use, Recycle and extract energy)."

2.2.6 "After the statutory targets of 2003/2004 and 2005/2006 have been achieved the Councils are proposing to work towards the following recycling and composting targets:

- 2010/2011 - 45-50%
- 2015/2016 - 50-55%
- 2020/2021 - 55-60%"

2.4 "The Partner Councils support recycling and intend to recycle as much waste as possible within the bounds of resources and markets."

2.5 The strategy partners recognise the wider environmental benefits of home composting and the reduction in overall tonnage of waste that has to be collected from households.

Appendix A – Strategic Principles and Key Issues Adopted

7 Strategy to also achieve UK national waste targets

13 Continuing and expanding local recycling

Objective 14
We will seek to work locally to promote, develop and stimulate sustainable recycling and composting initiatives consistent with green procurement codes

This objective / theme is derived from or related to:

Chapter 2 Policies and Plans

2.4 "The establishment of the Waste and Resources Action Programme (WRAP) is welcomed, and the partners look forward to this organisation's business plans coming to fruition, and hopefully bringing about an increase in demand for post consumer recyclate.

In particular the partners recognise the importance of regional market development and see it as an action to promote from 2004 onwards.

Appendix A – Strategic Principles and Key Issues Adopted

14 Relating recycling targets to markets, and working to expand them

Theme: *Management of Residual Waste*

Objective 15
We will aim to ensure that residual waste is treated as a resource recovering both energy and value where possible at every stage

This objective / theme is derived from or related to:

Chapter 2 Policies and Plans

2.2.11 "Through procurement the Partners intend to have their residual waste treated in such a way that it is classified as inert waste and, therefore, can be landfilled without restriction.

2.6 The Strategy Partners recognise that the level of residual waste is, therefore not less than 40% and that to achieve the obligations of the landfill directive alternatives that prevent biodegradable waste entering landfill need to be pursued.

Objective 16
We will aim to ensure as far as practicable that the outputs from residual waste treatment facilities are put to beneficial use

This objective / theme is derived from or related to:

Chapter 2 Policies and Plans

2.2.11 "Through procurement the Partners intend to have their residual waste treated in such a way that it is classified as inert waste and, therefore, can be landfilled without restriction.

2.4 "The establishment of the Waste and Resources Action Programme (WRAP) is welcomed, and the partners look forward to this organisation's business plans coming to fruition, and hopefully bringing about an increase in demand for post consumer recyclate.

In particular the partners recognise the importance of regional market development and see it as an action to promote from 2004 onwards.

"The Strategy Partners are keen to work with community groups, where these can be established, and to support them in taking up their role in society as far as recycling and composting is concerned."

Theme: *Wider Waste Role*

Objective 17
We will facilitate, promote and encourage the reduction, re-use and recycling of non municipal waste through partnership arrangements to reduce the amount of this waste sent to landfill e.g. commercial, construction and demolition waste

This objective / theme is derived from or related to:

Chapter 2 Policies and Plans

2.1.3 "Whilst most of the waste strategy will provide "end of pipe" solutions there is a very definite need to target the generation of waste at source and, therefore, encourage waste minimisation.

2.1.4 "The authorities will, acting together, consider the best ways to group together and organise waste services, to achieve strategic objectives and provide best value. They will take into account:

- Prospects for joining together collection, recycling and disposal services.
- Prospects for joint work with neighbouring authorities (e.g. recent discussions with Lincolnshire County Council).
- Strategic alliances with the commercial sector and compliance organisations such as Valpak."

2.2.4 "By Integrated Waste Management the Strategy Partners believe that it is important to maximise those treatments that are at the higher end of the Waste Hierarchy (i.e. Reduce, Re-use, Recycle and extract energy)."

2.2.10 "identify commercial waste which is finding its way into the household stream …and to re-direct it…Commercial waste collection facilities are available in all parts of the strategy area…and the partners intend to ensure that generators of commercial waste use these facilities, rather than the household waste stream.

2.9 "These policies are designed to ensure environmental, economic and social sustainability and cover a range of issues such as managing commercial and industrial waste, implementing charging schemes and, developing and maintaining links with commercial reprocessors.

2.9.3 "…the management of commercial and industrial waste within the strategy area is of the utmost importance in protecting and improving the environment. Local authorities have a statutory duty to collect commercial and industrial waste when requested to do so. Currently, partners in the strategy area have schemes in place to deal with the commercial and industrial waste that is being produced but most of this material is sent directly to landfill. Although this is a vital source of revenue for each of the partners that needs to be maintained, other opportunities exist in terms of waste minimisation, re-use and recycling which would have a major impact on the environment. The potential for such activities needs be investigated and the commercial and industrial sector must be encouraged to minimise, re-use and recycle as much of their waste as possible through well-designed and innovative schemes. The reader is referred to Part 4 of the strategy where the effects of commercial and industrial waste on the Landfill Directive targets is consider.

"Some local authorities in the area are running trials to see whether or not recyclables can be collected from local businesses in a cost effective manner. It is disappointing that landfill permits will effectively force local authority trade refuse services to be less competitive with the private sector because of the restrictions in the landfilling of MSW that will be placed upon them."

Appendix A – Strategic Principles and Key Issues Adopted

8 Integration with commercial and other wastes

16 Reviewing all discretionary services, charging options and incentives

Objective 18

We will explore new or expanded recycling/processing facilities that seek synergy with commercial waste and other similar waste streams within the Joint Strategy Area (JSA) or neighbouring authorities

This objective / theme is derived from or related to:

Chapter 2 Policies and Plans

2.1.4 "The authorities will, acting together, consider the best ways to group together and organise waste services, to achieve strategic objectives and provide best value. They will take into account:

- Prospects for joining together collection, recycling and disposal services.
- Prospects for joint work with neighbouring authorities (e.g. recent discussions with Lincolnshire County Council).
- Strategic alliances with the commercial sector and compliance organisations such as Valpak."

2.2.10 "identify commercial waste which is finding its way into the household stream …and to re-direct it…Commercial waste collection facilities are available in all parts of the strategy area…and the partners intend to ensure that generators of commercial waste use these facilities, rather than the household waste stream.

Appendix A – Strategic Principles and Key Issues Adopted

8.3 Plans for new or expanded recycling/processing facilities will also seek synergy with commercial waste and other similar waste streams in the immediate catchment area, if joint ventures are practical, e.g. with sewage sludge and food processing wastes.

Objective 19
We will actively seek to influence the local, regional, and national waste agendas and take an active role in all representative bodies (e.g. NAWDO, LARAC, CSS)

This objective / theme is derived from or related to:

Chapter 2 Policies and Plans

2.1.4 "The authorities will, acting together, consider the best ways to group together and organise waste services, to achieve strategic objectives and provide best value. They will take into account:

- Prospects for joining together collection, recycling and disposal services.
- Prospects for joint work with neighbouring authorities (e.g. recent discussions with Lincolnshire County Council).
- Strategic alliances with the commercial sector and compliance organisations such as Valpak."

2.3.1 "…very careful targeting of the waste producers is necessary to achieve significant waste reduction."

2.3.2 "They [Strategy Partners] particularly welcome the packaging regulations and look forward to working more closely with compliance organisations…The strategy partners will:

- Do what they can to promote the 're-use' and 'buy loose' messages
- Work with forward looking supermarkets to introduce 'take-back' schemes"

Theme: *Stakeholder Engagement*

Objective 20
We will engage and consult with stakeholders on sustainable waste management during the implementation of this strategy

This objective / theme is derived from or related to:

Chapter 2 Policies and Plans

2.4 "The Strategy Partners are keen to work with community groups, where these can be established, and to support them in taking up their role in society as far as recycling and composting is concerned.

"…The Strategy Partners intend to set up such forums and operate them on a regular basis. The object of these forums will be to increase public awareness of recycling and composting issues, and to define what members of the community think are appropriate ways of moving forward.

"…They believe that this can only be done with the wholesale co-operation of local community, and are determined to bring this about."

2.8 "Successful awareness campaigns should lead to greater public acceptance of responsibilities for dealing with the waste from each household and help to generate a more sustainable approach to waste management within the strategy area."

Appendix A – Strategic Principles and Key Issues Adopted

2.3 Councils will improve consultation, particularly between county and district, on future waste decisions that could have significant service and/or cost impacts on other councils

15 Involving the public and other waste producers

17 Reviewing all discretionary services, charging options and incentives

Appendix 7

Modelling Report

Appendix 7: Modelling Report

Figures

1 Introduction

As part of the Joint Municipal Waste Management Strategy (JMWMS), the RECAP partnership Data Group has undertaken a modelling exercise to assess what practical measures each local authority will implement to meet their Recycling targets. Each authority has set out to model the individual actions necessary to meet these targets. RECAP commissioned Enviros Consulting (via the ROTATE WRAP funding) to develop a bespoke model designed to enable the authorities to review the performance of their current systems. Then, based on this information the authorities can model a range of scenarios to provide a robust evidence base in order to support the decisions made in implementing new recycling and composting schemes and on increasing the impact of existing services. All municipal waste and collection systems are included within the model and a range of different waste streams can be targeted as part of the modelling scenarios. There are five key model variants that can be adjusted for each year:

- Coverage (the number of households that the scheme is available to);
- Participation (the number of households participating in the schemes available);
- Inclusion of new materials and removal of existing targeted materials;
- Inclusion and removal of collection schemes; and
- Recognition (the proportion of each material recycled by a participating householder with the available scheme).

Participation and recognition are improved by encouraging householders to change behaviour, via marketing, incentives and communication campaigns.

The Data Group undertook this exercise from Autumn 2007 to Spring 2008.

1.1 Modelling objectives

The objectives of this modelling exercise were to assess the practical steps that RECAP could implement to achieve:

- A recycling and composting rate of 55% by 2015 for all of RECAP;
- A recycling and composting rate of 60% by 2020 for all of RECAP; and
- A recycling and composting rate of 65% by 2020 for Peterborough.

The target of 50% by 2010 was not modelled because the current recycling rate (2006/07) is already close to meeting it. Although the model outputs are provided on an annual basis, the approach undertaken has considered the step changes for future years when the targets are more challenging.

The implications for Landfill Allowances were not included within this modelling exercise as they have already been modelled by Peterborough and Cambridgeshire County as part of their LATS strategies and long term waste contracts (outlined in Appendix 3). It is assumed that by the two modelled target years (2015 and 2020), the intended residual waste treatment facilities will be operating and therefore the Landfill allowances will have been met.

The model has the capability to assess the aspirational scenario of maximum recycling. However, at this stage the approach has remained focused on providing an evidence base to illustrate how the current targets in 2015 and 2020 will be met. One of the key future actions in taking this waste strategy forward is to assess the practicalities of further recovery beyond the agreed targets. Therefore this scenario would assess:

What recycling rate can be achieved with all authorities recycling as much as possible?

1.2 Outputs

This modelling exercise provides a sound basis for projecting future changes and assessing if RECAP's target of a 60% recycling rate (and 65% for Peterborough) are achievable within the constraints of the planned systems and current available data. The results will provide the authorities with the information required to inform key strategic decisions about the proposed programme for service delivery and implementation.

2 Modelling approach

The modelling follows a systematic approach using detailed information from the RECAP data group and from each individual authority:

- Peterborough City Council (PCC);
- Cambridgeshire County Council (CCC);
- Fenland District Council (FDC);
- South Cambridgeshire District Council (SCDC);
- East Cambridgeshire District Council (ECDC);
- Huntingdonshire District Council (HDC); and
- Cambridge City Council (CCiC).

Each authority modelled its individual step-changes and then these different models have been brought together by RECAP.

All the base assumptions and data are listed in this chapter, but where there are variations due to different authorities, these are listed in the appendices.

2.1 Base assumptions

The main base assumptions and sources of information are listed below:

- **Base year** – All modelling is based on the position in 2006-07;
- **Population and household data** – Sourced from Cambridgeshire County Council Resource Group, Mid-2006 Household Forecasts;
- **Waste arisings** – Base year waste arisings for 2006/07 are shown in the following table;
- **Waste composition** – RECAP Waste composition analysis undertaken in 2005;
- **Schemes coverage** – Sourced from the individual authorities;
- Participation rates - Both dry recycling and organic schemes' participation rates are estimated by the individual local authority officer. These were based on local knowledge, experience and the local authority's interpretation of the resulting capture and recognition rates; and
- **Scheme tonnage data** – Sourced from Cambridgeshire County Council's Final Data Publication 2006/07 and Peterborough City Council data records.

Waste arisings

2006/07 was taken as the base year. Waste arisings and tonnages diversion figures are those that were submitted to WasteDataFlow. The total municipal waste arisings for RECAP is 436,364 tonnes in 2006/07.

Table 1: RECAP's Waste Arisings 2006/07

	Waste Type	Total Cambridgeshire	Cambridgeshire County Council	Cambridge City	East Cambridgeshire	Fenland	Huntingdonshire	South Cambridgeshire	Peterborough
Houshold waste	Households	247,200	247,200	46,700	34,200	40,000	68,600	57,700	73,225
	Population	578,800	578,800	113,700	76,300	89,900	160,700	138,000	166,000
	Inorganic	17,031		3,597	2,034	1,820	4,388	5,193	3,394
	Organic	32,764		4,373	3,096	6,107	13,439	5,750	11,606
	Green	66,574		10,504	5,500	11,188	19,771	19,611	11,411
	Total recycling and composting	**116,369**		**18,474**	**10,630**	**19,114**	**37,598**	**30,553**	**26,411**
	Total household waste landfilled	131,807		28,124	19,574	21,155	33,564	29,389	44,936
	Total Household	**248,176**		**46,598**	**30,205**	**40,269**	**71,162**	**59,942**	**71,346**
HRC waste	HWRC Inorganic	14,932	14,932						1,883
	HWRC Organic	7,266	7,266						1,112
	HWRC Green	9,873	9,873						11,725
	Total recycling and composting	**32,071**	**32,071**						**14,720**
	HWRC household waste landfilled	25,785	25,785						7,604
	Total HWRC household waste	**57,856**	**57,856**						**22,324**
Other waste	HWRC Hardcore	8,698	8,698						4,088
	HWRC Soil	3,842	3,842						0
	Trade waste	12,407		6,837	0	2,411	958	2,201	3,408
	Flytipping	1,708		5	189	293	554	667	2,511
	Total MSW	**332,687**	**70,396**	**53,440**	**30,393**	**42,973**	**72,675**	**62,810**	**103,677**
	Kg/person household waste (BV84)	529	100	410	396	448	443	434	564
	Tonnes/household	1.24	0.23	1.00	0.88	1.01	1.04	1.04	1.28

2.1.2 Waste growth

The waste collection model has the capability to assess the impact of different waste growths. However, to ensure consistency with previous waste predictions, the LATS strategy and procurement modelling work, the previously agreed waste growth rate was used to generate a total waste arising for the years 2015 and 2020.

However, RECAP is currently developing a waste prevention plan concurrently with the JMWMS development. Clearly this will impact on the estimated waste arising in future years although the Scenario 3[1] waste growth projection used does accommodate a decrease in waste growth. The plan is not published and therefore the impact of the waste prevention schemes proposed remains unclear. Therefore the current modelling has been undertaken in isolation of this plan.

For clarity, based on the previous waste growth work, undertaken by RECAP in 2006, the following scenario has been approved and used to model future waste growths:

Scenario 3 – waste growth based on projected household growth with a 1% growth per household up to 2007, followed by 0.5% growth each year from 2008 – 2019.

2.1.3 Waste composition

A waste composition analysis for each authority within RECAP was conducted in 2005 and carried out on the residual waste, the dry recycling and organic kerbside schemes operating at the time. The 2005 waste compositions have been used in this modelling (however any adjustments to the compositions due to new schemes have been noted in the supporting information).

The base information of the waste compositions for each authority is shown in the following figures:

Fig 1: Cambridge City Council Kerbside Waste Composition

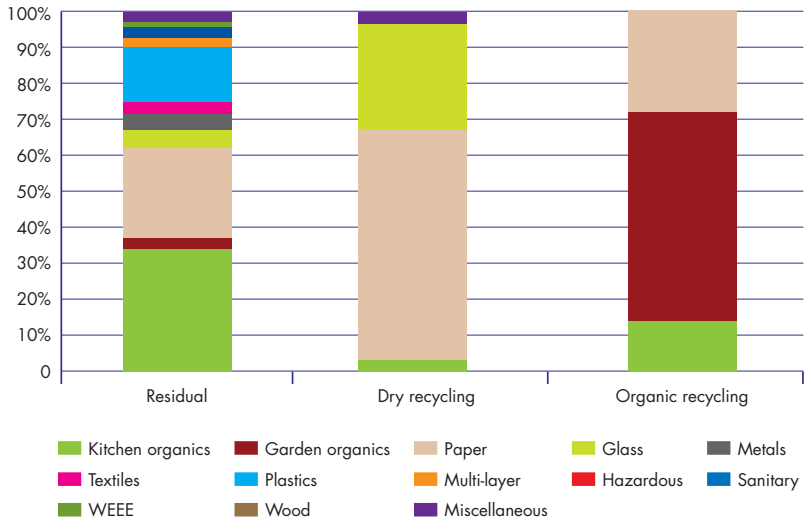
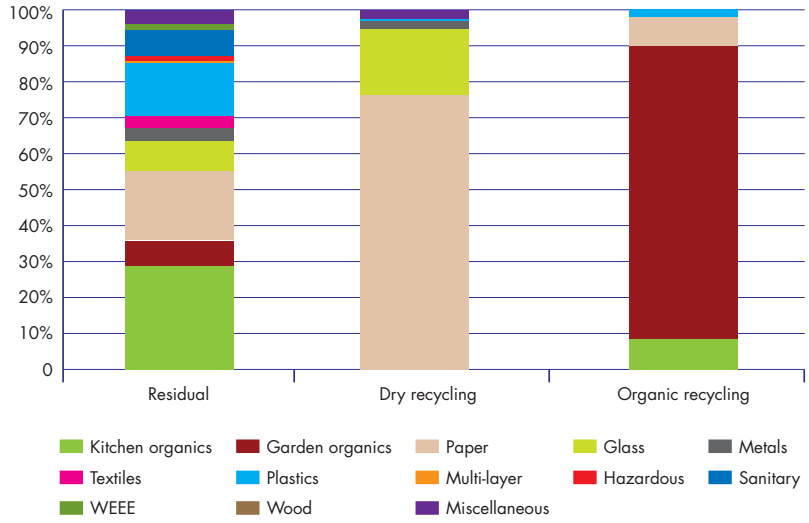


Fig 2: East Cambridgeshire District Council Kerbside Waste Composition



1 Scenario 3 details: see Appendix 3 and Chapter 4 of the main JMWMS

Fig 3: Fenland District Council Kerbside Waste Composition

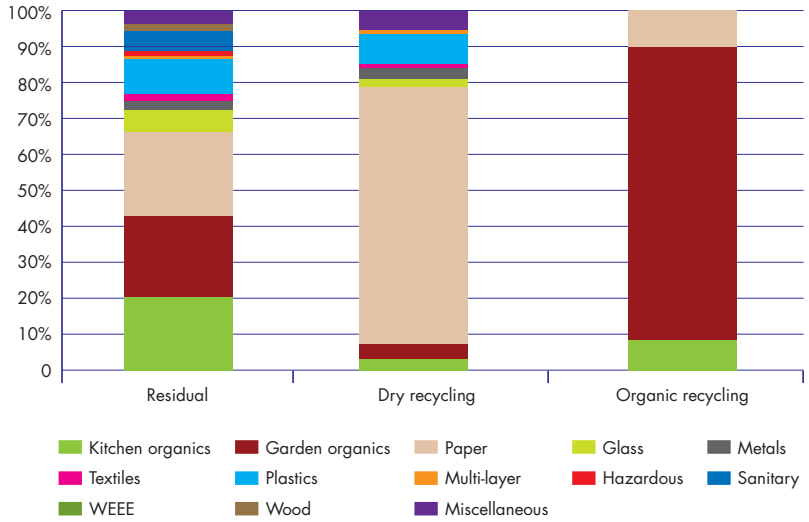


Fig 4: Huntingdonshire District Council Kerbside Waste Composition

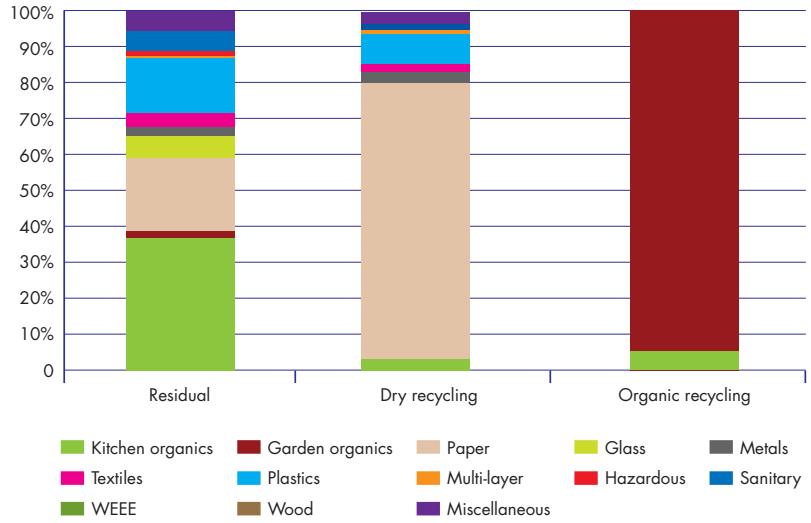


Fig 5: South Cambridgeshire District Council Kerbside Waste Composition

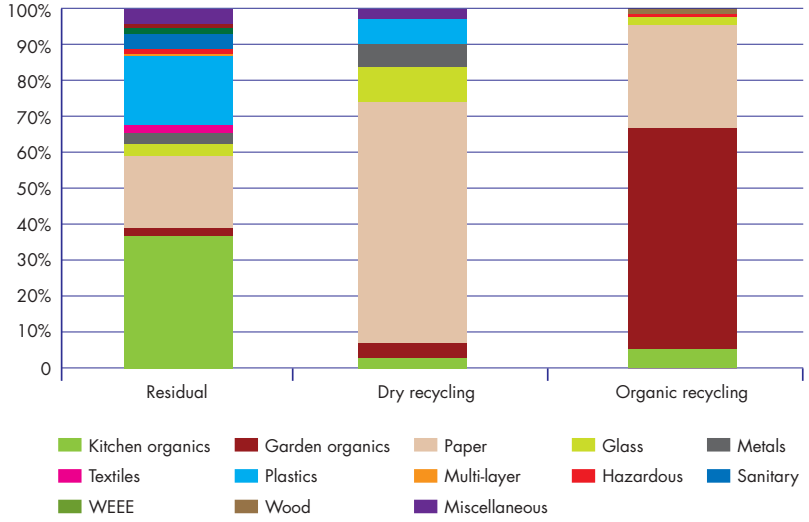
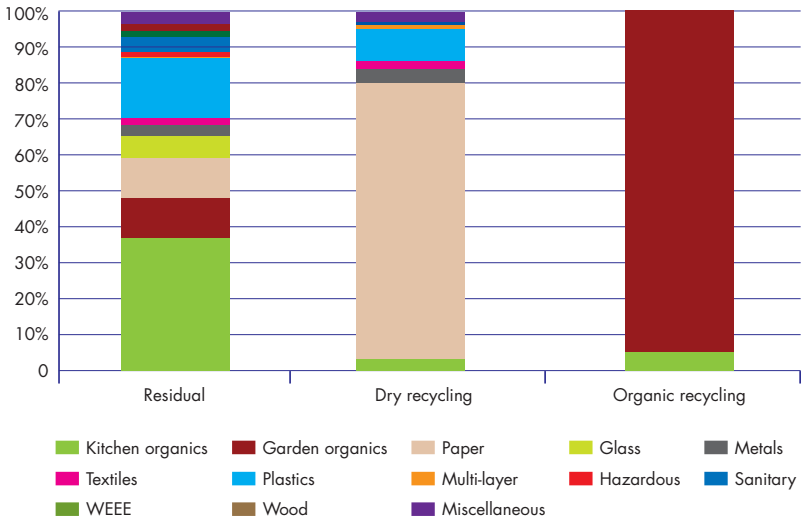
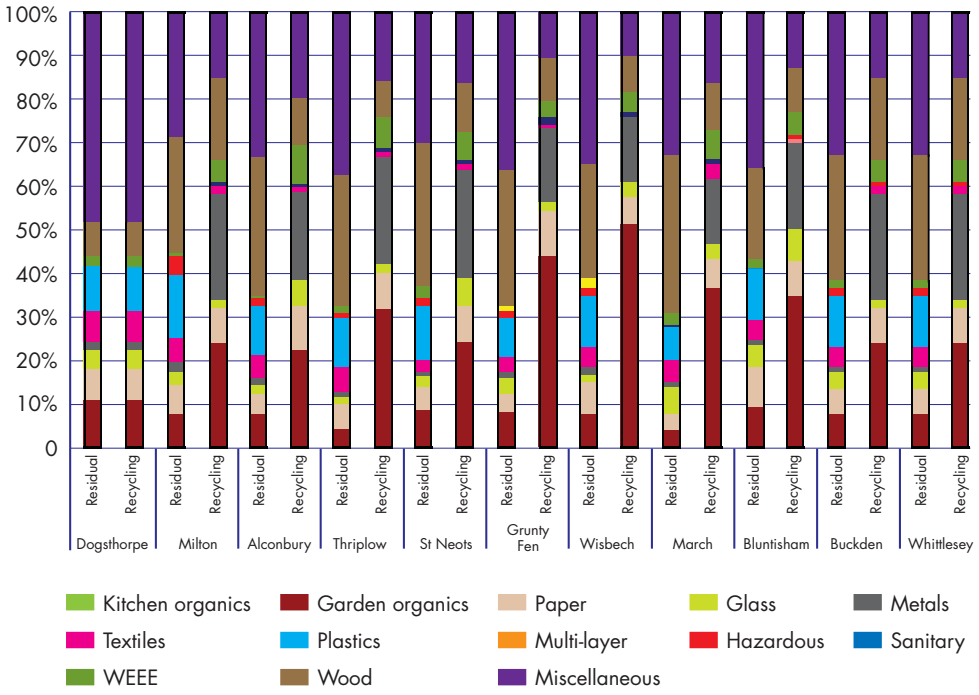


Fig 6: Peterborough City Council Kerbside Waste Composition



Household Recycling Centre Waste Composition



2.1.4 Current method of collection

The current tonnage collected via each scheme (via bring banks, kerbside collection, HRCs etc (see supporting information) for each authority was inputted into the model. This information was sourced from Cambridgeshire County Council's Final Data Publication 2006/07 and Peterborough City Council data records. The coverage for each scheme was also added.

As participation rates have not been measured within the RECAP JSA, each individual authority assumed a participation rate based on local knowledge and experience of the schemes.

Current Dry Collection Schemes[2]

	CCiC	ECDC	FDC	HDC	SCDC	PCC
Coverage	84.6%	99.7%	100%	100%	97.8%	93.6%
Participation	74%	72%	75%	95%	68%	96%
Material	**Recognition rates**					
Paper	39%	43.8%	68%	66.3%	40.3%	79.5%
Glass	65.4%	47.2%	-	3.6%	100%	-
Metals	31.4%	21.2%	39.8%	25.4%	59.7%	28.8%
Plastics	12.9%	-	16.1%	10.6%	-	13.8%
Multi-layer	-	-	-	-	-	34.1%
Hazardous	-	-	-	-	-	6.3%[3]

The recognition rates in the base year were then calculated by the model. This calculation is based on the tonnage information diverted, the composition of the waste, the coverage and participation assumptions.

[N.B. the waste materials are split into primary and secondary categories. For example: Paper is a primary category, whereas secondary categories could be newspaper & magazines, office white paper and other paper. All the information in the tables above is shown at a primary level; however the schemes may only collect one of the secondary categories. For this reason plastic often has a low recognition rate as only one secondary category (e.g. plastic bottles) has been collected compared to other dense plastics and plastics bags etc. Any changes throughout this modelling report will have been made at the secondary category level].

2 For reference, abbreviations through out this document are: Peterborough City Council (PCC); Cambridgeshire County Council (CCC); Fenland District Council (FDC); South Cambridgeshire District Council (SCDC); East Cambridgeshire District Council (ECDC); Huntingdonshire District Council (HDC); and Cambridge City Council (CCiC)

3 Aerosol

Current Organic Collection Schemes[2]

	CCiC	ECDC	FDC	HDC	SCDC	PCC
Coverage	84.6%	99.7%	100%	100%	100%	83.6%
Participation	90%	85%	88%	90%	74%	95%
Material	**Recognition rates**					
Kitchen organics	31.9%	8.9%	22.7%	6.7%	26%	-
Garden organics	100%	91.7%	72.3%	100%	100%	85.3%
Paper	25.1%	7.3%	5.9%	-	52.5%	0.0%

2.2 Scenario assumptions

The model has the ability to view potential scenarios and see the impact of changes on the recycling tonnage diverted from residual waste. There are five key model variants that can be adjusted for each year:

- Coverage (the number of households that the scheme is available to);
- Participation (the number of household participating in the schemes available);
- Inclusion of new materials and removal of existing targeted materials;
- Inclusion and removal of collection schemes; and
- Recognition (the proportion of each material recycled by a participating householder with the available scheme).

The factors can be adjusted to assess the impact of the following scenarios.

- Baseline "Do Nothing", if RECAP continues to divert waste at the current performance level and no alteration to the current schemes;
- A recycling and composting rate of 55% by 2015 for all of RECAP;
- A recycling and composting rate of 60% by 2020 for all of RECAP; and
- A recycling and composting rate of 65% by 2020 for Peterborough.

Therefore this section states the changes to the base assumptions to assess the scenarios above.

2.2.1 Baseline "Do Nothing"

In this scenario, there are no changes to the base data. The waste arisings were projected up to 2020 using the previous mentioned assumptions.

However base "recognition rates" of materials and schemes have been calculated from the data entered in the model. This is important as "recognition rate" is a key factor that can be altered in the following scenarios:

2.2.2 Achieve 55% recycling and composting rate by 2015

In this scenario each authority implements a series of realistic changes to achieve the 55% recycling rate. In practice, these changes could be implemented incrementally up to 2015, but only 2015 has been modelled as the target year. The changes from the baseline scenario modelled are listed below and highlighted in the dark green cells (with the baseline figure in brackets):

Alteration to Dry Collection Schemes by 2015[4]

	CCiC	ECDC	FDC	HDC	SCDC	PCC
Coverage	84.6%	99.7%	100%	100%	97.8%	98% (93.6%)
Participation	80% (74%)	80% (72%)	82.2% (75%)	95%	75% (68%)	96%
Material	**Recognition rates**					
Paper	55% (39%)	66.9% (43.8%)	80.1% (68%)	72.4% (66.3%)	44.3% (40.3%)	86.6% (79.5%)
Glass	65.4%	65.9% (47.2%)	48.2% (0%)	5.1% (3.6%)	100%	76.9%* (0%)
Metals	31.4%	55.6% (21.2%)	51.2% (39.8%)	27.8% (25.4%)	64.9% (59.7%)	50.2% (28.8%)
Plastics	12.9%	8.9% (0%)	21.5% (16.1%)	10.6%	14.3% (0%)	33.7% (13.8)
Multi-layer	-	-	-	-	-	54.9% (34.1%)
Hazardous	-	23.8%	-	-	-	19.1%* (6.3%)

**Glass introduced at kerbside collection has also been reflected as a slight decrease in capture rates in glass at bring banks within Peterborough's modelling.*

Alterations to the Organic Collection Schemes by 2015[4]

	CCiC	ECDC	FDC	HDC	SCDC	PCC
Coverage	84.6%	99.7%	100%	100%	100%	83.6%
Participation	95% (90%)	90% (85%)	88%	90%	74%	95%
Material	**Recognition rates**					
Kitchen organics	77.6% (31.9%)	57.1% (8.9%)	44.2% (22.7%)	13.2% (6.7%)	61.4% (26%)	-
Garden organics	96.3%	93.4% (91.7%)	72.3%	100%	100%	89% (85.3%)
Paper	33.8% (25.1%)	11.3% (7.3%)	6.3% (5.9%)	-	52.5%	-

Additional New Schemes in Peterborough by 2015

	Kitchen organics	Textiles	On street recycling*
Coverage	98%	66%	-
Participation	75%	70%	-
Material	**Recognition rates**		
Kitchen organics	89.3%	-	-
Metals	-	-	3.5%
Textiles	-	60%	-
Plastics	-		1.2%

** On street recycling in Peterborough using a split litter bin to separate recyclates at source.*

No changes were modelled for the ten Household Recycling Centres across Cambridgeshire

Alterations to Current Capture Rates at Household Recycling Centres by 2015

Material	Peterborough, Dogsthorpe
WEEE*	85% (73.1%)
Wood	79.1% (61.6%)

** Waste Electrical and Electronic Equipment.*

2.2.3 Achieve 60% recycling and composting rate by 2020 (and 65% for Peterborough)

In this scenario each authority implements a series of realistic changes to achieve the 60% recycling rate. The individual authorities could implement the changes prior to 2020, but only 2020 would be assessed. The changes modelled are listed below (highlighted in dark green cells and brackets state previous assumed rates):

Alterations to Dry Collection Schemes by 2020[4]

	CCiC	ECDC	FDC	HDC	SCDC	PCC
Coverage	84.6%	99.7%	100%	100%	97.8%	98%
Participation	85% (80%)	90% (80%)	85% (82.2%)	95%	75%	96%
Material	**Recognition rates**					
Paper	60.9% (55%)	67.3% (66.9%)	84.6% (80.1%)	79.5% (72.4%)	44.3%	86.6%
Glass	65.4%	65.9% (65.4%)	48.2% (5.1%)	6.6% (5.1%)	100%	76.9%
Metals	52.4% (31.4%)	55.6%	62.4% (51.2%)	30.9% (27.8%)	64.9%	50.2%
Plastics	44.8% (12.9%)	9.8% (8.9%)	26.2% (21.5%)	14.9% (10.6%)	14.3%	33.7%
Multi-layer	47.2% (0%)	-	-	-	-	54.9%
Hazardous	-	23.8%	-	-	-	19.1%*

4 For reference, abbreviations through out this document are: Peterborough City Council (PCC); Cambridgeshire County Council (CCC); Fenland District Council (FDC); South Cambridgeshire District Council (SCDC); East Cambridgeshire District Council (ECDC); Huntingdonshire District Council (HDC); and Cambridge City Council (CCiC)

Alterations to the Organic Collection Schemes by 2020[4]

	CCiC	ECDC	FDC	HDC	SCDC	PCC
Coverage	84.6%	99.7%	100%	100%	100%	83.6%
Participation	90% (95%)	95% (90%)	90% (88%)	90%	74%	95%
Material	**Recognition rates**					
Kitchen organics	79.2% (77.6%)	61% (57.1%)	59.3% (44.2%)	24.7% (13.2%)	61.4%	-
Garden organics	96.3%	93.4%	72.3%	100%	100%	89%
Paper	33.8%	11.3%	6.9% (6.3%)	-	52.5%	-

Alterations to New Schemes in Peterborough by 2020

	Kitchen organics	Textiles	On street recycling*
Coverage	98%	66%	-
Participation	80% (75%)	70%	-
Material	**Recognition rates**		
Kitchen organics	89.3%	-	-
Metals	-	-	3.5%
Textiles	-	60%	-
Plastics	-		1.2%

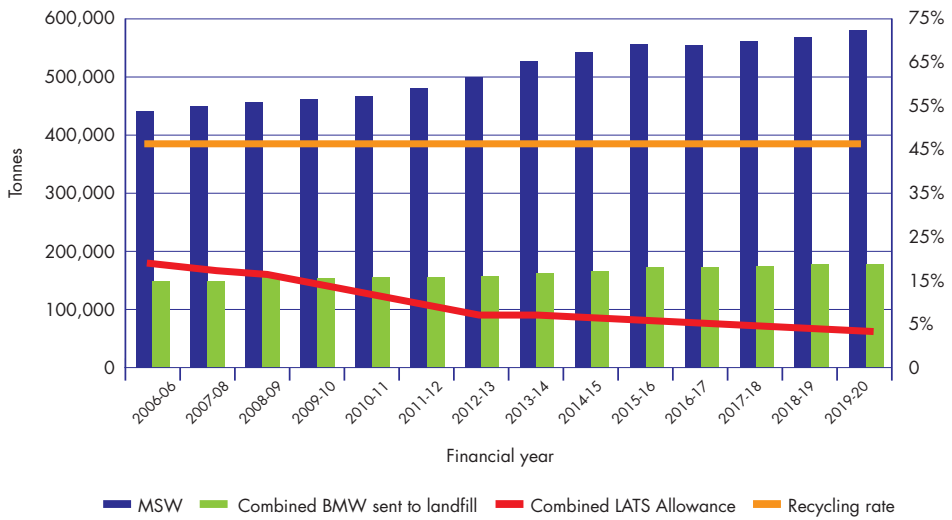
No further alterations were made to any other collection schemes within the RECAP area.

3 Results

3.1 Baseline "Do Nothing"

The Baseline Scenario "Do Nothing" shows that current recycling rates will continue for all years and the amount of BMW sent to landfill is proportional to the increase in total arisings (as shown in the figure below).

Baseline MSW Projections, Estimated Recycling Rates and BMW Sent to Landfill



From the base information entered into the model (e.g. the participation rate, coverage and the base tonnage) the recognition rates in the base year has been calculated. As outlined in the assumption section recognition is calculated by the tonnage information diverted, the composition of the waste and the coverage and participation assumptions.

Baseline Dry Collection Schemes Recognition Rates[4]

Material	CCiC	ECDC	FDC	HDC	SCDC	PCC
	Recognition rates					
Paper	39%	44%	68%	66.3%	40%	79%
Glass	65%	47%	-	3.6%	100%	-
Metals	31%	21%	40%	25%	60%	29%
Plastics	13%	-	16%	11%	-	14%
Multi-layer	-	-	-	-	-	34%
Hazardous	-	-	-	-	-	6%*

*Aerosols

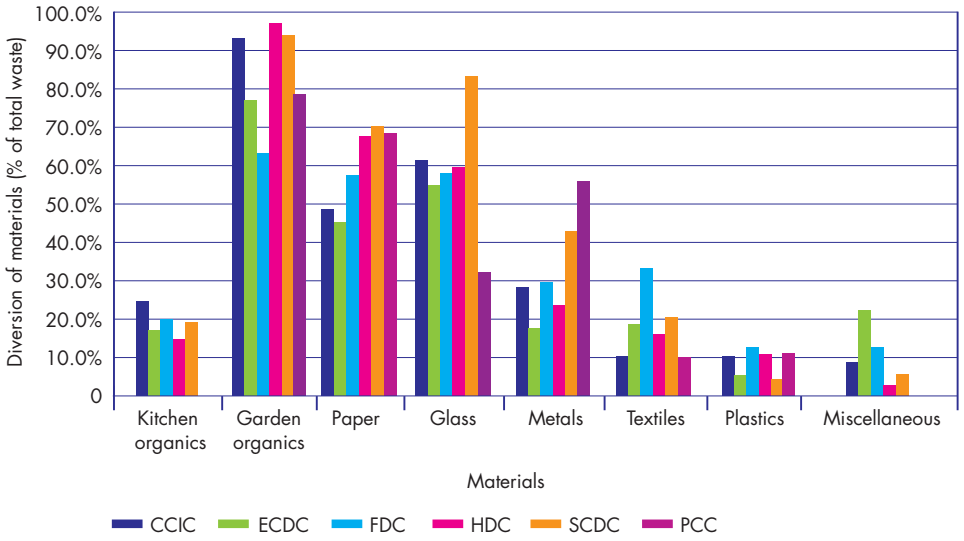
Based on the assumptions in the data it is clear that plastics have a low recognition rate, whereas glass has the largest variance across the different authorities' kerbside schemes.

Current Organic Collection Schemes[4]

Material	CCiC	ECDC	FDC	HDC	SCDC	PCC
	Recognition rates					
Kitchen organics	32%	9%	23%	7%	26%	-
Garden organics	100%	92%	72%	100%	100%	85%
Paper	25%	7%	6%	-	53%	0%

It can be seen from these results that the recognition rate of garden organics is consistently higher than the recognition rates of the kitchen organics.

Diversion of Materials for All The Schemes for 2006/07[4]



The diversion rate is a combination of coverage, participation and recognition rates. It is basically the proportion of material diverted at an authority level in comparison to the material that is available within the total waste stream. The diversion rates of the materials collected via the waste collection authorities shows that a high proportion of glass, paper and garden organics are diverted from landfill whereas the other materials could increase their diversion rate.

Current Capture Rates at Household Recycling Centres

Material	Peterborough, Dogsthorpe	Milton	Alconbury	Thriplow	St Neots	Grunty Fen	Wisbech	March	Bluntisham	Buckden	Whittlesey
Garden organic	93.4%	77.8%	77.2%	90.3%	74.3%	87.2%	89.8%	89.6%	78%	83.9%	85.4%
Paper	21.4%	61.3%	73.9%	64.4%	63.6%	79.5%	49.6%	72.1%	52.9%	64.5%	62.1%
Glass	21.6%	34.4%	73.9%	60.1%	66.3%	38.4%	72%	39.4%	60.6%	65.8%	63.1%
Metals	90.8%	93.5%	95.5%	94.6%	96.3%	94.3%	93.4%	94.6%	94.4%	95.6%	94.1%
Textiles	14.5%	31%	27.1%	27.2%	38.6%	0%	0%	47.8%	22.4%	53.5%	18.7%
Plastics	0%	1.8%	0%	0%	0%	0%	0%	0%	0.3%	0%	0.6%
Hazardous	62.9%	33.5%	59.5%	61.3%	39.8%	51.3%	46.7%	84.7%	83.8%	36.1%	47.7%
WEEE*	73.1%	98.2%	98.5%	92.9%	88.3%	95.3%	88.4%	87.4%	90.9%	73.3%	91.3%
Wood	61.6%	45.3%	36.8%	35.7%	30.6%	33.8%	33.2%	29%	48.7%	33.9%	31.5%
Miscellaneous	0.2%	19.9%	27.9%	17%	18%	19%	15.4%	22%	15.1%	0%	13.4%

* Waste Electrical and Electronic Equipment

The capture rates of materials at the HRCs vary from site to site. Plastics has a low capture rate at the sites that collect this material, whereas WEEE and garden organics are in excess of 70% capture rate at all sites.

3.2 How do we achieve 55%?

3.2.1 What has been diverted?

The table below outlines the total tonnes (to the nearest hundred tonnes) diverted via the various schemes modelled and demonstrates the recycling rates hoped to be achieved by 2015. All modelled scenarios exceed the 55% recycling target.

Results in 2015[4]

	CCiC	ECDC	FDC	HDC	SCDC	CCC (HRCs only)
Household waste arisings (t)	62,700	37,200	46,800	81,400	77,000	70,800
Dry Recycling Tonnage (t)	13,500	9,500	12,500	21,800	16,700	21,800
Organic Recycling (t)	21,300	11,000	14,200	23,000	30,000	17,500
Diverted (t)	34,800	20,500	26,700	44,900	46,700	39,200
Target	34,500	20,500	25,800	44,700	42,400	38,900
Recycling Rate	55.4%	55.0%	57.1%	55.2%	60.6%	55.4%

The table below demonstrates that if the authorities implement all the schemes as modelled Cambridgeshire, Peterborough and RECAP should all exceed the 55% recycling rate target in 2015. As RECAP the target is exceeded by 3%.

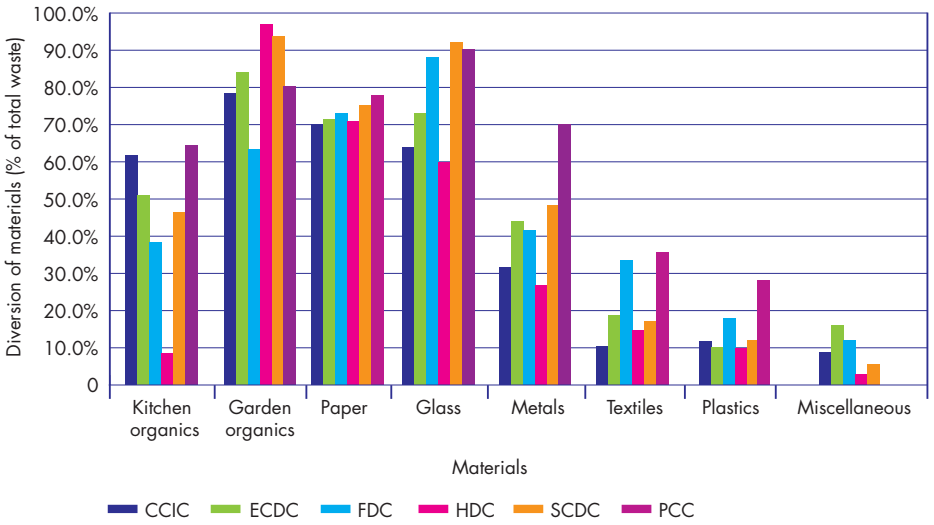
Results in 2015[4]

	CCC	PCC	RECAP
Household waste arisings (t)	375,900	113,900	489,900
Dry Recycling Tonnage (t)	95,800	31,400	127,200
Organic Recycling (t)	117,000	42,200	159,100
Diverted (t)	212,700	73,600	286,300
Target	206,700	62,700	269,400
Recycling Rate	57%	65%	58%

3.2.2 What is still left in the waste?

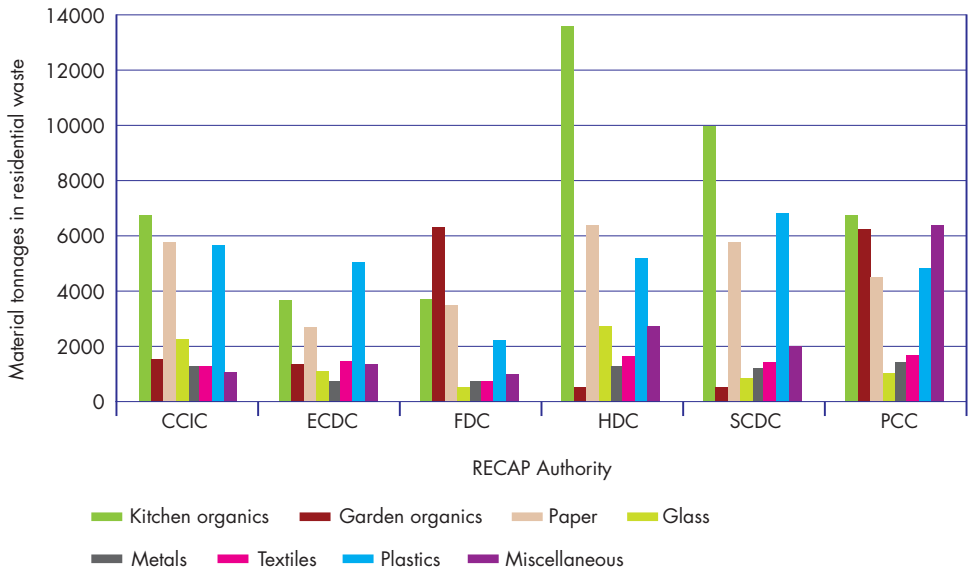
The next figure shows what materials are diverted out of the total waste stream for each authority. On the converse side this demonstrates the materials that are still left within the waste stream and could potentially be targeted in the future.

The Materials Diverted by Each Authority by 2015[4]



Paper, Garden and glass have high diversion rates and kitchen organics varies for each authority. Textiles, plastics and miscellaneous have low diversion rates.

Tonnage of Materials Still in the Residual Waste for 2015[4]



The figure above shows the tonnage of material not diverted by the proposed schemes. The weight of plastics is more than 4,000 tonnes within the residual waste in 4 authorities. Also 4 authorities have more than 6,000 tonnes of kitchen waste within the residual waste.

3.3 How do we achieve 60 - 65%?

The table below outlines the total tonnes (to the nearest hundred tonnes) diverted via the various schemes modelled and demonstrates the recycling rates hoped to be achieved by 2020.

3.3.1 What has been diverted?

The table below outlines the total tonnes (to the nearest hundred tonnes) diverted via the various schemes modelled and demonstrates the recycling rates hoped to be achieved by 2015. All modelled scenarios exceed the 55% recycling target.

Results in 2020[4]

	CCiC	ECDC	FDC	HDC	SCDC	CCC (HRCs only)
Household waste arisings (t)	67,700	38,900	51,000	85,300	85,500	76,100
Dry Recycling Tonnage (t)	18,700	10,900	14,700	24,900	18,400	23,400
Organic Recycling (t)	22,000	12,400	16,800	26,300	33,300	18,800
Diverted (t)	40,700	23,300	31,500	51,200	51,800	42,200
Target	40,600	23,300	30,600	51,200	51,300	45,700
Recycling Rate	60.1%	60.0%	61.9%	60.0%	60.5%	55.4%

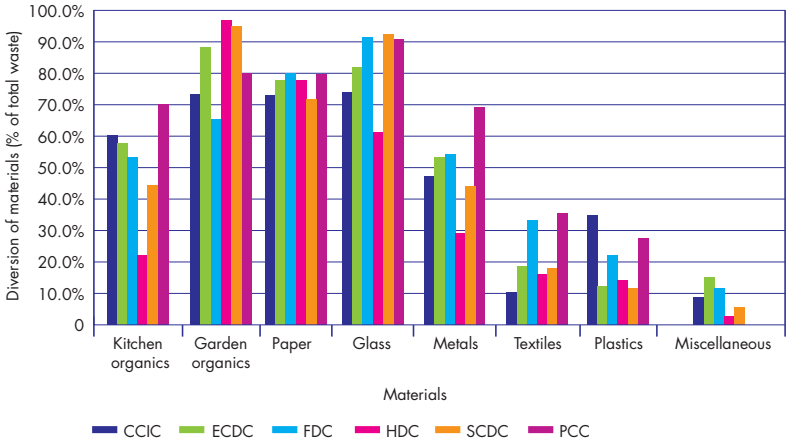
Results in 2020[4]

	CCC	PCC	RECAP
Household waste arisings (t)	404,400	127,400	531,800
Dry Recycling Tonnage (t)	111,100	35,100	146,200
Organic Recycling (t)	129,500	48,100	177,700
Diverted (t)	240,700	83,300	324,000
Target	242,700	82,800	319,100
Recycling Rate	60.0%	65.4%	61.0%

3.3.2 What is still left in the waste?

The figure on the following page shows what materials are diverted out of the total waste stream for each authority. On the converse side this demonstrates the materials that are still left within the waste stream and could potentially be targeted in the future.

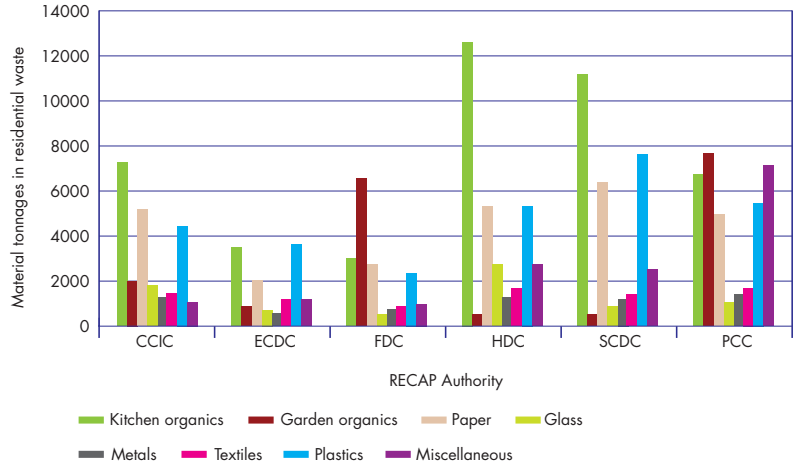
The Materials Diverted by Each Authority by 2020[4]



The figure above shows an increase in diverted material from 2015 with most materials increasing their diversion rates. Kitchen organics is still the largest tonnage available within the residual waste stream (in excess of 6,000 tonnes) in Huntingdon, South Cambridge and Cambridge City.

Paper, Garden and glass have high diversion rates and kitchen organics varies for each authority. Textiles, plastics and miscellaneous have low diversion rates.

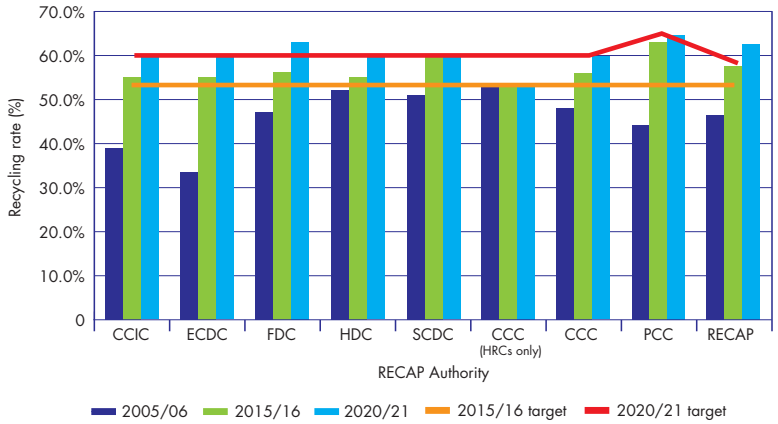
Tonnage of Materials Still in the Residual Waste for 2020[4]



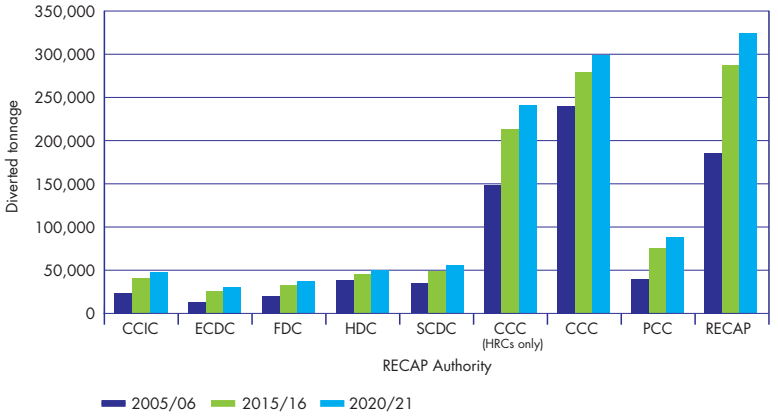
3.4 Scenarios and targets

Looking at the different scenarios and comparing the results to the targets in the JMWMS, the figure below shows that the recycling rates targets are achieved by every collection authority for each target year. There is one exception of CCC HRCs, however when all the data from the Waste authorities and HRCs are combined Cambridgeshire County Council still reaches the overarching targets, as does Peterborough and RECAP. The next figure also shows a steady rise in the tonnage diverted from landfill for each of the scenarios.

Comparing the Predicted Recycling Rates Verses the Target Recycling Rates [4]



Total Tonnage Diverted[4]



4 Key outputs to achieve RECAP set targets

The modelling undertaken has developed a number of realistic step-changes in performance and service delivery to meet the targets outlined within the RECAP strategy. The modelling exercise demonstrates (with the current information and assumptions) that the authorities within RECAP can implement a series of initiatives capable of increasing recycling and composting to the heightened levels. These actions range from implementing new schemes and activities (e.g. campaigns) that are designed to improve householders' recycling behaviour, resulting in significantly improved participation and recognition rates.

The key step-changes that have been included in the models are listed below. They will be incorporated into the delivery plan of the JMWMS and will be reviewed by each individual authority to assess their cost and deliverability. Once this assessment has taken place the authority will take the appropriate action, as listed below.

4.1 South Cambridgeshire

2015/16

- Activity targeted at increasing participation rates for dry recycling;
- Activity targeted at increasing recognition rates for kitchen waste;
- Activity targeted at increasing recognition rates for paper and ferrous cans and packaging; and
- Addition of plastic bottles in 2008.

2020/21

- Activities maintained.

4.2 Peterborough

2015/16

- Improve coverage for kerbside dry recycling (by 4.4%);
- The addition of glass collected at kerbside;
- The addition of hard plastics collected at kerbside;
- The addition of a scheme for collecting textiles at kerbside;
- The addition of a scheme for collecting kitchen waste at kerbside;
- Promotions, targeted at household paper and ferrous materials, to increase recognition rates;
- Activity targeted at improving capture rates for WEEE at Dogsthorpe;
- Introduce wood composite recycling at Dogsthorpe; and
- Introduce on-street recycling facilities (anticipated tonnage for plastics and ferrous).

2020/21

- Activity targeted at increasing participation rates for kitchen organics.

4.3 East Cambridgeshire

2015/16

- Activity targeted at increasing participation rates for both dry and organic recycling;
- Introduction of plastics at kerbside;
- Activity targeted at increasing recognition rates for dry materials; paper, glass and metals; and
- Activity targeted at increasing recognition rates for kitchen organics.

2020/21

- Activity targeted at increasing participation rates for both dry and organic recycling;
- Activity targeted at increasing recognition rates for dry materials; paper; and
- Activity targeted at increasing recognition rates for kitchen organics.

4.4 Fenland

2015/16

- Activity targeted at increasing participation rates for kerbside dry recycling;
- Potential introduction of kerbside-collected glass;
- Activity targeted at increasing recognition rates for dry materials: household paper, card, plastics and metals; and
- Activity targeted at increasing recognition rates for kitchen waste.

2020/21

- Activity targeted at increasing participation rates for kerbside-collected dry and organic recycling;
- Activity targeted at increasing recognition rates for dry materials: household paper, card, plastics and metals; and
- Activity targeted at increasing recognition rates for kitchen waste.

4.5 Huntingdonshire

2015/16

- Activity targeted at increasing recognition rates for dry materials: paper, glass, metals; and
- Activity targeted at increasing recognition rates for kitchen waste.

2020/21

- Activity targeted at increasing recognition rates for dry materials: paper, glass, metals;
- Activity targeted at increasing recognition rates for kitchen waste; and
- Potential collection of other dense plastics at kerbside.

4.6 Cambridge City

2015/16

- Activity targeted at increasing participation rates for kerbside-collected dry recyclable;
- Activity targeted at increasing recognition rates for paper within dry recycling (e.g. glass, paper and metal); and
- Activity targeted at increasing recognition rates for kitchen waste and card within the organic kerbside collection.

2020/21

- Activity targeted at increasing participation rates for kerbside-collected dry recycling;
- Activity targeted at increasing recognition rates for materials within dry recycling; and
- Activity targeted at increasing recognition rates for kitchen waste.

5 Risk and sensitivitles

All the modelling undertaken was based on key assumptions and any changes in these assumptions may have an impact on the modelled predictions. This is illustrated below in the following table of risks.

RECAP is committed to annually monitor the various recycling and composting schemes to assess the performance of the schemes and improve them in the future (as identified in these modelled scenarios). There is a risk that if the assumptions in this modelling exercise do not reflect the latest data or measurements the schemes may not perform as expected. Therefore RECAP has identified the need for the continuous monitoring of their waste data to ensure future predictions reflect likely trends.

Modelling Risks

Key Assumptions	Risk	Impact	Recommendations
Growth Rate	The total household waste does not grow in accordance with Scenario 3. This growth scenario has been modelled to calculate total waste arisings.	Total waste will increase or decrease in accordance with the growth rate and therefore total waste diverted will also increase or decrease in proportion to total arisings.	Annually monitor total waste arisings and study trends Further modelling with new growth rates (See Actions 12 and 13 of JMWMS).
Waste Prevention	Targeted materials for waste prevention schemes will impact on: • The total waste arisings (reduction); and • Targeted material within the waste stream (reduction) (e.g. home composting may decrease the amount of organics available in the waste stream).	Collection schemes may need to be revised as a successful waste prevention campaign could result in decreasing targeted materials causing potential conflict with collection schemes (e.g. home composting, will result in a reduction in kitchen organic collected).	Annual monitoring of waste prevention programme to reduce potential conflict with collection schemes. Further modelling with new data (See Actions 8, 12 13 of JMWMS).
Waste Composition	The waste composition from 2005 will become dated.	A change in waste composition may impact on targeted collection schemes.	Regularly re-assess waste composition and carry out further modelling. Annually monitor recycling schemes to compare actual diversion with predicted (See Action 13 of JMWMS).
Coverage Rate	If the stated coverage is incorrect, diversion rates will be miscalculated (this is low risk as this data is considered to be accurate).	If the coverage rates are incorrect, the future diversion rates may be miscalculated.	No action as low risk.
Participation Rate	If the assumed participation rates are too low or high during modelling process, any changes to participation rate may be incorrectly calculated.	If the participation rates are incorrect, the future diversion rates may be miscalculated.	If risk is large, potentially conduct a participation survey. Further modelling with new data. Annually monitor recycling schemes to compare actual diversion with predicted. (See Action 13 of JMWMS).
Recognition Rate	If the assumed recognition rates are too low or high during modelling process, any changes to recognition rate may be incorrectly calculated.	If the recognition rates are incorrect, the future diversion rates could be misreported.	If risk is large, potentially conduct a recognition survey. Further modelling with new data. Annually monitor recycling schemes to compare actual diversion with predicted (See Action 13 of JMWMS).

6 Support Information

6.1 Waste Input Tonnage Input Data

Waste Diverted by Kerbside Collection Schemes in 2006/07[4]

	CCiC	ECDC	FDC	HDC	SCDC	PCC
Glass	1776	989	0	198	3606	0
Cans	253	130	155	342	540	432
Paper	3494	2293	5793	12668	4868	11393
Card	0	0	0	0	0	118
Textiles	0	0	0	0	0	0
Plastic	393	0	291	512	0	897
Green	10504	5482	11188	19771	19611	11278
Tyres	7	40	76	41	35	0

Waste Diverted by Bring Sites in 2006/07[4]

	CCiC	ECDC	FDC	HDC	SCDC	PCC
Glass	888	641	1190	3175	698	1970
Cans	126	22	3	0	18	0
Paper	760	560	208	629	749	0
Furniture	0	135	0	0	0	0
Textiles	96	198	212	239	207	188
Books	69	11	0	21	29	0
Plastic	104	115	0	0	192	0
Green	0	19	0	0	0	0

6.2 Key Assumptions by Individual Authorities

6.2.1 Fenland Model

Variations to Baseline Assumptions in 2.1: Waste composition data from Phase 1, 2007

Amendments made to baseline data to correct imbalances: None

Modelling to Achieve RECAP Targets

Kerbside Dry Materials

Coverage				
Increase from 2006/07 to 2015/16		Increase from 2015/16 to 2020/21		
No change		No change		
Participation rates				
Increase from 2006/07 to 2015/16		Increase from 2015/16 to 2020/21		
>7.8% to 82.2%		>2.8% to 85%		
Recognition rates				
Primary material	Increase from 2006/07 to 2015/16	Key secondary materials increased	Increase from 2015/16 to 2020/21	Key secondary materials increased
Paper	>12.1% to 80.1%	Household paper and newsprint grade	>4.5% to 84.6%	Corrugated cardboard, flat card and catalogues
Plastics	>5.5% to 21.5%	PET and HDPE bottles (increase of around 25% each material)	>4.4% to 25.9%	PET and HDPE bottles (increase of around 20% each material)
Metals	>12% to 51.1%	Aluminium cans and ferrous cans and packaging	>11.5% to 62.2%	Aluminium cans and ferrous cans and packaging
Introduced materials				
Material	Date introduced	Rec rates in 2015/16	Rec rates in 2020/21	
Glass	08/09	48.2%	48.2%	

Modelling to Achieve RECAP Targets

Kerbside Organic Scheme

Coverage				
Increase from 2006/07 to 2015/16		Increase from 2015/16 to 2020/21		
No change	No change			
Participation rates				
Increase from 2006/07 to 2015/16		Increase from 2015/16 to 2020/21		
No change		>2% to 90%		
Recognition rates				
Primary material	Increase from 2006/07 to 2015/16	Key secondary materials increased	Increase from 2015/16 to 2020/21	Key secondary materials increased
Kitchen organics	>21.5% to 44.2%	Kitchen home compostables and Kitchen other organics	>15.1% to 60%	Kitchen home compostables and Kitchen other organics
Paper	>0.1% to 6.0%	Non-recyclable but compostable paper (increased by 12.8%)	>0.6% to 6.6	Non-recyclable but compostable paper (increased by 15%)
Introduced materials				
Material	Date introduced	Rec rates in 2015/16	Rec rates in 2020/21	
None	-	-	-	

6.2.2 Cambridge City Model

Variations to Baseline Assumptions in 2.1: None, as per 2.1

Amendments made to baseline data to correct imbalances: None.

Modelling to Achieve RECAP Targets

Kerbside Dry Materials

Coverage				
Increase from 2006/07 to 2015/16		Increase from 2015/16 to 2020/21		
No change		No change		
Participation rates				
Increase from 2006/07 to 2015/16		Increase from 2015/16 to 2020/21		
>6% to 80%		>5% to 85%		
Recognition rates				
Primary material	Increase from 2006/07 to 2015/16	Key secondary materials increased	Increase from 2015/16 to 2020/21	Key secondary materials increased
Paper	>16% to 55%	Household paper and newsprint grade	>5.9% to 60.9%	Household paper, newsprint grade and catalogues
Glass	None		>19.8% to 74.2%	All colour glass Cans
Metal	None		>21% to 52%	
Introduced materials				
Material	Date introduced	Rec rates in 2015/16	Rec rates in 2020/21	
None	-	-	-	

Modelling to Achieve RECAP Targets

Kerbside Plastics

Coverage				
Increase from 2006/07 to 2015/16		Increase from 2015/16 to 2020/21		
No change		No change		
Participation rates				
Increase from 2006/07 to 2015/16		Increase from 2015/16 to 2020/21		
No change		>11% to 85%		
Recognition rates				
Primary material	Increase from 2006/07 to 2015/16	Key secondary materials increased	Increase from 2015/16 to 2020/21	Key secondary materials increased
Plastics	No change	-	>31.9% to 44.8%	All bottles and other dense plastics
Introduced materials				
Material	Date introduced	Rec rates in 2015/16		Rec rates in 2020/21
None	-	-	-	

Modelling to Achieve RECAP Targets

Kerbside Organic Scheme

Coverage				
Increase from 2006/07 to 2015/16		Increase from 2015/16 to 2020/21		
No change		No change		
Participation rates				
Increase from 2006/07 to 2015/16		Increase from 2015/16 to 2020/21		
>5% to 95%		<5% down to 90%		
Recognition rates				
Primary material	Increase from 2006/07 to 2015/16	Key secondary materials increased	Increase from 2015/16 to 2020/21	Key secondary materials increased
Kitchen organics	>45.7% to 77.6%	Kitchen home compostables and kitchen other organics	>1.6% to 79.2%	
Paper	>8.7% to 33.8%	Corrugated cardboard and flat card	No change	
Introduced materials				
Material	Date introduced	Rec rates in 2015/16		Rec rates in 2020/21
None	-	-	-	

6.2.3 East Cambridgeshire Model

Variations to Baseline Assumptions in 2.1: None, as per 2.1

Amendments made to baseline data to correct imbalances: Participation - Organic waste participation rate was raised from initial estimation of 72% to 85% to ensure recognition/capture rates were realistic and lower than 100%.

Modelling to Achieve RECAP Targets

Kerbside Dry Materials
**Recognition rate for plastic bottles only*

Coverage				
Increase from 2006/07 to 2015/16		Increase from 2015/16 to 2020/21		
No change		No change		
Participation rates				
Increase from 2006/07 to 2015/16		Increase from 2015/16 to 2020/21		
>8% to 80%		>10% to 90%		
Recognition rates				
Primary material	Increase from 2006/07 to 2015/16	Key secondary materials increased	Increase from 2015/16 to 2020/21	Key secondary materials increased
Paper	>66.9% to 67%	Household paper, corrugated cardboard, flat card	>0.3% to 67.2%	Only corrugated cardboard increased by 5%
Glass	>19% to 80%	Brown glass and clear jars	No change	-
Metals	>34% to 55.6%	Significant rises across all collected materials	No change	-
Hazardous (aerosols)	>23.8% to 23.8%	Aerosols >40% to 40%	No change	-
Introduced materials				
Material	Date introduced	Rec rates in 2015/16*		Rec rates in 2020/21*
Plastics	April 2008	50%	55%	

Modelling to Achieve RECAP Targets

Kerbside Organic Scheme

Coverage				
Increase from 2006/07 to 2015/16		Increase from 2015/16 to 2020/21		
No change		No change		
Participation rates				
Increase from 2006/07 to 2015/16		Increase from 2015/16 to 2020/21		
>5% to 90%		>5% to 95%		
Recognition rates				
Primary material	Increase from 2006/07 to 2015/16	Key secondary materials increased	Increase from 2015/16 to 2020/21	Key secondary materials increased
Kitchen organics	>48.2% to 57.1%	Significant change to all collected materials	>3.9% to 61%	-
Garden organics	>1.7% to 93.4%	-	No change	-
Paper	>4% to 11.3%	Corrugated cardboard	No change	-
Introduced materials				
Material	Date introduced	Rec rates in 2015/16		Rec rates in 2020/21
-	-	-	-	

6.2.4 South Cambridgeshire

Variations to Baseline Assumptions in 2.1: None.

Amendments made to baseline data to correct imbalances: None.

Modelling to Achieve RECAP Targets

Kerbside Dry Materials

Coverage				
Increase from 2006/07 to 2015/16		Increase from 2015/16 to 2020/21		
No change		No change		
Participation rates				
Increase from 2006/07 to 2015/16		Increase from 2015/16 to 2020/21		
>7% to 75%		No change		
Recognition rates				
Primary material	Increase from 2006/07 to 2015/16	Key secondary materials increased	Increase from 2015/16 to 2020/21	Key secondary materials increased
Paper	>4% to 44.3%	Only increase is to household paper, >15.2% to 30%.	No change	-
Metals	>5.2% to 64.9%	Only increase is to Ferrous cans and packaging, >10.1% to 80%.	No change	-
Introduced materials				
Material	Date introduced	Rec rates in 2015/16	Rec rates in 2020/21	
Plastics	September 2008	14.3%	14.3%	

Modelling to Achieve RECAP Targets

Kerbside Organic Scheme

Coverage				
Increase from 2006/07 to 2015/16		Increase from 2015/16 to 2020/21		
No change		No change		
Participation rates				
Increase from 2006/07 to 2015/16		Increase from 2015/16 to 2020/21		
No change	No change			
Recognition rates				
Primary material	Increase from 2006/07 to 2015/16	Key secondary materials increased	Increase from 2015/16 to 2020/21	Key secondary materials increased
Kitchen organics	>35.4% to 61.4%	Kitchen home compostables > 36.9%. Kitchen other, >35.3%.	No change	-
Introduced materials				
Material	Date introduced	Rec rates in 2015/16	Rec rates in 2020/21	
-	-	-	-	

6.2.5 Huntingdonshire

Variations to Baseline Assumptions in 2.1: None, as per 2.1.
Amendments made to baseline data to correct imbalances: None.

Modelling to Achieve RECAP Targets

Dry Kerbside Materials

Coverage				
Increase from 2006/07 to 2015/16		Increase from 2015/16 to 2020/21		
No change		No change		
Participation rates				
Increase from 2006/07 to 2015/16		Increase from 2015/16 to 2020/21		
No change		No change		
Recognition rates				
Primary material	Increase from 2006/07 to 2015/16	Key secondary materials increased	Increase from 2015/16 to 2020/21	Key secondary materials increased
Paper	>6.1% to 72.4%	Household paper, >18.2% to 70%. Newsprint, >3.9% to 85%.	>7.1% to 79.5%	Household paper, >20% to 90%. Newsprint, >5% to 90%.
Glass	>1.5% to 5.1%	Green, >5% to 5%. Brown, >5% to 5%. Glass jars, >5% to 5%.	>1.5% to 6.6%	Green, >5% to 10%. Brown, >5% to 10%. Glass jars, >5% to 10%.
Metals	>2.5% to 27.8%	Aluminium foil, >6.4% to 10%. Ferrous cans and packaging, >6.4% to 35%.	>3.1% to 30.9%	Ferrous cans and packaging, >5% to 40%.
Plastics	None	None	>4.3% to 14.9%	All other dense plastics, >12.4% to 20%.
Introduced materials				
Material	Date introduced	Rec rates in 2015/16		Rec rates in 2020/21
-	-	-	-	

Modelling to Achieve RECAP Targets

Kerbside Organic Scheme

Coverage				
Increase from 2006/07 to 2015/16		Increase from 2015/16 to 2020/21		
No change		No change		
Participation rates				
Increase from 2006/07 to 2015/16		Increase from 2015/16 to 2020/21		
No change	No change			
Recognition rates				
Primary material	Increase from 2006/07 to 2015/16	Key secondary materials increased	Increase from 2015/16 to 2020/21	Key secondary materials increased
Kitchen organics	>6.6% to 13.2%	Kitchen home compostables, >4.8% to 15%. Kitchen other organics, >10% to 10%.	>11.5% to 24.7%	Kitchen home compostables, >10% to 25%. Kitchen other organics, >15% to 25%.
Introduced materials				
Material	Date introduced	Rec rates in 2015/16		Rec rates in 2020/21
-	-	-	-	

6.2.6 Peterborough City Council

Variations to Baseline Assumptions in 2.1: Number of households, waste arisings and scheme tonnage data from Peterborough City Council records.

Amendments made to baseline data to correct imbalances: Participation rates – Garden participation rate was increased from 45% to 95% to lower recognition rates to less than 100%.

Waste composition rates – Dogsthorpe amended to be the same as HRC residual to correct capture rates of over 100%. Minor change made to kerbside residual in paper.

Modelling to Achieve RECAP Targets

Dry Kerbside Materials

Coverage				
Increase from 2006/07 to 2015/16		Increase from 2015/16 to 2020/21		
No change		No change		
Participation rates				
Increase from 2006/07 to 2015/16		Increase from 2015/16 to 2020/21		
No change		No change		
Recognition rates				
Primary materials	Increase from 2006/07 to 2015/16	Key secondary material increased	Increase from 2015/16 to 2020/21	Key secondary materials increased
Paper	>7.1% to 86.6%	Household paper, >24.1% to 90%. Newsprint grade, >1.6% to 98%. Corrugated cardboard, >1.4% to 90%. Flat card, > 16.2% to 90%.	No change	
Metals	>21.4% to 50.2%	Ferrous cans and packaging, >38.6% to 80%.	No change	
Plastics	>19.9% to 33.7%	PET bottles, >6.5% to 80%. HDPE bottles, >24.4% to 90%. PVC bottles, >3.6% to 30%. All other dense plastics, >50% to 50% due to development of MRF so as capable of reprocessing other hard plastics.	No change	
Multi-layer	>20.8% to 54.9%	Composite packaging predominantly card (TetraPaks), >22.7% to 60%	No change	
Hazardous	>12.8% to 19.9%	Aerosols, >40.3% to 60%	No change	
Introduced materials				
Material	Date introduced	Rec rates in 2015/16 76.9% (Green, brown,	Rec rates in 2020/21	
Glass	March 2008	clear bottles and glass jars set at 80%)	No change	

Modelling to Achieve RECAP Targets

Introduction of the Collection of Kitchen Organics

Coverage				
2015/16 rates		2020/21 rates		
98%		98%		
Participation rates				
2015/16 rates		2020/21 rates		
75%		>5% to 80%		
Recognition rates				
Primary material	2015/16 rates	Rates for secondary categories	Increase from 2015/16 to 2020/21	Key secondary materials increased
Kitchen organics	89.3%	Kitchen home compostables – 90%. Kitchen other organics – 90%.	No change	-

Introduction of the Collection of Textile Bags

Coverage				
2015/16 rates		2020/21 rates		
66%		66%		
Participation rates				
2015/16 rates		2020/21 rates		
70%		70%		
Recognition rates				
Primary material	2015/16 rates	Rates for secondary categories	Increase from 2015/16 to 2020/21	Key secondary materials increased
Textiles	60%	60% for all categories (Potentially recyclable/ reusable materials, shoes, cleaning textiles /rags)	No change	-

Bring Sites

Capture rates				
Primary material	2015/16 rates	Rates for secondary categories	Increase from 2015/16 to 2020/21	Key secondary materials increased
Glass (due to introduction of kerbside glass collection)	Decrease of 10.1% to 23.1%	Decrease across all categories of around 10.6%	No change	-
Plastics (through street recycling bins)	1.2%	PET bottles only at 15%	No change	-

Household Recycling Centre - Dogsthorpe

Capture rates				
Primary material	Increase from 2006/07 to 2015/16	Key secondary materials increased	Increase from 2015/16 to 2020/21	Key secondary materials increased
WEEE	>11.9% to 85%	No secondary categories	No change	-
Introduced materials				
Material	Date introduced	Rec rates in 2015/16	Rec rates in 2020/21	
Wood composite	2008	50%	50%	

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