



Dealing with Derbyshire's Waste

**Derbyshire and Derby City Joint Municipal
Waste Management Strategy Review**

2013-2026 Draft Report



Autumn 2014



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1. Introduction

The Derbyshire and Derby City Joint Municipal Waste Management Strategy (DJMWMS) has been produced by the Derbyshire Waste Partnership (DWP) in consultation with a range of stakeholders for the management of local authority collected waste¹. The DWP is made up of the 10 councils listed below. The role of each council in managing Derbyshire's waste is given.

Waste Disposal Responsibilities

Derbyshire County Council

Derby City Council



Waste Collection Responsibilities

Derby City Council

Amber Valley Borough Council

Bolsover District Council

Chesterfield Borough Council

Derbyshire Dales District Council

Erewash Borough Council

High Peak Borough Council

North East Derbyshire District Council

South Derbyshire District Council

The strategy '**Looking after Derbyshire's Waste**' was originally written in 2006 as a vision for 20 years that would be reviewed every five years. The 2006 strategy focused on the following principles:

- Adopting a partnership approach to waste management in Derbyshire;
- Expansion of recycling and composting schemes and infrastructure to achieve a recycling and composting target of up to 55%; and
- Meeting the requirements of the Landfill Directive by diverting waste through recycling and composting and recovery practices.

¹ Local Authority Collected Waste (municipal) includes household and commercial waste collected by local authorities and some construction and demolition waste received at Household Waste Recycling Centres according to the Waste and Emissions Trading Act 2003 (WET Act).



The progress made since 2006 and current performance have been reviewed. Together, with the help and commitment of householders, we have made considerable progress in recent years to recycle and compost more waste. There have been many improvements to recycling and composting services by the councils and the amount of waste that we recycle and compost has increased.

In 2012/13 we recycled and composted 45.5% of waste from households, whilst the amount of waste produced reduced. However, there is still more to be done to reduce the amount of waste we produce further and to maximise the amount of waste which is reused, recycled and composted each year. A lot of waste is still being thrown away which could be recycled or composted and we need further help from householders to achieve this.

Sending waste to landfill is expensive and the cost of doing this will continue to rise in the next few years. The cost of sending Derbyshire and Derby City's waste to landfill in 2012/13 was £22.7 million, much of which could have been recycled, composted, reused or not created in the first place. Landfill is the least preferred way to dispose of waste as useful resources and raw materials are wasted and the breakdown of biodegradable waste in landfill is bad for the environment.

Policy and Strategic Drivers for the Strategy

The way that waste is managed in Derbyshire is shaped by both national and European policy and legislation that include targets for recycling, reduction of certain waste streams going to landfill, and activity around waste prevention.

These are summarised in the Waste Strategy for England 2007 which includes the following targets to:

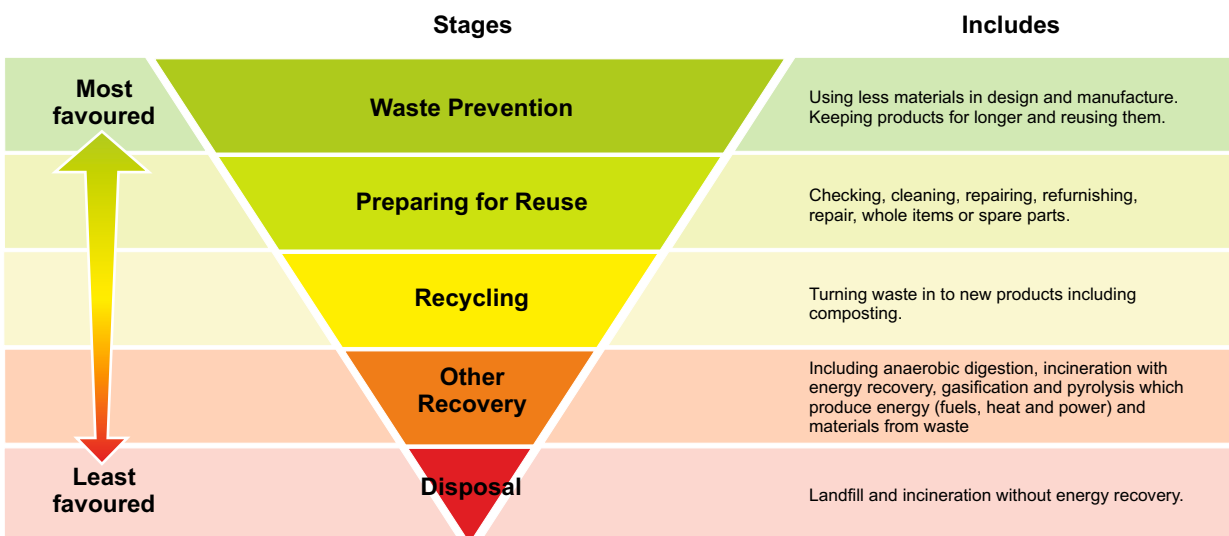
- **recycle and compost 50% of household waste by 2020;**
- **reduce household waste by 45%; and**
- **recover 75% of municipal waste by 2020.**



Following the formation of a coalition government in 2010, a review of waste policy was completed². The review re-affirmed many elements of the Waste Strategy for England 2007 but gave an increased focus on waste prevention. The review also committed the Government to produce a National Waste Management Plan and a Waste Prevention Programme during 2013³. Consultations are currently underway in relation to both of these documents which presently do not propose any new targets.

This strategy and the national waste strategy are based on the principle of the waste hierarchy as a guide to sustainable waste management. The waste hierarchy, as shown in Figure 1, presents a number of waste management stages in their order of priority. It stresses the importance of preventing waste being created in the first instance as the main priority and disposal as the lowest priority. Producing recyclable material of a high quality is also important so that the amount that requires further processing or disposal is minimised.

Figure 1 - The Waste Hierarchy



² Government review of waste policy in England 2011, Defra

³ This is also part of a requirement to comply with the revised Waste Framework Directive (WFD) introduced in 2008. It includes a 50% recycling target, a requirement to separately collect at least four recyclable materials and to introduce a national waste prevention programme.



Scope of the Strategy

This strategy sets out our approach to managing waste sustainably for the communities of Derbyshire and Derby City and our priorities for action over the next five years until the next review takes place. This document replaces the 2006 strategy. Strategic objectives have been developed and ways to support the changes needed to meet the objectives and associated targets proposed. The strategy provides a framework for how we will work to:

- **Reduce the amount of waste that we produce;**
- **To reuse, recycle and compost as much material as possible; and**
- **Find the most sustainable solutions to deal with any waste produced.**

The strategy focuses on activities that fall within the upper sections of the waste hierarchy and considers how we can work to reduce or reuse waste and improve recycling and composting performance.

The strategy does not review arrangements for treatment and disposal of waste that isn't recycled or composted. This is managed through a long term waste management contract with private sector contractor, Resource Recovery Solutions (Derbyshire) Ltd (RRS). This strategy does not cover waste management planning issues. Policies for determining planning applications for waste management developments are dealt with by the Derby and Derbyshire Joint Waste Plan.

In addition to the waste collected by local authorities there remains a significant proportion of waste that is generated by commercial, industrial, construction and demolition activities, which is managed by private waste contractors. This is not dealt with by local councils and is therefore not a focus of this strategy. Figure 2 shows the proportion of waste produced in Derbyshire which is covered by this strategy.

Figure 2 - Waste created in Derbyshire

Waste from industrial, construction, demolition and commercial activities 90%



Waste collected by local authorities 10%



Strategy Documents

The strategy is made up of this headline document supported by action plans for each council which provide details of individual activities at a local level. It has been developed alongside and supported by a number of technical studies documented in the reports listed below:

- **A Waste Forecasting Report that considered likely waste growth trends over the duration of the strategy;**
- **An Options Appraisal Report which considered different ways to achieve the objectives in the strategy;**
- **A Strategic Environmental Assessment (SEA), which considered the impact on the environment of the strategy and ways to reduce any negative impacts.**

The overall structure of the waste strategy supporting documents is illustrated in Figure 3.

Figure 3 - Strategy Documents



The above documents are available at: www.derbyshire.gov.uk/wastestrategy



Consultation Report

Successfully implementing the strategy is not just a matter for the councils. Everyone within our communities has an active role to play. In developing the strategy we have sought the views and support of everyone including householders, stakeholders, the waste management industry, and the community and voluntary sector.

A 13 week public consultation on the strategy took place from 15 November 2013 to 14 February 2014. The aim of the consultation was to seek views on the content of the strategy, the proposed vision and objectives and ways for delivering it. 1,636 questionnaires were returned and responses were received from 5 stakeholders/interest groups.

The views from the public consultation indicated that the large majority of respondents (93%) strongly agreed or agreed with the proposed vision and objectives for the strategy. 90% of respondents strongly agreed or agreed with the proposed recycling and composting target.

Comments received and the results from the consultation have been fully considered by DWP and agreed changes have been made to this document and the council waste action plans. The results are documented in the full Consultation Report.

Strategic Environmental Assessment

An SEA of the strategy has been completed to identify any likely environmental impacts of the strategy both positive and negative. The results of the SEA are set out in the SEA Environmental Report and a non-technical summary. The results have been considered and no changes were required to the strategy. The findings of the SEA will be considered further when the actions plans are delivered. A number of areas for monitoring were recommended, for example, carbon impact, waste generated, waste diverted from landfill, etc. These areas will be reviewed as part of the annual review of the council waste action plans.



2. Our Vision for Sustainable Waste Management

The DWP in consultation with a range of stakeholders has developed a vision and objectives for the strategy which are stated below.

The Derbyshire and Derby City Joint Municipal Waste Management Strategy aims to deliver a sustainable waste management service.

The following ten objectives have been developed to support the Strategy vision and set the framework for future waste management activity.

The strategy will deliver:

- **Reduced waste;**
- **Increased reuse and recycling/composting of waste;**
- **Reduced waste to landfill and recovering value from waste that is left over for disposal;**
- **Increased public understanding and engagement in waste and recycling leading to high levels of customer satisfaction;**
- **An accessible, efficient, effective and value for money service.**

It will also contribute towards:

- **Improved resource efficiency;**
- **Reduced carbon / climate change impacts;**
- **Protection of natural resources;**
- **The management of non-household waste;**
- **Local self-sufficiency in the management of waste.**

The combined vision and objectives will help us to reach a target of 55% recycling/composting of household waste by 2020 and to exceed this where possible.



Why is Sustainable Waste Management Important?

This strategy recognises the impact that waste management can have on the environment. Dealing with waste uses energy to collect and transport it, this uses fossil fuels which when burned release greenhouse gases (including methane, carbon dioxide). Greenhouse gases contribute to climate change.

The strategy also considers the wider environmental impact of items that we use in our daily lives and recognises that impacts on the environment do not begin when things are thrown away. The extraction of raw materials from the earth, material processing, manufacturing and transport are all stages in the process that use energy and emit greenhouse gases. Over the life of a product one tonne of material may represent several tonnes of greenhouse gases. This happens even before it becomes waste.

Recycling uses fewer natural resources from the earth and less energy to produce the same new product. Recycling can also help to reduce greenhouse gases being released and waste being produced. The vast majority of life cycle studies have shown that recycling is environmentally preferable to incineration or landfill⁴.

This strategy is underpinned by the principles of the waste management hierarchy that prioritise not producing waste in the first place, then reusing it followed by recycling and composting.

This strategy recognises that providing efficient, effective and value for money services with high customer satisfaction are important to sustainable waste management. It is important to the councils that waste services are provided that are of high quality, achieve the required targets and that householders are satisfied with. Services must continue to be provided against a situation of decreasing budgets and pressure to provide the 'same for less' and even to do 'more for less'. Sending waste to landfill costs money which could be spent on other parts of the waste service or on other council services.

Reducing waste means that less money is spent on collecting, recycling and composting and disposing of waste. For waste that is produced it is important to recycle and compost as much as we can which helps to avoid paying high disposal costs. For materials to be collected for recycling and composting markets for the materials need to exist and quality standards met for the collected material. Putting the right materials and items into the correct recycling and composting containers is important to make sure quality standards are met and that materials are not rejected and sent for disposal.

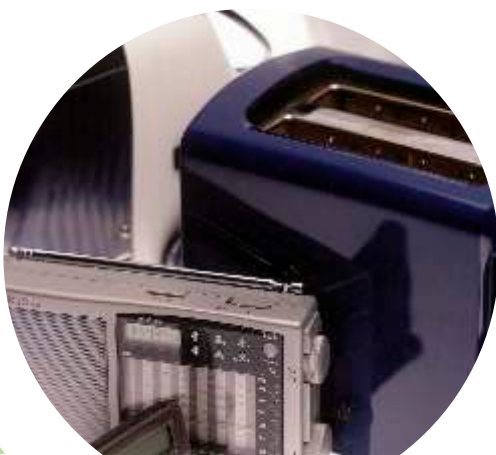
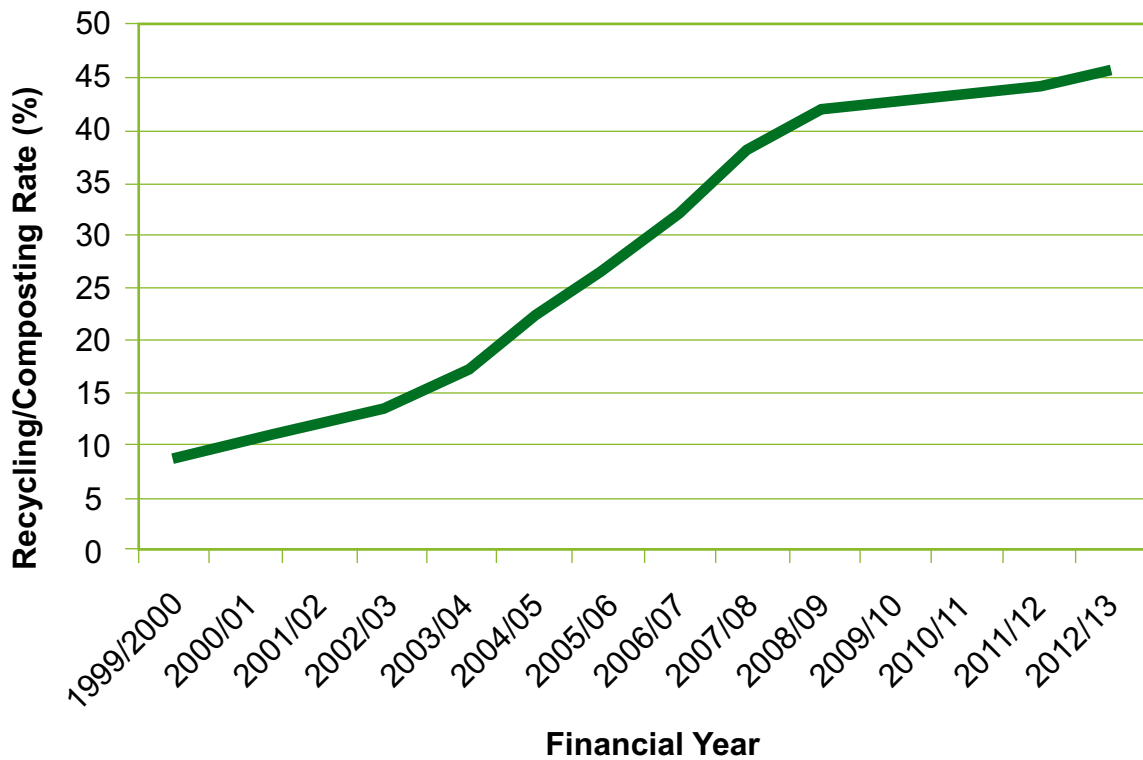
⁴ Environmental Benefits of Recycling, WRAP, 2006 and 2010 update



3. What we have achieved so far

Since 2006 a lot of work has been completed to deliver and promote sustainable waste management in Derbyshire and Derby City. Improvements to recycling services and increased public participation in recycling and composting has meant that the recycling rate in Derbyshire and Derby rose to 45.5% in 2012/13. Figure 4 below shows how recycling and composting rates have changed since 1999/00.

Figure 4 - Derbyshire and Derby City Recycling and Composting Performance





The improvement in the recycling and composting rates are due to a number of reasons which include the following:

- **Improved kerbside recycling and composting collection services;**
- **Increased participation in recycling and composting services by householders;**
- **Development of a new In-Vessel Composting (IVC) facility at Buxton in High Peak to turn garden and kitchen waste collected from households into high quality compost;**
- **Providing new Household Waste Recycling Centres (HWRC) at Ashbourne, Bolsover, Buxton, and Matlock;**
- **Employment of Recycling Advisors who provide information to help householders reduce, reuse, recycle and compost more;**
- **Encouraging schools to become Eco Schools by providing teacher training, classroom support and interactive theatre productions;**
- **Running a wide range of promotional campaigns to encourage householders to reduce, reuse, recycle and compost more. These have focused on reducing the amount of food thrown away, composting at home, using real nappies and reused items such as furniture and electrical items.**





4. Current Waste Management Services and Performance

Geography and Demographics

Derbyshire and Derby City cover an area of 1,015 square miles which includes approximately three quarters of the Peak District National Park. The population of Derbyshire is 769,686 and Derby City is 248,752⁵ averaging approximately 2.2 inhabitants per household. Three quarters of the population are concentrated in the eastern side of the county with Derby and Chesterfield being the main centres of population. The west of the county contains less than 25% of the population.

The rural nature of the County, population spread and the location of a National Park in the County all present challenges for the provision and operation of efficient waste management services and infrastructure.

Current Council Waste Services

Waste collection services are provided by Derby City Council and each district and borough council either through private waste contractors or by the council's own teams. Each council is responsible for the planning, provision, management and funding of these services with each being determined by local priorities.

Kerbside Collections

All councils offer a fortnightly recycling collection service at the kerbside with the principal materials collected being paper, cardboard, cans, glass and plastic. A number of councils also collect drinks/food cartons and batteries. Recyclable materials are either collected in vehicles which have different compartments to keep materials separate or are collected mixed together. When materials are mixed they are sorted before being processed into new recycled products.

General waste is collected fortnightly by all councils.

Garden waste is currently collected free of charge by all councils⁶. A mixed food and garden waste service is offered by three of the nine councils and the development of a second composting facility in the County will increase this number to six. One council offers a separate weekly food waste collection service which began in October 2012.

Trade Waste⁷ and Bulky Collections

Derby City Council and the district and borough councils all operate a trade waste collection service. Four councils offer some form of trade waste recycling service to their trade waste customers with Derby City and Erewash offering recycling for five or more materials.

⁵2011 census data, Office for National Statistics

⁶Derby City is switching to a chargeable service for garden waste commencing April 2014.

⁷Waste collected by the councils from commercial properties.



All councils offer householders a chargeable bulky household waste collection service for larger household items. One council diverts collected reusable furniture items to a reuse organisation and the other councils encourages householders to send furniture to other reuse organisations who accept good quality furniture and other large household items for reuse.

Household Waste Recycling Centres

Household Waste Recycling Centres (HWRCs) are sites where householders can take items that may be too large or bulky to be collected through their normal kerbside waste collection service, for example, electrical items, garden cuttings, furniture. There are ten HWRCs across Derbyshire including one in Derby City. In the last five years the number of centres has increased from six to ten.

A wide variety of materials are accepted for reuse, recycling and composting at each of the centres including wood, oil, batteries, paper, cardboard, metals, textiles, glass, furniture, plastic bottles, garden waste and electrical items.

Treatment and Disposal

The county and city councils (being responsible for disposal of waste) awarded a contract in December 2009, for the operation of HWRCs, waste reception, transfer, treatment and disposal services which started in April 2010. The contractor, Resource Recovery Solutions (Derbyshire) Ltd (RRS) has sought planning permission for a waste treatment facility, which could treat 190,000 tonnes of general waste per year, to be located at a site in Sinfin, Derby. The facility would sort and remove recyclable material from a proportion of the waste with around 140,000 tonnes each year being treated to produce energy. The planning process for this facility is on-going. Treatment and disposal is therefore not part of this review.

How much waste is produced in Derbyshire?

In 2012/2013 approximately 487,800 tonnes of waste⁸ were produced across Derbyshire and Derby City. This tonnage is equivalent to approximately 1 tonne per household per annum.

The majority of this waste is produced from households as shown in Figure 5 with approximately 10% of the overall waste coming from commercial collections of waste from businesses.

⁸Local authority collected waste.



Figure 5 - Breakdown of Waste Collected by Local Councils

Waste from Households
449,400 tonnes
(90%)

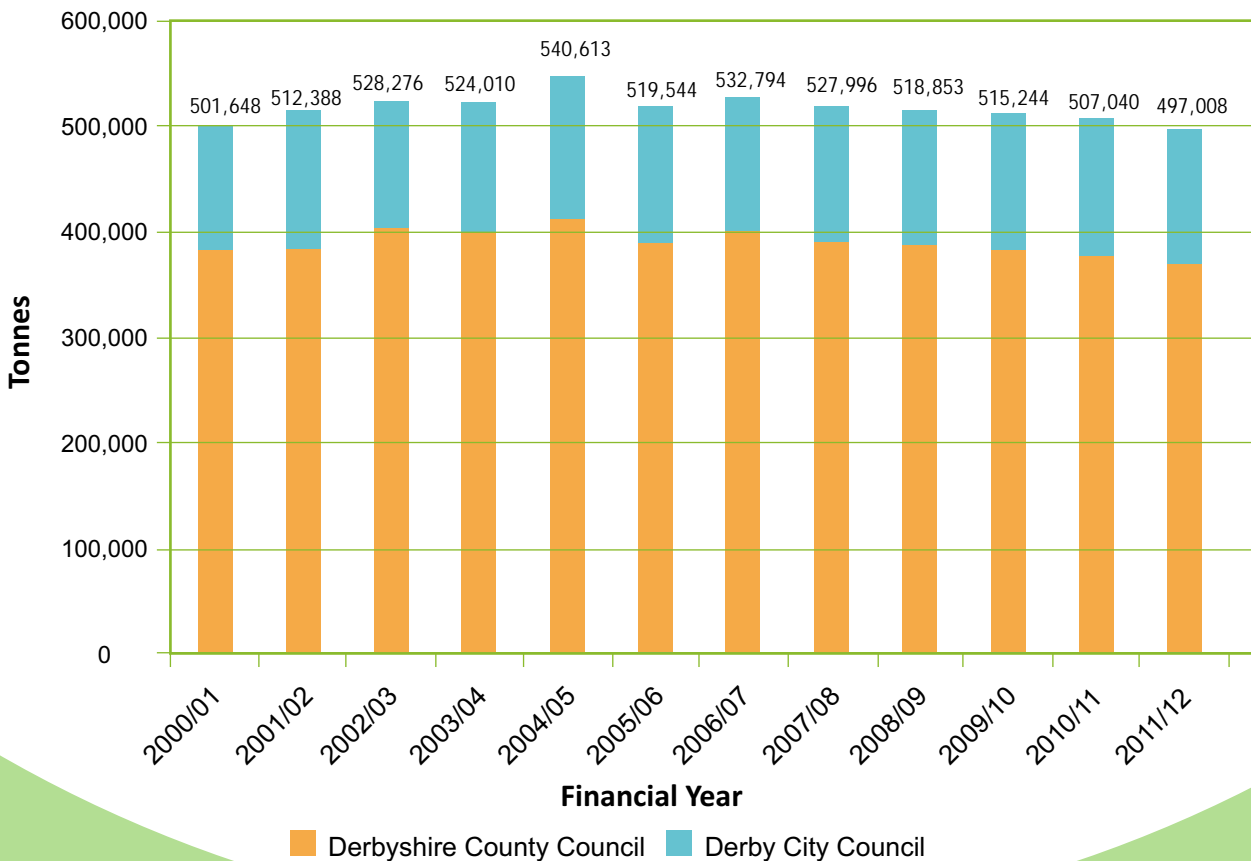


Waste from Businesses
38,400 tonnes
(10%)

Waste Trends

Overall quantities of waste produced at a national and local level generally mirror patterns of economic growth and decline. Figure 6 highlights how overall quantities have been reducing in line with the economic decline which the UK economy has been experiencing since 2008 and it is therefore likely that waste will increase as the economy recovers and grows.

Figure 6 - Waste arising in Derbyshire and Derby City since 2001





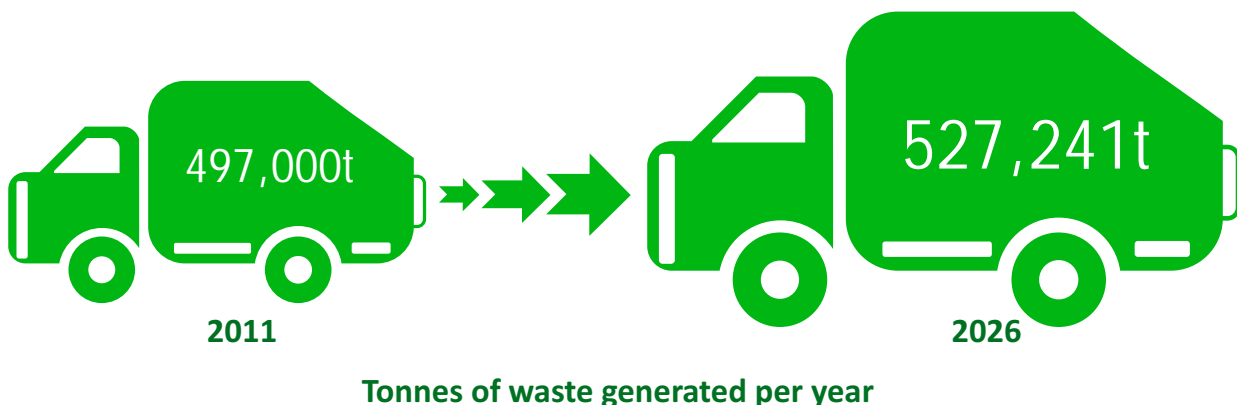
There are also other factors which have influenced the overall quantities of waste produced. These include population and housing growth, householder's purchasing behaviour, and weather (which can impact on the amount of garden waste produced). Overall there has been a declining trend in the quantities of waste being produced per household.

The population of Derbyshire is estimated to have increased around 6% in the period from 2001-2010, with a further increase of around 19% estimated to take place from 2010-2035. The main areas for growth being South Derbyshire (30.6%) and Derby City (26.2%), although all districts/boroughs are predicted to show population growth of over 10% during this time frame.

There is also a predicted growth of housing that is related to the rise in population, with South Derbyshire, Derby City and Amber Valley estimated to see an increase of 15% or higher in the number of households in the period 2008-2023, other district and boroughs are estimated to increase by 9.13%.

These predicted increases in population and housing mean that more waste is likely to be generated across Derbyshire and Derby City which will need to be managed. For the purposes of planning the waste strategy it has been assumed that waste will continue to grow in the future at a rate of approximately 0.4% per annum⁹. Figure 7 shows the predicted waste growth from 2011 to 2026.

Figure 7 - Forecasted Waste Growth in Derbyshire and Derby City



⁹Derbyshire and Derby City Joint Municipal Waste Management Strategy
Waste Forecasting Report 2013.

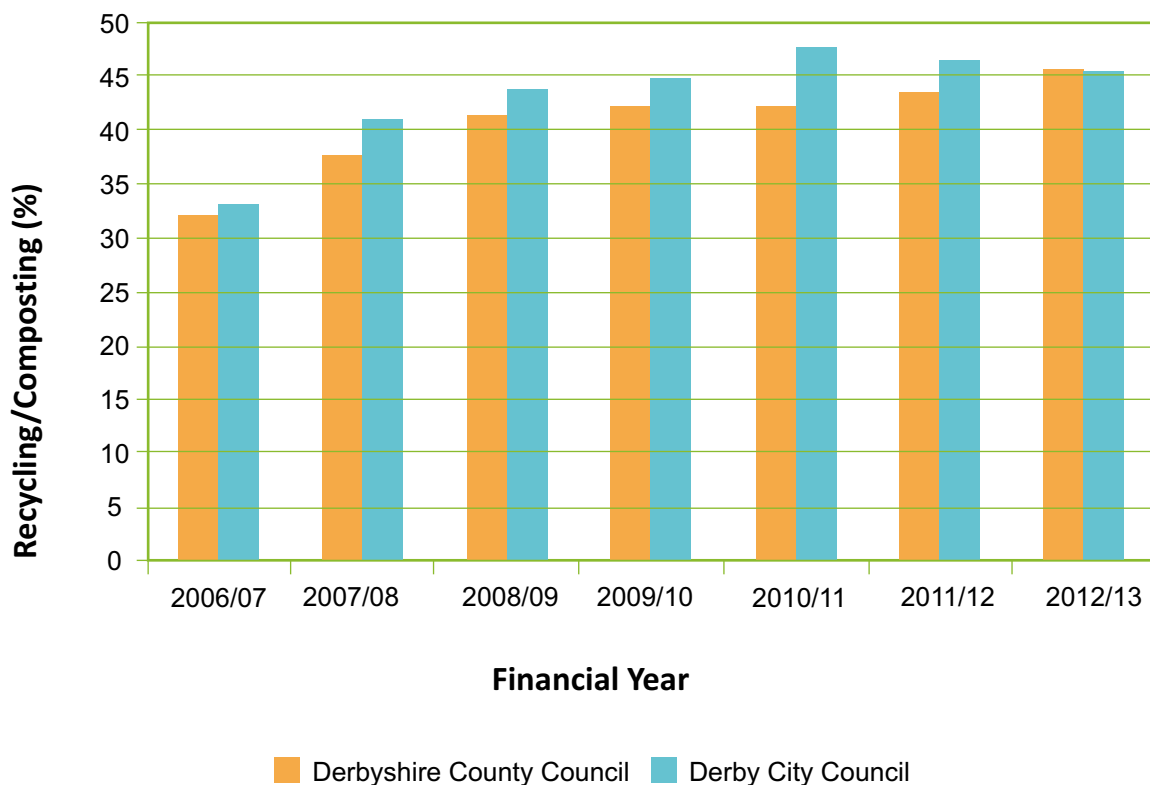


Recycling and Composting Performance

Since 2006/07 there has been a significant increase in the quantity of material collected for recycling and composting as shown in Figure 8. This has been due to significant investment by all the councils in better recycling services accompanied by increased recycling and composting by householders. In 2012/13 Derbyshire County Council achieved a recycling rate of 45.5% (a combined total of the eight districts and HWRC performance) and Derby City Council 45.4%. This is an increase from 31.6% in Derbyshire County and 32.7% in Derby City in 2006/07.

However, over the last two years around half of the councils have experienced a levelling off or a slight decrease in recycling and composting performance. This is due to a number of linked issues including householders purchasing fewer goods during the economic downturn and technological change resulting in changes in packaging material composition (for example, light weighting where manufacturers reduce the weight of products such as plastic, glass, cans and newspaper).

Figure 8 - Summary of Household Waste Recycling Performance





Disposal of General Waste

Waste not diverted for recycling and composting is primarily sent to landfill. There has been a 26% reduction in the amount of waste sent to landfill over the seven year period from 2006/07 to 2012/13. This is as a result of a decline in the overall rate of waste being produced and an increase in the amount of material sent for recycling and composting. A proportion of waste has also been sent for energy recovery rather than to landfill as part of the long term contract with RRS.

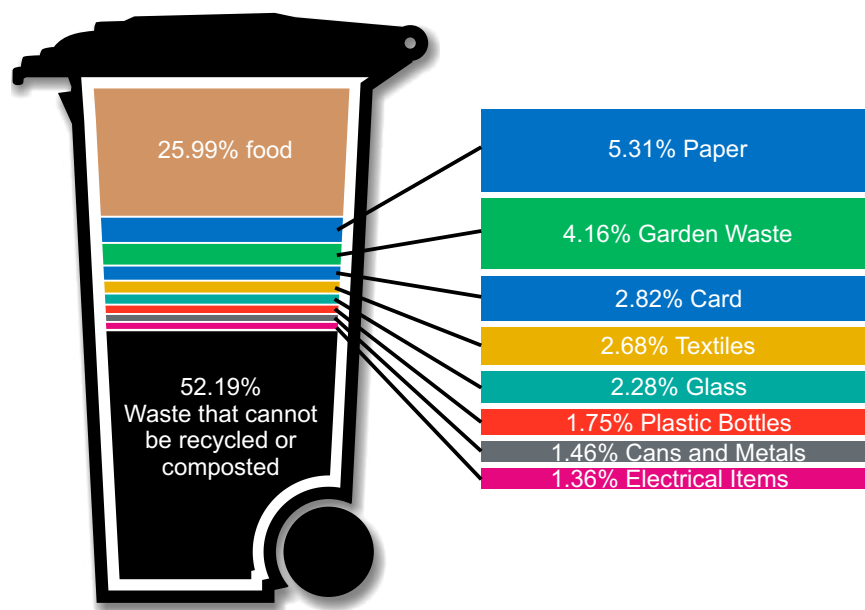
However, even with good recycling and composting performance, 208,300 tonnes of waste was still sent to landfill for disposal in 2012/13. We therefore need to do more to reduce waste and increase the amount of waste recycled or composting.

What's in the waste bin?

Waste from households is primarily made up of material such as plastic, paper and compostable waste such as garden and food waste. Even with the good recycling rates being achieved by Derbyshire and Derby City householders, there is still a high proportion of material that could be recycled and composted that is being thrown away in the general waste bin.

Based on a recent survey looking at what materials are thrown away in Derbyshire¹⁰, 89,000 tonnes (47%) of our discarded waste could be recycled. Figure 9 shows what we throw away. The largest element thrown away by householders was food waste with paper, cardboard and garden waste making up the next highest proportions.

Figure 9 - The Derbyshire Waste Bin in 2011



¹⁰Derbyshire Waste Composition Analysis Weighted Seasonal Results Feb Nov 2011, MEL Research

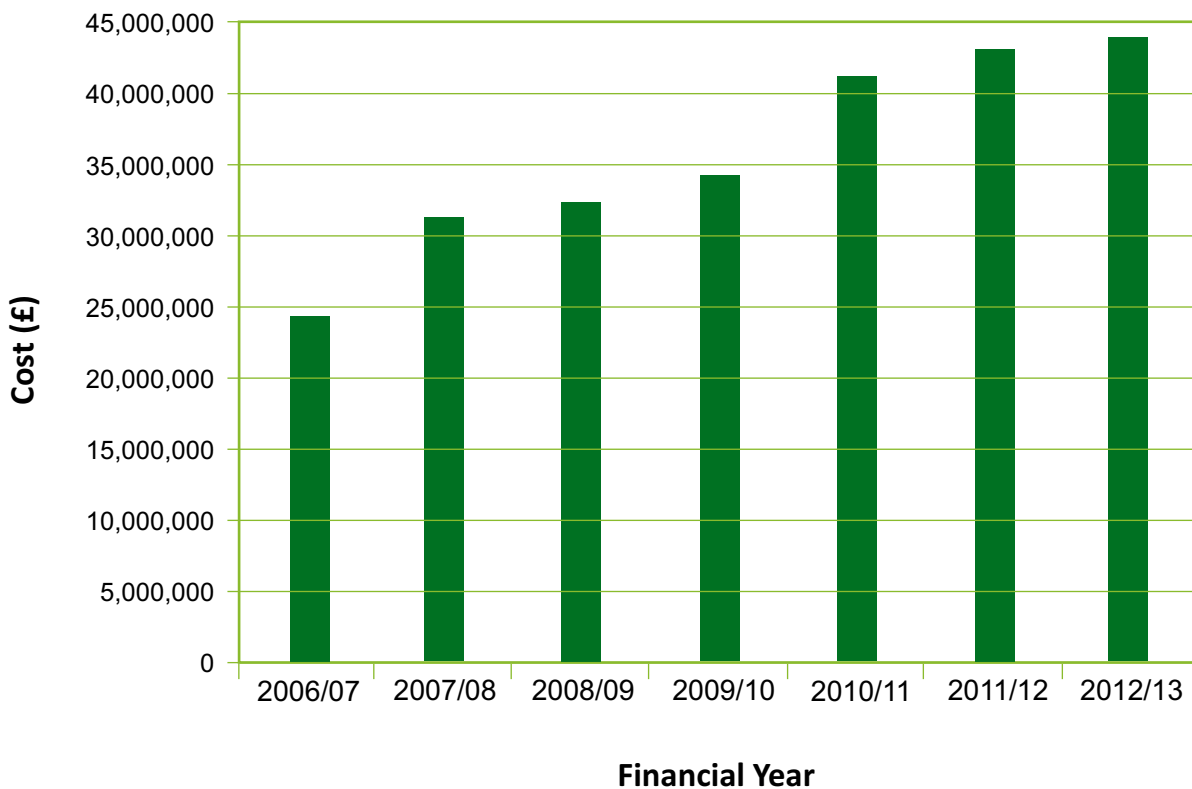


The Cost of Dealing with our Waste

Collecting, treating and disposing of our waste has a significant cost to council tax payers. This cost is increasing year on year. In 2012/13 the cost of managing HWRCs composting waste and disposal of general waste (excluding collection costs) was £43.9 million in Derby City and Derbyshire compared to £24.3 million in 2006/07.

The cost of managing waste has been significantly increasing each year due to the rising cost of landfill tax. For each tonne of waste landfilled landfill tax has to be paid in addition to the price paid to the landfill site operator. Since being introduced landfill tax has been increasing by £8 per tonne each year and is set to reach £80 per tonne in 2014/15. Government has stated that a minimum level of £80 per tonne will be in place until 2020. This escalating tax has been designed as a financial incentive to divert waste from landfill. Reducing the amount of waste that is produced is the best way of reducing this cost as well as our impact on the environment.

Figure 10 - Derbyshire and Derby City Annual Cost of Waste Disposal





5. How Do We Achieve the Strategy Vision?

To achieve our vision for waste management in Derbyshire and Derby City we all need to work together to make the changes happen, this means all householders and the councils in Derbyshire doing more. There are many different actions that can be taken to support the strategy so that there is a visible change in behavior and attitudes which will improve performance against our objectives and targets.

In the last five years, all councils in Derbyshire have made changes to the services that they provide to make it easier for householders to recycle and compost and to send less waste to landfill. Collection systems are now broadly similar across all councils and include recycling of paper, cardboard, glass, cans, plastic and garden waste. There is still a large proportion of our waste thrown away that could be recycled or composted and in order for this to happen we need householders to participate further.

As part of the strategy review the DWP in consultation with lead elected members and other key stakeholders identified a range of different options and activities which would achieve the strategy objectives and targets. These options are deliberately focused on the higher levels of the waste hierarchy; namely waste prevention, reuse, recycling and composting. Focusing on these key areas will help to achieve the priorities of reducing waste, increasing recycling and composting and diverting more waste from landfill.

The proposed options were assessed against the vision and strategic objectives to create a shortlist of delivery options. The shortlist includes a wide range of activities for councils to choose from which are suitable for their local circumstance. This allows for the strategy to be delivered in a flexible way that is balanced with the pressures of the current financial climate and the challenges being faced by the public and private sectors.



This strategy document provides a framework for action in Derbyshire supported by individual council actions plans that are specific to local needs. The combination of these two elements, working together will help to achieve the vision.



Shortlist of Delivery Options

The following section summarises the shortlisted options that are available to each council against the higher levels of the waste hierarchy. An indication of annual cost¹¹ of delivering each option is given based on the key in Table 1.

Table 1 - Cost of Delivery Options

Cost	-££££	£1 million +
	-£££	£1/2 million up to £1 million
	-££	£100,000 up to £1/2 million
	-£	Up to £100,000
	£0	Cost Neutral
Saving	+£	Up to £100,000
	+££	£100,000 up to £1/2 million
	+£££	£1/2 million up to £1 million
	+££££	£1 million +

Each council has identified and prioritised the delivery options in a waste action plan, that can contribute to the overall strategy vision, objectives and targets in their local area based on their current performance and available resources.



¹¹The cost figures are indicative and have been determined using estimates from industry for the purposes of the strategic comparison of options. Actual and contractual prices may vary.



Waste Prevention

One of the biggest challenges facing all of us is to reduce the amount of waste we produce at home, at work and in other aspects of our daily lives. It is vital that householders have the correct information and knowledge to enable them to prevent waste.

We have become used to being able to purchase a wide range of electrical goods, food, clothes and household items and then throw things away and purchase new ones easily and at relatively low cost. Waste prevention is about making different decisions and choices about the things that we buy and use.

Ways to prevent waste include the following activities:

- **Deciding not to upgrade products when existing ones still work;**
- **Not buying items that are heavily packaged, have a short lifespan or are low quality;**
- **Buying items that last longer and can be repaired;**
- **Planning meals and food purchases and using up leftovers to minimise food waste;**
- **Buying items in refillable containers;**
- **Composting at home.**

In the future it may not be as easy to buy goods cheaply as the demand for raw materials will become greater and rare earth metals will become more expensive. The cost of food, energy and water will also increase alongside non-renewable resources such as fossil fuels, metals and other minerals.





Waste Prevention Delivery Options

Table 2 details the list of options that can help us prevent waste from occurring in the first place and are listed in no particular order.

Table 2 - Waste Prevention Delivery Options

	Waste Prevention Options	Option Description	Indicative Cost
1	Reduce residual bin size/capacity	Make bins for general waste smaller to encourage more recycling and composting	-££
2	Effective 'side waste' policy to ensure additional waste that cannot fit into the bin provided is not collected	Not collecting extra general waste put at the side of the main bin	-£
3	Home composting promotional campaign including home digestion	Continue to promote home composting	-£
4	In-house waste prevention by councils	Make sure that councils minimise waste being produced within their own organisations	-£
5	Love Food Hate Waste promotional campaign to reduce food waste	Encourage people to waste less food by planning meals, only buying and cooking what's needed, storing food properly and using up leftovers	+££



6	Education, promotion, awareness raising to increase public understanding and engagement of waste prevention	Run more promotional campaigns to schools and householders to encourage everyone to minimise waste	+£
7	Promotion of SMART (Save Money And Reduce Trash) shopping	Encouraging households to help the environment by buying items with less packaging, using reusable bags and buying refill packs and recycled products	+£
8	Junk mail promotional campaign	Continue to promote ways people can help reduce the amount of junk mail they receive	+£
9	Lobby government and relevant organisations on waste prevention issues	Lobby government and relevant organisations on waste prevention issues	-£

Reuse

If waste cannot be prevented then the next best option is to reuse or repair items. There is often value in the things we throw away and looking for alternative uses for these items is best. Many people already do this instinctively.

Ways to re-use items include the following:

- Giving items and clothes to friends and charity;
- Selling items via online auction sites and at car boot sales;
- Exchanging items via online sites such as Freecycle or Freegle;
- Using retailer schemes which take back furniture and electrical appliances when new ones are bought;
- Hiring items which may be used only once e.g. tools and cleaning equipment.



Reuse Delivery Options

Table 3 below details the list of options that can help us re-use waste and are listed in no particular order.

Table 3 - Reuse Delivery Options

	Reuse Options	Option Description	Indicative Cost
1	Partnering with and promoting / incentivising third sector activity on reuse	Work with charities to encourage people to donate more unwanted items rather than throwing them away	£0
2	Reuse at HWRCs including electricals (WEEE) and other items.	Provide reuse points at recycling centres for items such as electrical items and furniture	-£
3	Bulky waste reuse	Increase the reuse of furniture and large items collected by councils	£0
4	Promotion of Freecycle / Freegle	Promote websites where people can find a new home for items they no longer need	+£





5	Promotion of Auction Sites	Promote online auction sites where unwanted items can be sold	+£
6	Lobby government and relevant organisations on reuse issues	Lobby government and relevant organisations on reuse issues	-£
7	Education, promotion, awareness raising to increase understanding and engagement of reuse	Run more promotional campaigns to schools and householders to encourage everyone to reuse waste	+£





Recycling and Composting

Each council in Derbyshire has put in place systems to collect materials for recycling and composting. It is important that these systems are used to the full and that the correct materials are placed in the different recycling containers. Recycling markets demand material that is of good quality, otherwise this can lead to additional costs (often to the council) to deal with unwanted items or poor quality material. Only placing materials that have been requested in recycling and composting containers is therefore very important. Councils will continue to support householders by providing information about what they can recycle and compost in their areas.

Recycling and Composting Delivery Options

Table 4 details the options that can help us recycle and compost waste and are listed in no particular order.

Table 4 - Recycling and Composting Delivery Options

	Recycling and Composting Options	Option Description	Indicative Cost
1	Trade waste recycling	Recycle more waste collected by the councils from businesses	£0
2	Greater range of materials collected from the kerbside / bring sites / HWRCs	Collect a greater range of materials for recycling & composting from households and at recycling centres	-£
3	Incentive reward schemes	Develop incentive or reward schemes for householders to encourage recycling	+£
4	Reducing contamination in recycling and composting	Raising householders' awareness of what can be recycled and composted and monitoring that the right things are being recycled and composted	-£



5	Education, promotion, awareness raising to increase understanding and engagement in recycling/composting	Run more promotional campaigns to schools and householders to encourage everyone to recycle and compost	-£
6	Lower frequency of residual waste collection supported by weekly food waste	Collect general waste less often (every three weeks) whilst collecting food waste each week and recycling collections as normal	££££
7	Higher frequency of recycling collection	Collect recycling from households more often	-££
8	Separate food waste collection	Collect food waste from households in a separate container	££££
9	Bulky waste recycling	Increase the recycling of furniture and large items collected by the councils	£0
10	Lobby government and relevant organisations on recycling issues	Lobby government and relevant organisations on recycling issues	-£



How do the Options Deliver the Strategy Objectives?

The options outlined can all help in achieving the strategy vision and objectives, either directly or indirectly. Each option will support at least one of the objectives while others support all of the objectives.

A summary of how each option could support and contribute to the strategy objectives is given in Table 5. Those options providing direct support to an objective are coloured in blue and those providing indirect or partial contribution are coloured in green. Where an option does not support an objective no colour is used.

Table 5 - Contribution of Options to Strategy Objectives

Direct Contribution to Objective		Indirect / Partial Contribution to Objective									
Options	Objectives	1	2	3	4	5	6	7	8	9	10
		Reduced waste	Increased reuse and recycling	Reduced waste to landfill	Increased understanding and engagement	An accessible, efficient, effective and value for money service	Improved resource efficiency	Reduced carbon/climate change	Protection of natural resources	Management of non-household waste	Local self sufficiency
Waste Prevention Options											
1	Reduce residual bin size/capacity	Blue	Green	Blue	Green	Green	Green	Green	Green	Green	Green
2	Effective side waste policy	Green	Green	Blue	Green	Green	Green	Green	Green	Green	Green
3	Home composting promotional campaign	Green	Green	Blue	Blue	Green	Green	Green	Green	Green	Blue
4	In-house waste prevention by councils	Blue	Blue	Blue	Green	Green	Green	Green	Green	Blue	Blue
5	Love Food Hate Waste promotional campaign	Blue	Blue	Green	Blue	Green	Green	Green	Green	Green	Green
6	Education, promotion, awareness raising to increase understanding and engagement of waste prevention	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
7	Promotion of SMART shopping	Blue	Green	Blue	Green	Green	Green	Green	Green	Green	Green
8	Junk Mail promotional campaign	Blue	Green	Blue	Blue	Green	Green	Green	Green	Green	Green
9	Lobby government and relevant organisations on waste prevention issues	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green



Direct Contribution to Objective		Indirect / Partial Contribution to Objective									
	Objectives	1	2	3	4	5	6	7	8	9	10
		Reduced waste	Increased reuse and recycling	Reduced waste to landfill	Increased understanding and engagement	An accessible, efficient, effective and value for money service	Improved resource efficiency	Reduced carbon/climate change	Protection of natural resources	Management of non-household waste	Local self sufficiency
Reuse Options											
1	Partnering with voluntary organisations and promoting / incentivising activity on reuse										
2	Reuse at HWRCs including electricals (WEEE) and other items.										
3	Bulky waste reuse										
4	Promotion of Freecycle / Freegle										
5	Promotion of Auction Sites										
6	Lobby government and relevant organisations on reuse issues										
7	Education, promotion, awareness raising to increase public understanding and engagement of reuse										





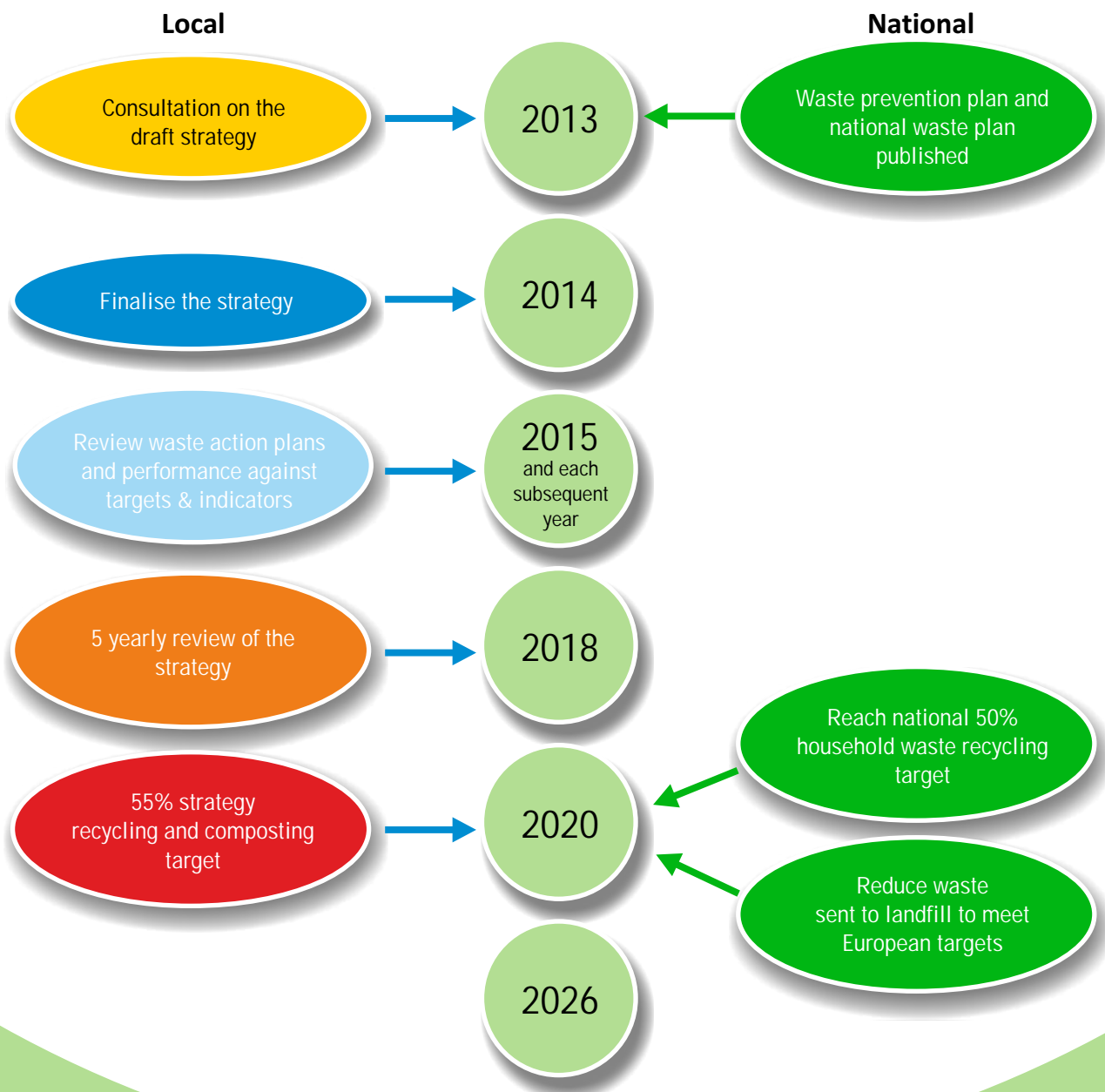
Direct Contribution to Objective		Indirect / Partial Contribution to Objective									
	Objectives	1	2	3	4	5	6	7	8	9	10
		Reduced waste	Increased reuse and recycling	Reduced waste to landfill	Increased understanding and engagement	An accessible, efficient, effective and value for money service	Improved resource efficiency	Reduced carbon/climate change	Protection of natural resources	Management of non-household waste	Local self sufficiency
Recycling and Composting Options											
1	Trade waste recycling										
2	Greater range of materials collected from the kerbside / bring sites / HWRCs										
3	Incentive reward schemes										
4	Reducing contamination in recycling/composting										
5	Education, promotion, awareness raising to increase understanding and engagement in recycling/composting										
6	Lower frequency of residual waste collection supported by weekly food waste										
7	Higher frequency of recycling collection										
8	Separate food waste collection										
9	Bulky waste recycling										
10	Lobby government and relevant organisations on recycling issues										



6. Delivery Timetable

Over the lifetime of this strategy the councils will implement their action plans and work with householders, communities and businesses to help them reduce waste, recycle more and use resources more sustainably. The timetable and key milestones to be considered in the delivery of the strategy and the waste action plans up to 2026 are set out below in Figure 11.

Figure 11 - Strategy Timeline





Measuring Success

Monitoring of performance against the vision and objectives in the strategy will take place every year subject to resources and individual council consultation practices. The following performance indicators set out in Table 5 will be used as a basis for this work.

Table 5 - Ways to Monitor Progress and Performance

	Performance Indicator	Unit/metric
1	Recycling/Composting Rate	% waste recycled and composted per year
2	Landfill Diversion	% waste diverted per year
3	Waste Reduction	Kg per person generated per year
4	Cost of Managing Household Waste	Cost per household for collection and disposal
5	Customer Satisfaction with Waste Services	% satisfied with waste collection and HWRC sites

The performance against these indicators will be monitored in conjunction with performance indicators identified during the SEA process and any significant changes will be highlighted, which may trigger a need for early review of the strategy.

The strategy will be reviewed every five years or where a substantial change in legislation, policy or other circumstance merits a review outside that timescale. This will ensure it remains fit for purpose and a strategic focus for the delivery of sustainable waste management in Derbyshire. The action plans will be reviewed on an annual basis.





Glossary of Terms

Biodegradable and Biodegradable Municipal Waste (BMW)	Waste such as garden waste, kitchen waste, paper and cardboard that is capable of breaking down with or without air.
Bulky Waste	Large items of household waste such as furniture or fridges, together with DIY waste or garden waste.
Climate Change (Carbon Impacts)	The term climate change is commonly used to mean global warming, but is also includes natural changes in the earth's climate. Climate change refers to the build up of greenhouse gases (produced by human activities) in the atmosphere that trap the sun's heat, causing changes in weather patterns on a global scale. Effects include changes in rainfall patterns, sea level rise, potential droughts and habitat loss.
Composting	An aerobic (in presence of air), biological process in which organic wastes such as garden and kitchen waste breaks down to form compost. Composting can be completed at home or on a larger industrial scale in the open or when food is involved within an enclosed system known as in-vessel.
Contamination	When materials which can't be recycled or composted are mixed in with recyclable or compostable waste. Contamination can result in recyclable or compostable waste ending up being rejected. Materials separated out by householders for recycling and composting are then wasted. The rejected materials have to be disposed of often to landfill which incurs a cost and can impact on recycling/composting performance.
Eco Schools	An international programme of environmental and sustainable developmental education for primary and secondary schools which aims to raise students' awareness of sustainable development issues through classroom study and community action.



<p>Energy Recovery</p>	<p>Waste is either burned directly, used as a fuel or treated to create a gas which is then burnt, to create heat which can be used to warm homes and buildings or to generate electricity using a steam turbine, or both, through combined heat and power systems.</p>
<p>Fossil Fuels</p>	<p>Fossil fuels are made from the remains of ancient plants and animals, buried deep inside the earth for millions of years. Over a long, long time, heat and pressure has turned these remains into the fossil fuels that we call coal, oil and natural gas. Fossil fuels are non-renewable, which means that one day they will be all gone.</p>
<p>Greenhouse Gas</p>	<p>Gases in the atmosphere that greatly affect the temperature of the earth. Includes carbon dioxide, nitrous oxide, methane and water vapour.</p>
<p>Household Waste</p>	<p>Household waste includes all mixed waste that is collected from households; all materials taken to local 'bring banks or collected at the doorstep or kerbside for recycling and composting; all waste taken to the Household Waste Recycling Centres (apart from waste arising from construction and demolition work).</p>
<p>Natural Resources</p>	<p>Natural resources are things that occur naturally and that are useful to us. They include fossil fuels such as oil and natural gas and materials such as iron ore and timber. Natural resources may be renewable or non-renewable. Non-renewable resources exist in fixed amounts or are used up faster than they can be replaced in nature e.g. fossil fuels.</p>
<p>Recovering Value from Waste</p>	<p>The process of recycling, re-use, reclamation or any other process with the goal of extracting secondary raw materials followed by creating energy from residual waste which would otherwise go to landfill. Tackling inefficiencies which can occur in the way goods</p>



Resource Efficiency	and services are produced including reducing overuse of resources and waste being generated. Being more material resource efficient means using less to produce the same level of goods and services.
Self-sufficiency	Waste where possible should be managed within the area where it has arisen provided there are no unacceptable adverse effects - on people, the environment or transportation systems. The principle cannot always be rigidly applied given that commercial considerations may override boundary issues. Also it may not be feasible or practical to treat certain wastes (e.g. special or hazardous wastes) close to its source of arising.
Sustainable Waste Management	Ensuring that material resources are used efficiently to cut down on the amount of waste produced. Managing waste up the 'waste hierarchy', prioritising prevention, preparing for reuse, recycling and composting, other recovery and disposing only as a last resort.
Sustainable Development	Sustainable development is 'development that meets the needs of the present without compromising the ability of future generations to meet their needs'.
Household Waste Recycling Centres (HWRCs)	A site at which householders can deposit household waste free of charge for reuse, recycling, composting or disposal.
Incineration	Incineration is a waste treatment technology that involves the burning of waste materials until nothing but ash remains.
In-Vessel Composting (IVC)	A process by which organic waste is composted inside enclosed units in the presence of air.
Landfill	A waste disposal site where waste is deposited onto or into the ground. Landfill sites are often located in disused quarries or mines.



Landfill Directive	The Landfill Directive, more formally known as the Council Directive 1999/31/EC of 26 April 1999 on the landfill of waste, is a European Union directive issued by the European Union. The Directive's overall aim is "to prevent or reduce as far as possible negative effects on the environment, in particular the pollution of surface water, groundwater, soil and air, and on the global environment, including the greenhouse effect, as well as any resulting risk to human health, from the landfilling of waste, during the whole life-cycle of the landfill.
Landfill Tax	Introduced in October 1996, landfill tax has to be paid by landfill site operators on every tonne of waste going into landfill. The cost of this tax is passed onto the customers using the landfill site. The tax was set up to reduce the UK's reliance on landfill for disposal of waste and reduce the associated environmental impacts.
Lobbying	A legal and legitimate act of attempting to influence decisions made by officials in the government.
Local Authority Collected Waste	All waste collected by or on behalf of a local authority.
Love Food Hate Waste	A campaign, launched by the Waste & Resources Action Programme (WRAP) in 2007, with the aim of reducing the amount of food waste produced in the UK.
Mailing Preference Service	The Mailing Preference Service (MPS) is a free service set up 20 years ago and funded by the direct mail industry to enable consumers to have their names and home addresses in the UK removed from lists used by the industry.
Municipal Waste	Household and commercial waste collected by a local authority and some construction and demolition waste received at recycling centres.
Non-Recyclable	Items or waste which cannot be recycled.
Recycling	Involves the reprocessing of wastes, either into the same product or a different one.



Residual /General Waste	Waste left after all the materials that can be recycled and composted have been removed.
Reuse	Using materials or products again, for the same or a different purpose, without reprocessing the materials.
Sustainable Procurement	A process where organisations buy goods and services in a way that achieves value for money but takes into account environmental and social aspects as well. It aims to generate benefits for the procuring organisation, society and the economy, whilst minimising damage to the environment.
Trade Waste	Waste from premises used wholly or mainly for the purposes of a trade or business or for the purpose of sport, recreation, education or entertainment. Does not include household, agricultural or industrial waste.
Treatment	Includes the activities involved in recovering or disposing of waste.
Unitary Authority	A type of local authority responsible for all local government duties in its area including waste collection and disposal.
Waste Collection Authority (WCA)	A local authority responsible for collecting household and some other wastes in the area covered by that authority.
Waste Disposal Authority (WDA)	A local authority responsible for managing the waste collected by WCAs and for providing HWRCs. Typically a WDA covers a larger area than a WCA with the exception of unitary authorities.
Waste Prevention	Actions or choices that prevent the generation of waste and include measures taken before a material or product becomes waste. Waste prevention reduces the amount of waste produced and the associated impacts on the environment.



Waste Hierarchy	Sets out the order in which options for waste management should be considered based on environmental impact. Prioritising prevention, preparing for reuse, recycling and composting, other recovery and disposing only as a last resort. It is a framework that has become a cornerstone of sustainable waste management.
WEEE	Waste electrical or electronic devices. Includes a wide range of small and large items and their components including hairdryers, games consoles, lawn mowers and TVs.





Large print, braille or another community language version of this document may be available on request. If you require a large print copy or other format please contact:

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Visit www.derbyshire.gov.uk/wastestrategy or www.derby.gov.uk/bins for more information about reducing, reusing, recycling and composting or to find out more about dealing with Derbyshire and Derby's waste.