

Waste Management Strategy for Solihull

Mid-point update - 2015



Foreword

Since the publication of our Waste Strategy in 2010, we have made significant progress towards achieving our targets.

We are making great progress thanks to the support and dedication of our residents who have embraced the recent changes that we have made to improve our recycling service. However there is still a lot more that we can do to manage our waste more sustainably with the ultimate aim of significantly reducing the amount of waste that we produce.

As a council, we have the responsibility to provide residents with the best service that we can and present as much opportunity as practicably possible to reduce, reuse, recycle and move towards resource management instead of disposal of rubbish. We have committed to do this through our Strategy. However as individuals we also have a responsibility for the waste that we produce and a key challenge is for us to try to change our behaviour and shopping habits to reduce the amount of waste that we collectively produce. Clearly retailers have a significant role to play in this too, but we must also play our part.

There are challenging times ahead. To reach 60% recycling, composting and reuse will be difficult, particularly as council finances are significantly stretched. To continue to improve our performance we will need the continued support of our residents and their feedback on our service.

As the Cabinet Member for the service area, I am committed to ensuring that we deliver an efficient and quality service to all residents in the borough. We will seek to provide more opportunities for reuse and develop our recycling service to make it accessible to all. We will also provide residents with the relevant information and necessary support needed to enable them to participate in the service.

We have come a long way from our 7% recycling rate and I am confident that we can continue to improve which will be to the benefit of Solihull and the environment as a whole.



Councillor Robert Hulland
Cabinet Portfolio Holder - Environment & Housing

Executive Summary

Solihull adopted its Municipal Waste Management Strategy in 2010, which set out the key aims and objectives for managing waste for the next 10 years. A commitment was made in the strategy to review and update our position in 2015.

Following the update, we have reaffirmed our commitment to the Strategic Vision that was agreed in 2010 and also renewed support for the 10 main strategy objectives.

SOLIHULL'S STRATEGY – VISION STATEMENT

Our vision is to manage Solihull's municipal waste as a resource that can be utilised for environmental benefit through a service that contributes to a cleaner, greener Borough. To provide a high quality, inclusive service that encourages residents of Solihull to fully engage in the opportunities to reduce, reuse and recycle wastes, to help reduce the carbon footprint of the Borough and to minimise the amount of residual waste left over. To recover energy and materials from the residual waste and minimise disposal to landfill. To work in partnership with other authorities, community groups and the private sector where there are demonstrable benefits in doing so. To deliver an efficient waste management service that represents best value and provides a sustainable and customer focussed operation.

Since the adoption of the Strategy, we have made progress towards our targets and the tasks identified in the Waste Strategy Action Plan.

Our recycling rate peaked in 2012 when we achieved a rate of 46%, we have since experienced a decline in our levels of recycling and have taken steps to increase levels of recycling and work towards our strategy target of 60% recycling by 2020.

We continue to send low quantities of waste to landfill, 11% in 2013/14 and will strive to reach and sustain our target to reduce landfill to 10%.

The supporting Waste Strategy Action plan will be updated accordingly to reflect progress against our targets and identifies future initiatives that we will put in place to enable us to reach our goals.

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The Strategy Update

Solihull adopted its Municipal Waste Management Strategy in 2010. The Strategy establishes a framework for managing Solihull's waste from 2010 until 2020.

A commitment was made to update the Strategy at its mid-point in 2015, to determine if the focus and targets set in 2010 are still relevant and applicable.

As part of this Waste Strategy update we have reviewed the targets and objectives and where appropriate we have updated the targets.

The original Waste Strategy Action Plan has also been updated and takes into consideration revised targets and achievements since 2010 and actions until the end of the Strategy period in 2020.

Why do we need a Waste Strategy?

We are tasked with adopting sustainable practices for managing waste with the disposal of waste being the last resort. Therefore, we need to establish a long-term vision and framework of how we want to manage waste. The Strategy provides a framework of how we plan to manage waste in the future and identifies the resources and finances required to achieve our objectives.

What does the Strategy Cover?

The Strategy focuses on waste collected by the local authority – 'local authority collected waste'. This is predominantly made up of household waste and other waste streams including fly-tipped waste, litter bin waste and street sweepings. The Strategy does not cover the collection of commercial and trade waste or construction and demolition waste.

What is the purpose of the update?

Since the Waste Strategy was adopted in 2010, how we manage waste has changed. We have made changes to the recycling service and there have been changes to the key legislative drivers which govern how we manage waste.

This update summarises how far with have come with respect to meeting the targets outlined in 2010 and considers what we need to aim for in the rest of the Strategy period, including whether the targets and objectives set in 2010 are still relevant.

Waste Strategy – Vision Statement

In developing the Waste Strategy the following vision statement was agreed which underpins the overall aims and objectives of the Strategy.

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The Vision Statement developed in 2010 is still relevant and summaries the principles of how we aim to manage waste in Solihull.

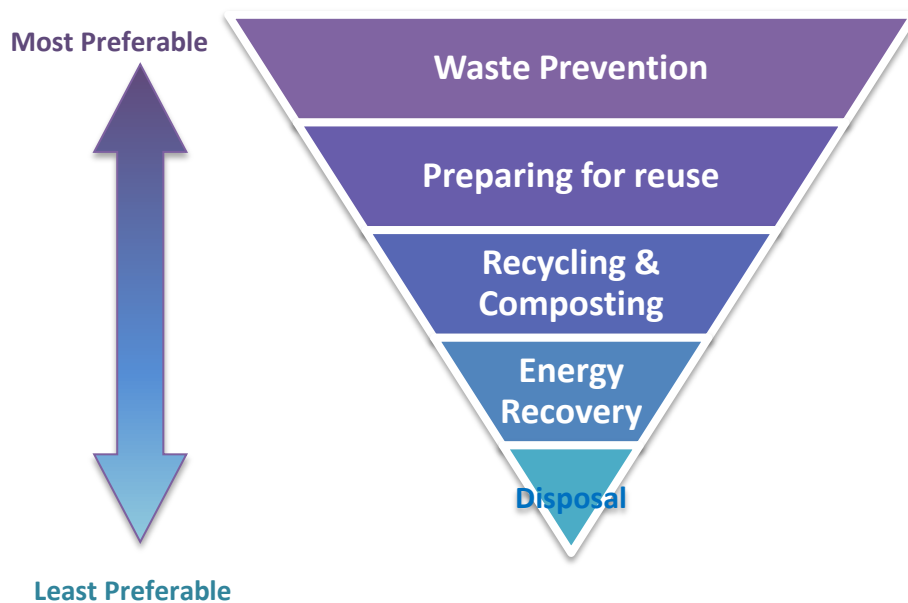
The Waste Hierarchy

The Waste Hierarchy sets out a preference for dealing with waste based on the potential environmental impact of each option. The aim is to move the management of waste up the hierarchy with the optimum solution being to prevent the generation of waste.

Clearly, other factors also need to be taken into consideration when considering how waste is managed, these include technical feasibility, social acceptability and ultimately cost.

An explanation of each of the stages in the hierarchy is provided in the following section.

Figure 1 - The Waste Hierarchy



Waste Prevention – Using less material in design and manufacture. Keeping products for longer, reusing and using less hazardous materials.

Preparing for reuse – Checking, cleaning, repairing, refurbishing whole items or spare parts.

Recycling & Composting – Turning waste into a new substances or products. This includes composting if the resulting product meets quality protocols.

Other Recovery – Includes anaerobic digestion, incineration with energy recovery, gasification and pyrolysis which produce energy (fuels, heat and power) and materials from waste.

Disposal – Landfill and incineration without energy recovery.

Key Legislative Drivers

There is an increasing shift in perception from waste being a problem to be disposed of, to considering and treating waste as a valuable resource. By recognising the value in waste we can reduce the use of raw materials and reduce our impact on the environment.

To focus this shift there has been a change in the legislation that governs the management of waste, particularly at a European level.

The key drivers for change in the management of waste are summarised in the following boxes. Key pieces of European legislation are shown in the green boxes.

Landfill Directive (199/31/EC)

- Aims to prevent or reduce the adverse effects of the landfill of waste on the environment
- Restricts the types of waste that can be landfilled
- Set targets to reduce the amount of biodegradable waste sent to landfill in the UK by:
 - 25% by 2010
 - 50% by 2013
 - 75% by 2020
- Was transposed into English law through the Waste Emissions Trading Act 2003, this legislation has since been revoked.
- Main driver to reduce landfill is the fiscal Landfill Tax, which is currently set at £80/tonne of waste landfilled.

Waste Framework Directive (2008/98EC)

- Reinforces the Waste Hierarchy
- Introduces a Duty of Care to ensure the Waste Hierarchy has been addressed for waste carriers, brokers and dealers
- Requires Member states to draw up a Waste Prevention Programme by 2013
- Requires the separate collection for recycling of paper, glass, cans and plastic by 2015
- Encourages the separate collection and recovery of biowaste
- Sets recycling targets:
 - Recycle 50% of household waste by weight by 2020
 - Recycle 70% of construction and demolition waste by weight by 2020
- Transposed into English Law through the Waste Regulations (England and Wales) (as amended) 2012

A review of the targets in the Waste Framework Directive has been carried out and it is proposed that the target for household recycling is increased to 70% by 2030. If higher targets are approved at an EU level, they will need to be transposed into UK law, we will then need to consider how we will strive to achieve the revised targets.

The following boxes provide details of key pieces of UK and English legislation which underpin how we manage waste.

Environmental Protection Act (EPA) 1990

- The EPA 1990 is a major piece of environmental legislation which covers a broad range of environmental topics, including the management of waste.
- There are no specific targets within the act, but with respect to waste it sets out the following requirements.
 - Identifies the roles and responsibilities of regulatory and other authorities including local authorities.
 - Identifies the regime for regulating and managing controlled waste, which includes household, commercial and industrial waste.
 - Establishes the Duty of Care and outlines provisions relating to litter, fly tipping and enforcement of Environmental Crime.
- The EPA is an evolving Act which incorporates changes which are introduced through EU policy or changes to National Policy.

The Waste (England and Wales) Regulations 2011 (amended 2012)

- This legislation transposes the EU Waste Framework Directive into English law.
- The regulations introduce a statutory requirement to take the waste hierarchy into consideration when making decisions about waste management options.
- The regulations introduce the following requirements:
 - Development of a National Waste Prevention Programme – which aims to break the link between economic growth and the environmental impacts of waste growth
 - Introduces a duty for authorities to separately collect paper, metal, plastic and glass by 1 January 2015. The separation of these materials applies where separate collection is necessary to ensure that waste undergoes recovery in accordance with the waste hierarchy and to facilitate recovery where it is technically, environmentally and economically practicable.
 - Development of National Waste Management Plans, which should set out the overall framework for managing waste.

The boxes below provide a summary of other pieces of relevant legislation and policy including policy specific to Solihull.

Batteries Directive (2006/66/EC)

- The Directive prohibits certain batteries from being sold where they contain mercury or cadmium and establishes rules for the collection, recycling, treatment and disposal of batteries and accumulators.

Packaging and Packaging Waste Directive (1994/62/EC)

- The Directive aims to limit the production of packaging waste and promote reuse, recycling and recovery of packaging material.

Controlled Waste Regulations 2012

- The Regulations identify sources of controlled waste as household, commercial or industrial waste and for which household wastes a collection and disposal charge can be made.

National Waste Prevention Plan for England 2013

- The aim of the waste prevention programme is to improve the environment and protect human health by supporting a resource efficient economy, reducing the quantity and impact of waste produced whilst promoting sustainable economic growth

Waste Management Plan for England 2013

- The Plan provides an overview of waste management in England, covering the management of municipal waste, industrial and commercial waste, construction and demolition waste and hazardous waste

Solihull Local Development Plan 2013

- The Local Development Plan, sets out a vision for future developments in the Borough until 2026. The Plan includes details of property growth in the borough and where key infrastructure sites could be located.

Document links

<u>Landfill Directive</u>	<u>Waste Framework Directive</u>
<u>Environmental Protection Act</u>	<u>Waste Regulations</u>
<u>Controlled Waste Regulations</u>	<u>Solihull Local Plan</u>
<u>Waste Management Plan</u>	<u>Waste Prevention Plan</u>
<u>Batteries Directive</u>	<u>Packaging and Packaging Waste Directive</u>

Changes since 2010

The following sections provide a summary of the key changes in the borough since the Strategy was adopted. These include changes in demographics, the economy and changes to the waste and recycling collection service.

Geography and Demographics

In 2011, the last census was carried out. This has provided an update on the population and demographics for the Borough. In addition to this, in 2014, the Local Development Plan for Solihull was approved. This sets out the future development and planning needs for the borough for the next 17 years (2011-2028) and includes the designation of land for property and infrastructure development within the borough.

According to the 2011 census information, the borough covers 17,829 hectares and has a population density of 11.6 persons per hectare compared to the average for England which is 4.1.

The borough has a population of 207,400 and 89,250 properties. Solihull has an aging population, with a higher proportion of the population aged 65 and over compared to the national average.

It is estimated that the population in Solihull will increase by 6.9% between 2011 – 2021, so by the end of the Strategy period the estimated population in Solihull will be 221,200, with 21% of the population being over 65.

In Solihull's Local Plan it is estimated that an additional 11,000 dwellings need to be built in the borough by 2028 to meet the needs of a growing and aging population, with an estimated total increase in properties of 14,000 in the period 2006-2028.

Within the plan it estimates that 500 additional properties will be built per year between April 2006 and 31 March 2028.

Combined, these factors will have an impact on the future delivery of the waste and recycling service, we will need to ensure that the service can cope with the differing demands of a growing and aging population.

Economic Changes

Since the Waste Strategy was approved in 2010, there have been significant changes to Government spending. In order to reduce the budget deficit, there have been unprecedented reductions in public spending. This has resulted in local authorities looking at new ways of delivering services and in some instances stopping services in order to balance expenditure.

There has also been a recession in England. Waste growth is linked to economic prosperity and as such, this has had an impact on waste generated in the borough over the past four

years. As the economy recovers we anticipate a potential rise in waste generated, as it is notoriously difficult to break the link between increasing prosperity and waste growth.

Recycling and Waste Services

The following sections provide a summary of the changes to the waste and recycling service since the Strategy was adopted in 2010.

Kerbside Recycling Collections

Since the Waste Strategy was adopted, we have forged ahead and have made improvements to our kerbside recycling service. Our aim was to increase the number of materials collected from the kerbside, to give more residents the opportunity to recycle and to make recycling as easy as possible.

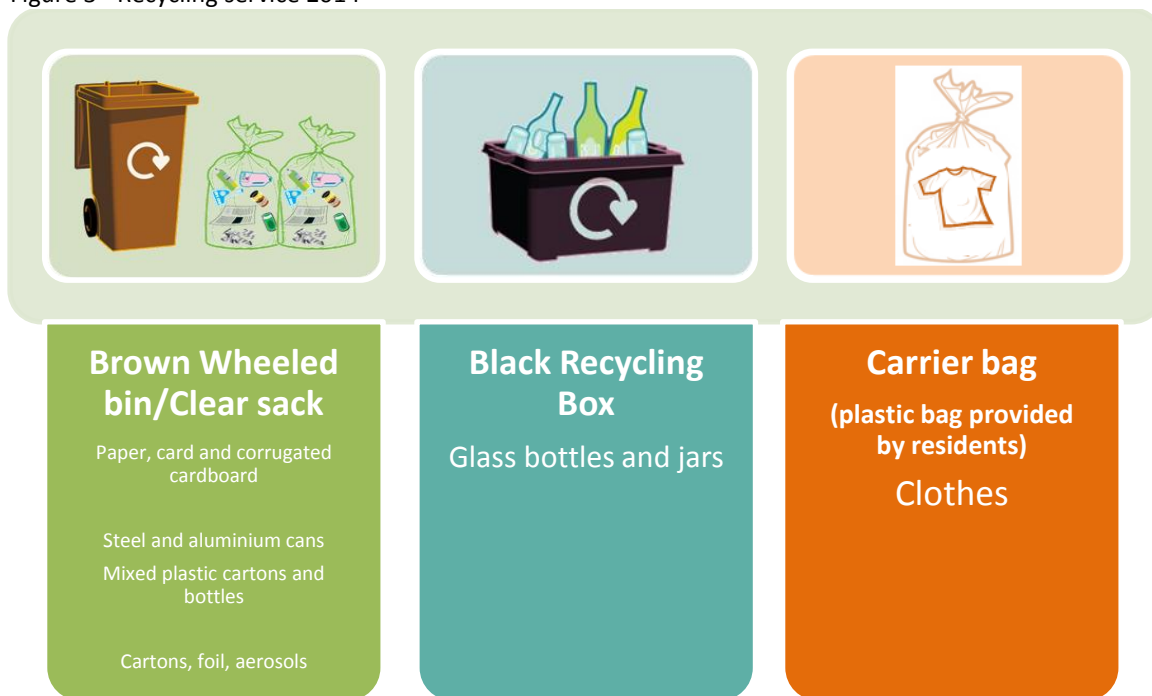
In 2011, we changed from a weekly collection for recycling (paper and glass was collected one week and plastic and cans the following week) to a fortnightly collection with the addition of mixed plastic and corrugated cardboard being collected from the kerbside. Recycling was collected in a combination of boxes and a white woven sack. The following figure summarises the changes made to the service in 2011.

Figure 2 - Recycling service 2011-2014



In September 2014, we introduced a 240 litre brown wheeled bin or clear plastic sacks for the contents of the green box and white sack – paper, plastic and cans and added cartons (tetra pak), foil and aerosols to the list of materials that can be recycled. The following figure provides a summary of the current recycling service.

Figure 3 - Recycling service 2014



We continue to collect glass separately in the black box. We also introduced a kerbside collection for clothes.

Recycling continues to be collected fortnightly on the opposite collection week to garden waste collections.

The rationale behind this change was to make recycling easier with less sorting for residents and to increase the capacity available for recycling. Combined these changes should also result in an increase in levels of recycling collected at the kerbside.

We have also extended the recycling service to more multi-occupancy properties – giving more residents the opportunity to participate in the kerbside recycling service.

Mini Recycling Centres

We continue to provide a network of Mini-recycling centres across the borough, however with the extension of the kerbside recycling service, we will be reviewing the provision of the Mini Recycling Centre sites. The aim is to develop a strategic network of well used sites which compliments the kerbside service provision.

On Street – Recycling Facilities

As outlined in the Waste Strategy we trialled the use of two on-street recycling units in Solihull Town Centre for a period of 6 months. The results of the trial were disappointing with the units being used for litter but minimal separation of the different recyclable materials being carried out. Subsequently the recycling compartments were heavily contaminated with general litter.

A further six month trial of the units was carried out on Shirley High Street. Again the disappointing results were replicated. Therefore, following the two trials, a decision was made not to implement on-street recycling across the borough.

Household Waste Recycling Centre

We continue to provide recycling facilities for large items of waste at Bickenhill Household Waste Recycling Centre. Since the Strategy was developed, we have revised our vehicle permit policy for vans, pick-ups and vehicles towing trailers. The changes require these vehicles to apply for a permit to use the site. In addition to this they are restricted to 12 visits per year and can only use the site between certain times Monday to Saturday.

The primary aim of the changes to the permit system was to reduce the potential for businesses and traders to use the site. The changes also improved access for other site users during peak visit times. The site is not licensed to take trade waste and is for use by householders in Solihull and not for business use.

As a result of the changes to the permit system, we have observed a reduction in the amount of waste that has been disposed of at the site.

Following an extensive monitoring period we have also changed the opening hours of the site. These have been reduced. We continue to seek opportunities to provide facilities for additional reuse and recycling at the site, within the operational constraints of the site.

Bulky Waste Collection Service

We provide a chargeable bulky waste collection service for large items that can be difficult to transport to the Household Waste Recycling Centre. To increase accessibility of the service we offer a 25% concession to residents who are in receipt of means tested benefits.

No Side Waste Policy

We operate a no side waste policy, whereby no additional bags of waste will be taken in addition to the wheeled bin or purple sacks provided. Any additional waste will be left and residents will need to make their own arrangements to dispose of the additional waste.

The following figure provides an overview of the main waste and recycling services provided.

Figure 4 - Summary of recycling and collection services



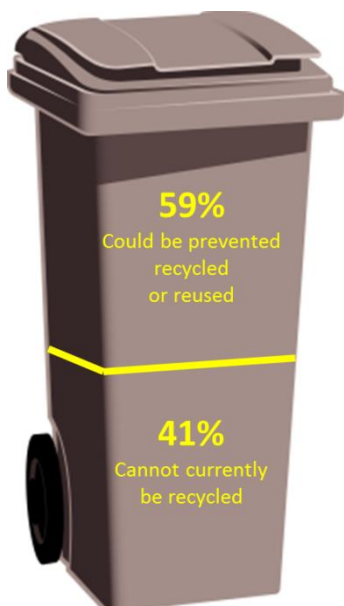
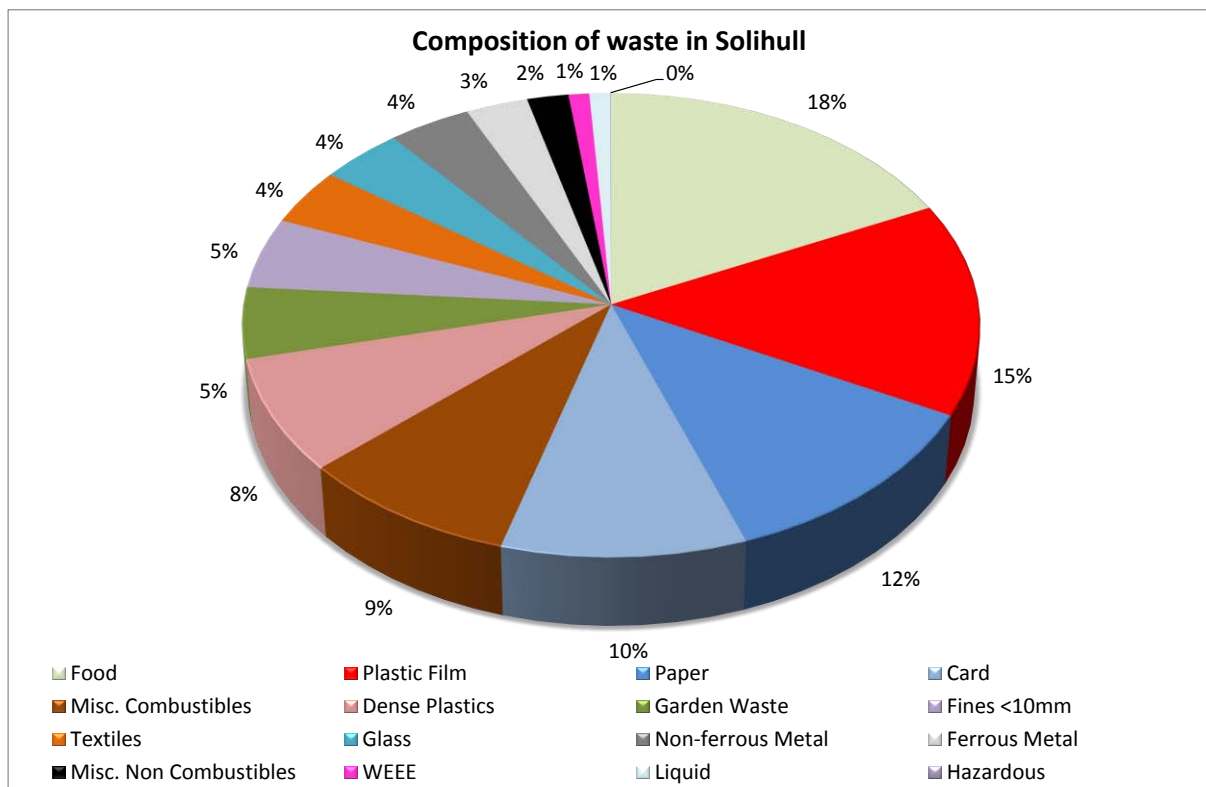
Performance Update

The following sections provide a summary of the performance of the waste and recycling service since the Strategy was adopted.

Material Collected

To gain an understanding of how much potentially recyclable material is still being thrown away, in November 2013, we undertook analysis of a small sample of rubbish collected for disposal. The results are summarised in the following chart.

Figure 5 - Waste Composition in Solihull



The results indicate that there is still a significant amount of potentially re-useable and recyclable material that could be removed from the bin. Approximately 59% of the waste thrown away could be recycled or reused. This includes food waste, 18% of the waste thrown away is food waste.

The generation of food waste has now been recognised as a problem at a national level and retailers are working to reduce the amount of food waste generated. However, this is also an issue that needs to be tackled at a local level through increasing awareness and engagement on the issue.

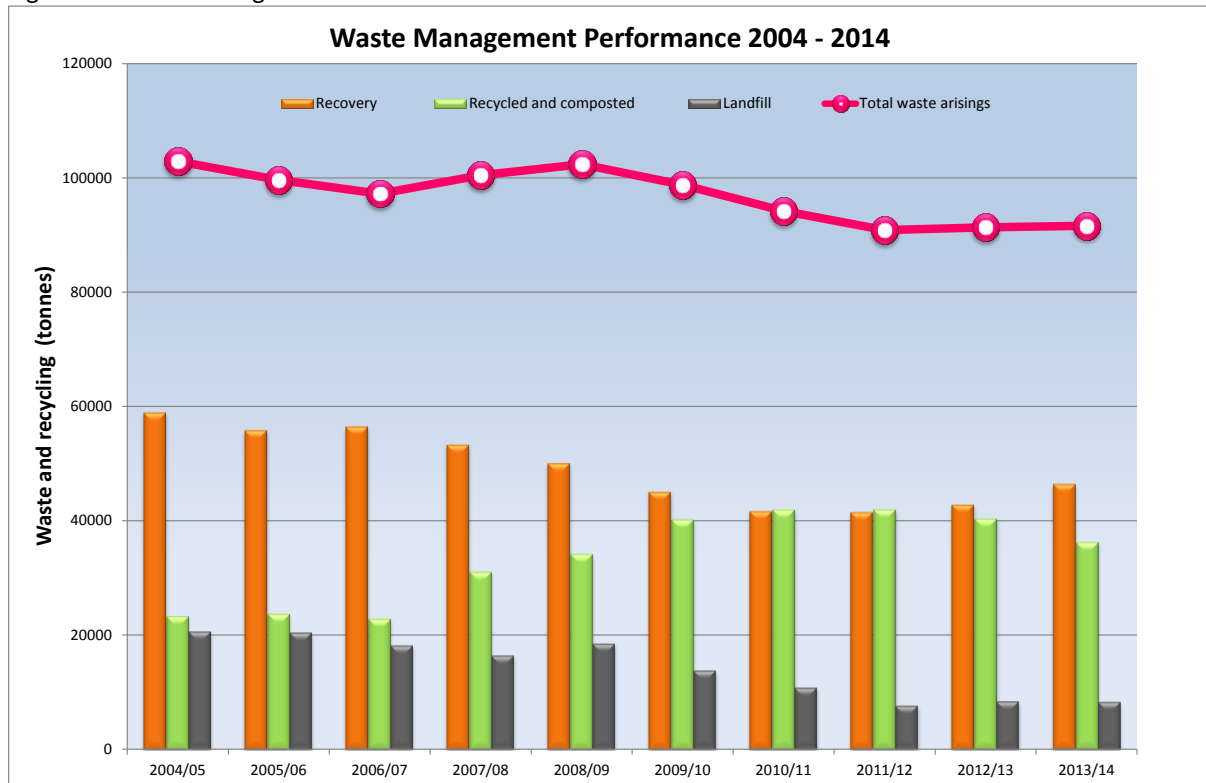
Performance Summary

Figure 6, shows that the majority of waste produced in Solihull is sent for treatment at the Energy from Waste Facility (EfW), located in Coventry. At the facility waste is incinerated at high temperatures and is used to generate heat and electricity. The electricity generated is used by the facility and any surplus is sold to the National Grid. The heat is used to heat civic buildings in Coventry City centre.

We have been actively separating out combustible waste at the Household Waste Recycling Centre to send it to the EfW in Coventry, this has contributed to a reduction in the amount of waste that is sent to landfill.

In Solihull we send a relatively small quantity of waste to landfill. This is primarily waste generated at the Household Waste Recycling Centre that cannot be recycled or sent for treatment at the EfW. The introduction of tighter van and commercial type vehicle controls in 2012 saw a reduction in the amount of waste that was sent to landfill. More recently we have recorded a slight increase in the amount of waste sent to landfill. This is in part due to a reclassification of street sweepings that have been processed as the organic fraction can no longer be classified as being recycled, it has to be classified as being landfilled (this is irrespective of the end use). This reclassification has impacted on most local authorities and has resulted in a decrease in the recorded recycling rate. In Solihull's case, this has led to a reduction of 3% in our recycling rate and an increase in our recorded landfill rate.

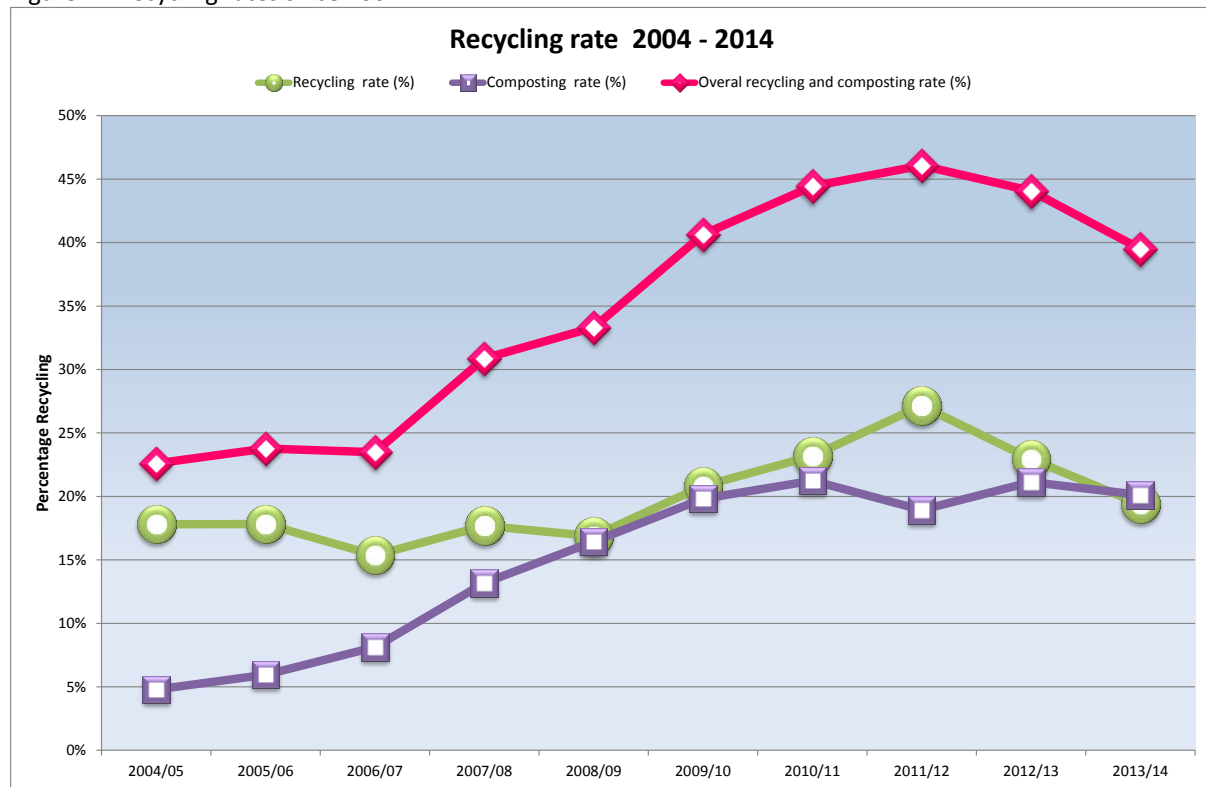
Figure 6 - Waste Management Performance since 2004



Recycling

Figure 7, shows how Solihull's recycling rate has increased significantly since 2004. Over the years both the rates of composting and recycling have increased. The overall recycling rate peaked at 46% in 2011/12, this was despite a poorer than average year for composting.

Figure 7 - Recycling rates since 2004



Since 2011/12 we have observed a reduction in the recycling rate. This can be partly explained by the re-classification of street sweepings, which has led to a 3% reduction in recycling. The national market for used wood also changed with used wood no longer being recycled but used to make fuel for biomass plants. This is not disposal but as it is not a recycling activity it is no longer possible to count it towards our recycling rate.

Changes to purchasing habits is also having an impact in Solihull and nationally, less newspapers are being purchased as we turn increasing to digital media for news. Through improvements in manufacturing and design, some materials have also become lighter. The average weight of glass bottles and cans has reduced and with a reduction in packaging being brought in by retailers for example, replacing the cardboard boxes in ready meals with a cardboard sleeve or removing cardboard altogether. These are important changes and are to be applauded, but they also have the impact of reducing the weight of potential available recyclable materials, which in turn impacts on recycling rates.

In Solihull we also believe that a lack of capacity for recycling had a negative impact on the amount of material presented for collection, therefore we anticipate that the new brown bins and clear sacks that have been issued for recycling will provide residents with the additional capacity to enable them to recycle more.

We are optimistic that by simplifying the recycling service, by collecting more materials and by providing more capacity for recycling that we will see an increase in our recycling rates and estimate that the changes will result in a 5% increase in our overall recycling rate, if not more.

Composting

Figure 8 shows the increase in overall levels of composting since 2004. The generation of garden waste is seasonally influenced, with extremes of weather having a significant impact on the amount of garden waste presented for collection. However, overall levels of composting remain fairly consistent, with levels of composting equalling that of recycling, with a composting rate of 20% being observed in 2013/14.

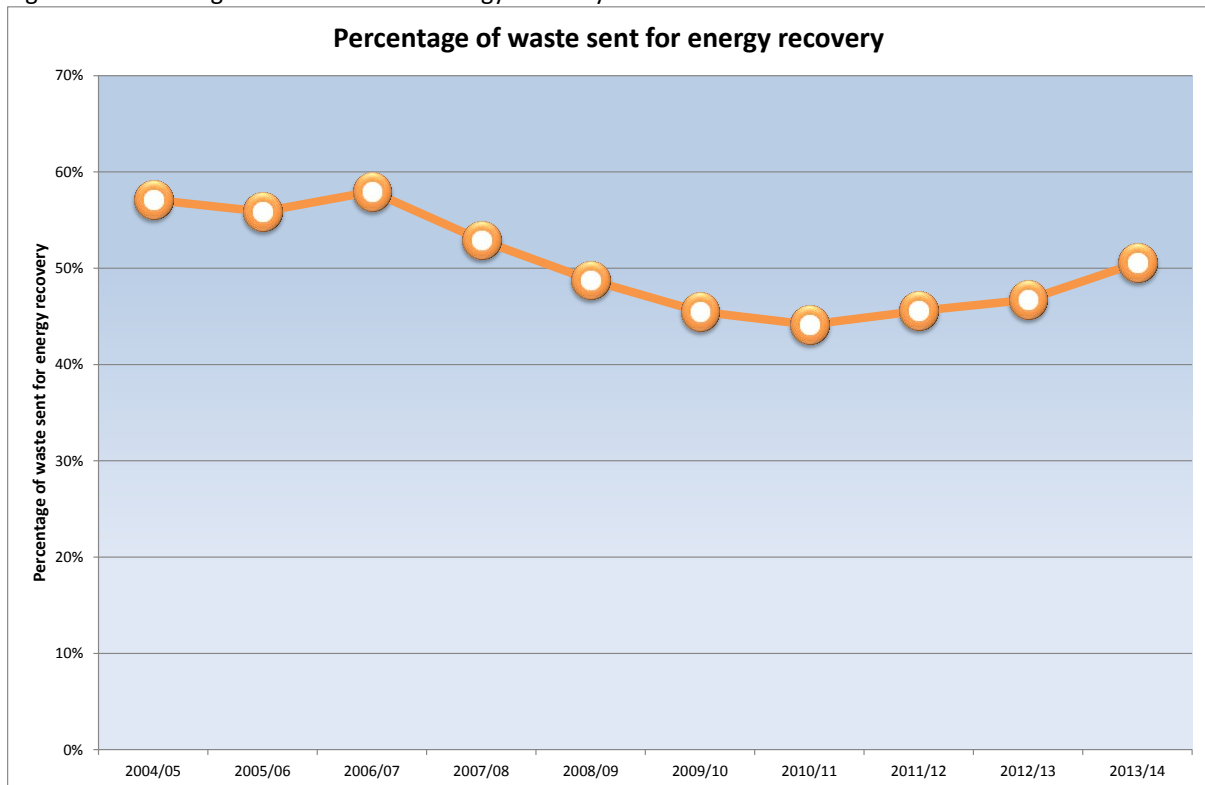
Figure 8 - Composting rate since 2004



Treatment – Energy from Waste

Due to increasing levels of recycling, the amount of waste requiring treatment has reduced. There has been a steady reduction in the amount of waste requiring treatment from 2007 until 2012, but more recently we have observed a slight increase. Levels of waste generation typically increase in times of economic prosperity and decrease when the economy is less buoyant and particularly during the recent recession. An increasing population in the Borough will also contribute to the amount of waste generated.

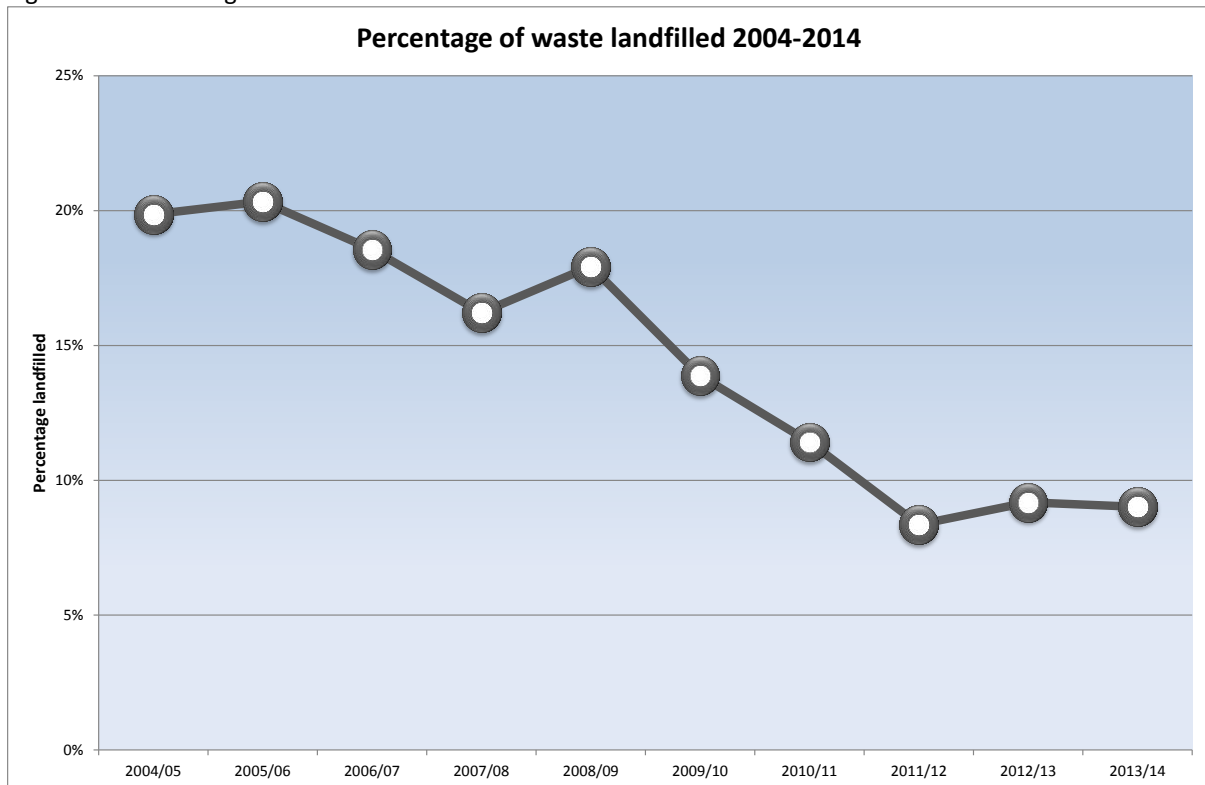
Figure 9 - Percentage of waste sent for energy recovery since 2004



Landfill

Historically Solihull has had a low landfill rate due to being able to send waste for treatment at the EfW in Coventry. Since 2004, the amount of waste sent to landfill for disposal has decreased from 20% to 10%. The majority of the waste sent to landfill originates from the Household Waste Recycling Centre. Since the start of the Strategy period, we have been proactively diverting waste from the landfill container to recycling or the combustible container for processing at the EfW.

Figure 10 - Percentage of waste sent to landfill since 2004

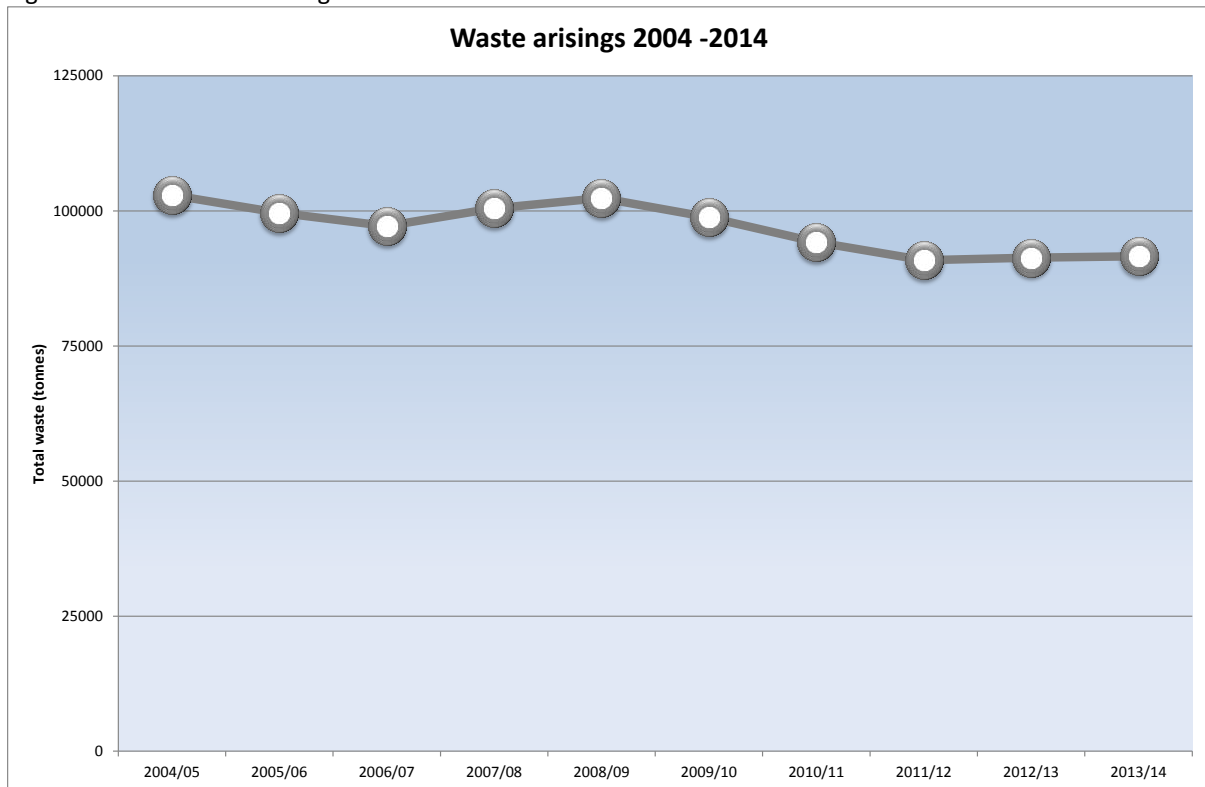


Waste Growth

As can be seen in Figure 11, there has been a gradual reduction in the amount of total waste generated with the start of the decline being observed in 2009, which coincides with the beginning of the economic slowdown.

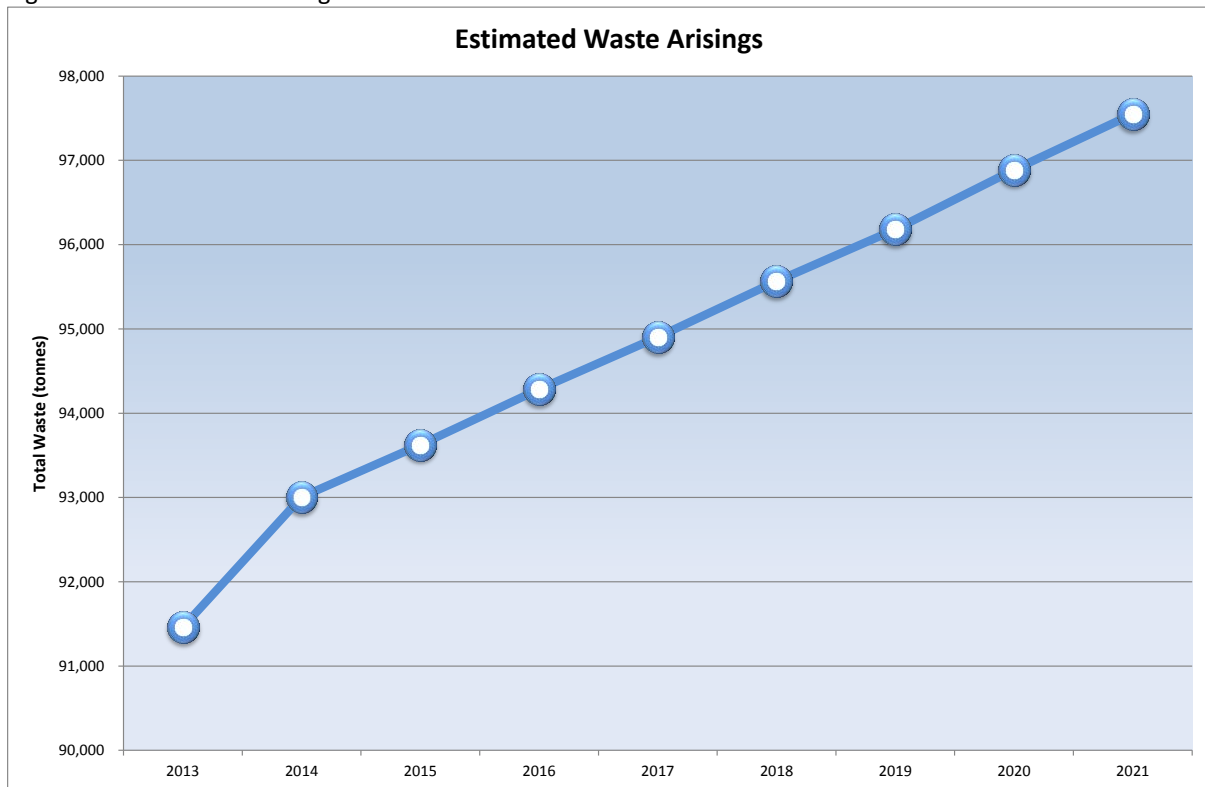
It is anticipated that there will be a gradual increase in the amount of waste generated as the economy improves.

Figure 11 - Total waste arisings since 2004



As outlined previously in the report – the population in the borough is due to increase annually. This will have an impact on the amount of waste generated in the borough. It is estimated that we will observe between a 1-2% increase in waste growth annually, as shown in Figure 12.

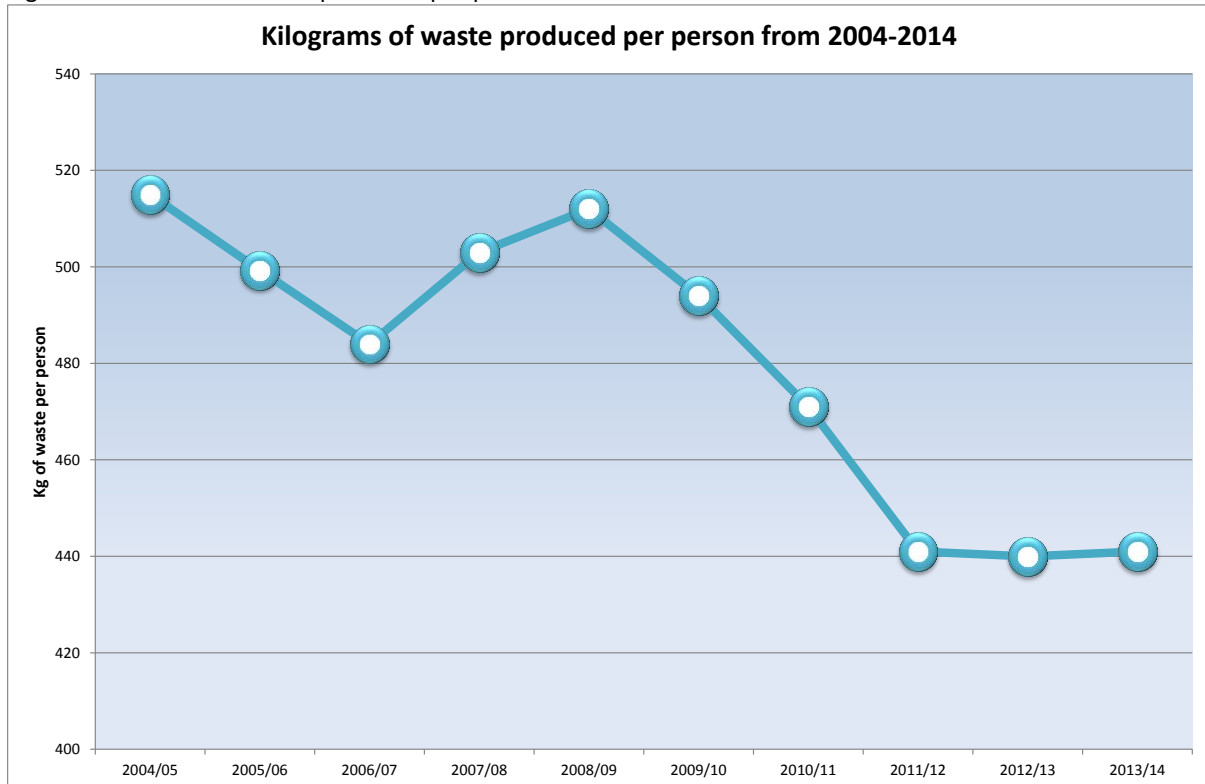
Figure 12 – Estimated waste growth



The results in Figure 13 show the amount of waste produced per head of the population. There has been a sharp decline in the amount of waste produced per head, again correlating with the start of the economic downturn. We have reached the target set for reducing household waste per head to 475kg by 2020, with 441kg per head being produced in 2013/14.

Our challenge will be to sustain low levels of waste growth generated per person as the economy improves.

Figure 13 - Amount of waste produced per person since 2004



Progress against Strategy Targets

The following sections provide an update on progress against the actions set in the Waste Strategy. The actions were set to enable us to work towards reaching the targets. Specific Strategy targets are highlighted in the following tables.

Waste Prevention and Reuse

Table 1 shows current progress against waste prevention and reuse targets set in the Waste Strategy.

Table 1 - Progress against Waste Prevention and Reuse Targets and Actions

Target/Action	Progress
Solihull Council to employ a Waste Prevention / Education officer (WPEO) to co-ordinate Waste Prevention & Reuse initiatives.	Community Engagement Officer role developed to promote reuse activities – role active from November 2014.
Solihull Council to subscribe to the scheme/s that replaces the WRAP subsidised home composter deal to ensure subsidised units are available to householders.	WRAP subsidised scheme came to an end – home compost bins available through Get Composting.com and is promoted on the councils website.
Solihull Council to continue to encourage and provide free uptake of home composters at schools that sign up to a talk on waste management and the recycling collection.	Schools were offered free composters. Support also provided through the Eco-schools scheme.
Solihull Council will plan a communications campaign, centred on ‘Love Food, Hate Waste’, but with a linked promotion of subsidised home composters. Solihull Council to seek the support of WRAP to add value and expertise to the planning and resource available. The plan should include appropriate monitoring and evaluation methods.	Using the national Love Food Hate Waste Themes we continue to promote Love Food Hate Waste at a local level.
Solihull Council to populate the Council website with information on waste prevention and reuse, including relevant links and contact information as regards at least:- <ul style="list-style-type: none"> • Love Food Hate Waste • Freecycle • Real Nappy Initiatives • Mail Preference Service • Reuse services 	These are promoted on the waste and recycling webpages.
Solihull Council to contact the Solihull branch of Freecycle and use existing media channels (e.g. the Council magazine ‘Your Solihull’), the website and promotional literature at events to raise the profile of the network.	These are promoted on the waste and recycling webpages.

Solihull MBC to seek to partner with a third sector organisation to provide home composting support to households 'Master Composter scheme' and 'Master Recycler', with training provided by the Waste section of Solihull Council, supported by WRAP.	Garden Organic has been supporting a Master Composter scheme which has been targeted at allotment holders.
Solihull Council to launch and run a dedicated campaign centred around 'Love Food, Hate Waste' to promote food waste prevention, linked to a home composter promotion.	Using the national Love Food Hate Waste Themes we continue to promote Love Food Hate Waste at a local level.
Solihull Council to review prevention & reuse performance and action plan at the 2015 review of the WMS.	Refer to Target updates section.
Solihull Council to assess success of waste prevention & reuse initiatives to date and develop appropriate new initiatives in the light of priorities and proximity to waste prevention target.	Refer to Target updates section.
<p>TARGET</p> <p>Solihull Council to utilise its influence to seek to deliver the following household waste arisings targets:-</p> <ul style="list-style-type: none"> • To reduce the amount of household waste arisings to 490 kg / person / year by 2013 • To reduce the amount of household waste arisings to 480 kg / person / year by 2017 • To reduce the amount of household waste arisings to 475 kg / person / year by 2020 	In 2013/14 the amount of household waste produced per person was 441.88kg, which is below the 2020 target of 475kg. It should be noted that we have recently left a period of extended economic downturn and the challenge will be to sustain lower levels of waste generation as the economy starts to improve.
Solihull Council to procure replacement Composting capacity for green waste.	Action completed, current composting contract is with Sita UK Ltd.

Recycling and Composting

Table 2 shows progress against actions relating to recycling and composting.

Table 2 - Progress against recycling and composting targets and actions

Target/Actions	Progress
<p>Solihull Council to seek to identify potential opportunities to expand the range of recycle types collected via the kerbside collection or through recycling centres / bring banks, and therefore to retain a proactive dialogue with:</p> <ul style="list-style-type: none"> • the collection contractor as regards innovation in the dry recycling system, • WRAP as regards secondary materials markets • The third sector as regards potential partnering over collections 	<p>Since the adoption of the Waste Strategy we have made two major changes to the recycling service.</p> <p>In 2011, we moved from a weekly collection of recycling to a fortnightly collection. This resulted in a budget saving and enabled us to add plastic tubs, pots and trays and corrugated cardboard to the materials already being collected.</p> <p>In 2014, we provided a brown wheeled bin for recycling for the majority of properties in the borough. The wheeled bin is for the collection of paper, card, cans, plastic and cartons with a separate 55 litre recycling box being retained for glass.</p> <p>The collection of cartons, aerosols and foil were also added to the materials that can be collected from the kerbside.</p>
<p>Solihull Council to evaluate the success of the new dry recycling system. To identify areas of improvement (e.g. capture rates, participation and contamination) Baseline to be provided by 'before' survey.</p>	<p>Participation surveys are carried out annually to determine levels of participation in the recycling service. In 2014, the overall participation rate in the service was 80%.</p> <p>Surveys have also been carried out before major service changes.</p>
<p>Solihull Council to develop a campaign plan to improve areas of weakness in the kerbside recycling collection, anticipated to include elements such as:-</p> <ul style="list-style-type: none"> • Monitoring and evaluation methods • Door knocking activities • Stickers / leaflets 	<p>A programme of monitoring and engagement activities will be developed to support the changes to the recycling service implemented in September 2014.</p>
<p>Solihull Council to evaluate the recycling performance of the new layout and operation of the Household Waste Recycling Centre (HWRC) and agree a baseline of recycling performance against which to set targets for improvement.</p>	<p>This task was completed with annual recycling targets set for the Household Waste Recycling Centre.</p>

<p>Solihull Council to explore partnering arrangements with adjacent local authorities as regards food waste treatment. The business case / procurement plan should also consider third party wastes where economies may be realised. Anaerobic Digestion based systems should be preferred.</p>	<p>Since the Strategy was adopted, the number of regional facilities for processing food waste has increased.</p> <p>Our future approach to collecting food waste is discussed as part of this update.</p>
<p>Solihull Council to review the tonnages captured via mini recycling centres / bring sites and plan a strategic review of the locations, materials and capacity of:-</p> <ul style="list-style-type: none"> • Mini Recycling Centres • On street recycling bins <p>With consideration to the following principles guide to planning:</p> <ul style="list-style-type: none"> • maximising accessibility by residents and visitors to recycling services (i.e. a focus on areas not served by kerbside collections) • increasing the range of materials available for recycling by the public • increasing recycling tonnages • increasing carbon benefit • enhancing the efficiency of the recycling service as a whole supporting a cleaner, greener Borough 	<p>Two separate trials of on street recycling units were carried out in the borough. The results of the trials were disappointing as the units were used in the same way as a standard litter bin with very low levels of material separation being recorded and consequently high levels of contamination. As a result, on-street recycling units have not been located in the borough.</p> <p>Due to increasing provision of kerbside recycling we have noted a reduction in the use of mini-recycling centres. Due to low tonnages and in one instance high incidences of fly-tipping we removed 7 mini-recycling centres in 2013. In 2014, we were asked to remove two further banks by the landowners and Sainsburys took over the operation of the site located at their Shirley branch.</p> <p>In 2014 both our can and plastic contractor withdrew their collection services due to them no longer being financially viable. This is due to an increasing number of local authorities reducing or removing their mini recycling provision.</p> <p>Both cans and mixed plastic are collected as part of the kerbside recycling collection.</p>
<p>Solihull Council to identify any future capital improvements (in discussion with the operator) for the HWRC to enhance recycling rates further.</p>	<p>Operations at the HWRC are reviewed annually. Since the last major refurbishment of the site we have improved signage of the individual bays and at the site entrance. We have also installed mirrors so that residents can see vacant bays more easily. Operationally, we remain constrained by the size and capacity of the site – however we strive to optimise the use of the space that we have.</p> <p>We currently provide reuse facilities for tools, printer cartridges, mobile phones and spectacles on site.</p>

Solihull Council to seek to expand the range of materials collected for recycling from schools in line with the kerbside collection service, and increase the numbers of schools participating in the scheme.	Since the introduction of the paper recycling service for schools, we have also included card and corrugated cardboard as part of the collections.
Solihull Council to assess the performance of the kerbside dry recycle collection system in the light of costs, expectations, participation and feedback from residents.	We have carried out regular reviews of the recycling collection system and will be closely monitoring the performance of the service following the changes implemented in September 2014.
Solihull Council to implement the campaign to optimise the performance of the kerbside dry recycling collection, through the initiatives identified in the previous planning exercise.	A programme of monitoring and engagement activities will be developed to support the changes to the recycling service implemented in September 2014.
Solihull Council to consider procurement options and implement procurement strategy for kerbside dry recycling / organics / trade waste in the light of the evaluation of the service and availability of markets for recycle.	A survey of Solihull Town Centre business was carried out in 2013. Results indicated that there was little appetite for this within the Town Centre, with many of the larger retailers having long term corporate contracts in place.
Solihull Council to implement infrastructure changes arising from the recycling centre / bring site review and any capital improvement to the HWRC.	Operations at the HWRC are reviewed annually. Operationally we remain constrained by the size and capacity of the site
Solihull Council to implement a food waste collection to increase recycling performance in line with medium and long term targets.	Our future approach to collecting food waste is discussed as part of this update.
Solihull Council to review overall recycling performance and action plan at the 2015 review of the WMS.	Mid-point review carried out.
Solihull Council will carry out a review of collection methods to identify areas for performance optimisation.	Our approach to future collection methods is discussed as part of this update.

<p>TARGET Solihull Council will seek to deliver the following targets through the actions identified in this WMS:- 80% of schools participating in the recycling service by 2012</p> <ul style="list-style-type: none"> • 95% of schools participating in the recycling service by 2014 	<p>71% of schools use the recycling service provided by Solihull. Schools not using the service provided by Solihull tend to have put in place their own contractual arrangements for recycling.</p>
<p>TARGET</p> <ul style="list-style-type: none"> • Agree interim recycling rate targets for Household Waste Recycling Centre (HWRC) • Minimum 60% recycling rate (excluding rubble) for HWRC by 2020, aspirational 70% target 	<p>In addition to the level of recycling achieved at the HIWRC, We also report the percentage of waste diverted from landfill. This allows us to take into account material that is not landfilled, but that is sent for recovery, for example wood.</p> <p>In 2013/14 61 % of waste was diverted from landfill.</p>
<p>TARGET Minimum 60% household waste recycling rate for Solihull by 2020, aspiring to reach this by 2015 if practicable.</p>	<p>In 2013/14 we achieved a recycling rate of 40% - we have observed an reduction in our recycling rate. It will be challenging to reach our target of 60% by 2020, however we anticipate that the changes made to the recycling service in 2014 will result in an increase in recycling.</p>
<p>To maintain residual waste treatment and recovery capacity, extending contractual arrangements.</p>	<p>Long term Service Level Agreement is in place with the Coventry and Solihull Waste Disposal Company.</p>

Waste Treatment

Table 3 shows progress against actions relating to the treatment, recovery and disposal of waste.

Table 3 – Targets and actions relating to waste treatment, recovery and disposal

Targets and Actions	Progress
Solihull Council will seek to derive environmental benefit from the residual waste management treatment by recovering both materials and energy value from the waste.	<p>Solihull has a long-term Service Level Agreement with the Coventry and Solihull Waste Disposal Company.</p> <p>Since the Strategy was adopted, the facility has entered into a long-term agreement to supply heat to buildings in Coventry City Centre. This improves the overall operating efficiency of the facility.</p>
Procure appropriate replacement landfill capacity.	Solihull is currently in the process of reviewing long-term landfill options.
<p>TARGET</p> <p>Solihull Council will apply the actions of this MWMS, available technology and procurement to seek to reduce the amount of household waste sent to landfill to 10% of Solihull’s waste by 2020.</p>	<p>In 2013/14 11% of the waste generated in Solihull was landfilled. The majority of waste landfilled arises from the HWRC.</p> <p>Our approach to further reducing the amount of waste that is sent to landfill will be reviewed in this Strategy.</p>
Solihull Council will review its process for assessing reprocessor compliance with relevant waste legislation particularly regarding the onward processing of recyclable material (following the reprocessing audit trail).	<p>Solihull has signed up to the End of Destinations Recycling Charter – and has made a commitment to publish an annual log of where materials collected are reprocessed.</p> <p>This information is available on the council’s website.</p> <p>The requirement to provide end processor information is also being included in all new contracts.</p>

Education and Engagement

Table 4 shows the actions related to engagement and communication

Table 4 – Targets and actions relating to engagement and communications

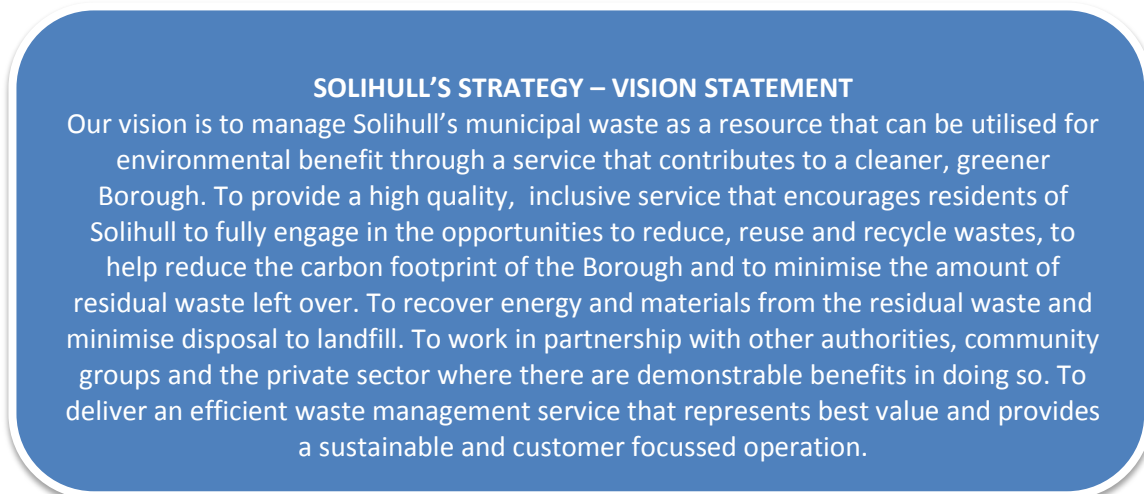
Target/Action	Progress
Communications actions as explained in 'Prevention & Reuse' and 'Recycling and Composting'.	Our approach to communication and engagement will be reviewed in the updates section of the Strategy.
<p>Solihull Council to increase the number of talks in schools and ensure that the following aspects are covered (as appropriate to the age group concerned):-</p> <ul style="list-style-type: none"> • The link with climate change • The link with renewable energy • The issue of resource management <p>What you can do:</p> <ul style="list-style-type: none"> • Prevention • Reuse • Recycling • Composting • Cleaner/greener littering issues 	<p>Since the Strategy was adopted, Solihull has developed 'Love Solihull', this is a borough wide campaign to increase awareness and participation in civic pride – including education on littering, recycling, dog fouling and sustainability.</p> <p>This is a wide reaching campaign which includes engagement with schools, communities and businesses throughout the borough.</p> <p>Engagement with schools will be delivered through 'Love Solihull'.</p>
Investigate what reward and recognition schemes could be implemented in Solihull e.g. Recyclebank, positive feedback schemes.	Our approach to communication and engagement will be reviewed in the updates section of the Strategy.
<p>TARGET</p> <p>Solihull Council staff to make at least 25 presentations to schools in the Borough per year covering the issues identified above.</p>	This is delivered through the Eco-schools campaign and through Love Solihull.

Updated Objectives, Targets and Indicators

Waste Strategy Objectives

When the Strategy was adopted in 2010, a vision statement was developed which outlines the principles, which underpin how we propose to manage waste in Solihull. Supporting the vision statement are ten objectives which provide further guidance for managing waste in Solihull.

Figure 14 - Solihull's Vision Statement



As the Strategy was approved five years ago in a different economic climate, each objective has been reviewed to determine whether it is still relevant or whether it needs updating.

Each objective is outlined in the following sections and additional commentary is provided (in italics) regarding the on-going relevance of each objective.

Objective 1

Set in place initiatives to reduce the amount of waste arising in Solihull through prevention and reuse activity and continue to raise awareness to encourage behavioural change and participation in these schemes.

It is paramount that we develop initiatives to enable us to move the management of waste up the waste hierarchy – this is a key objective.

Objective 2

Expand the range of materials collected for reuse and recycling across the Borough to ensure all households have the opportunity to make sustainable choices for the management of their wastes.

We now collect the majority of readily recyclable materials from the kerbside. We will continue to review the service and identify other potential materials to collect.

Objective 3

Improve recycling services and engage with the residents of Solihull to fully participate in the recycle collections, with the aim of delivering a minimum target of 60% household waste recycling rate by 2020, but aspiring to deliver this level of performance by 2015 if practicable.

The changes to the recycling service and improvements to recycling at flats has provided access to recycling for more residents. Continuing to reduce waste and increased recycling is a key objective. Attaining 60% recycling by 2020 will be extremely challenging, however the aspiration should be retained.

Objective 4

Minimise the need for landfilling of wastes by continuing Solihull's high performance in residual waste treatment beyond the life of the existing Energy from Waste plant, with the aim of delivering no more than 15% of household waste to landfill by 2015 and a maximum of 10% by 2020.

Our aim is to continue to reduce the amount of waste landfilled, diverting waste to reuse, recycling and recovery. This is a key objective.

Objective 5

Seek to recover both energy and materials from residual waste in the most efficient manner, to conserve resources, gain maximum value and contribute to carbon reduction, renewable energy and recycling targets.

Reducing the amount of waste sent to landfill is a key objective – identifying viable, sustainable alternatives is necessary to further reduce levels of landfill.

Objective 6

Continue to support existing partnerships and actively explore new partnering arrangements with organisations that can support the vision and objectives of this Strategy.

Solihull continues to work closely with Coventry City Council and authorities in the Warwickshire Sub-region and will continue to pursue opportunities for joint working where they are beneficial to Solihull.

Objective 7

Use good practice methods in communication, education and enforcement to support the delivery of a cleaner, greener Borough for the benefit of all.

Clarity of communication and encouraging participation and engagement in recycling and reuse is essential to achieve our Strategy targets – this is a key objective.

Objective 8

Demonstrate continued improvement in reducing the levels of carbon emissions of the municipal waste management service throughout the life of this Strategy, as a measure to tackle climate change.

Since the Strategy was adopted we have reduced our carbon impact and will continue to identify ways to further reduce the impact of delivering the service.

Objective 9

Provide a service that is affordable and demonstrates best value for Solihull through seeking efficiencies wherever practicable, considering other waste streams in addition to municipal waste, managing risks appropriately and delivering a sustained high quality service.

This is a key objective – which is essential when delivering a service in an increasingly challenging financial climate.

Objective 10

Solihull Metropolitan Borough Council to lead by example and improve the environmental performance of its offices, depots and staff activities through more sustainable use of resources and adopting practices that reduce carbon emissions.

Solihull has put in place measures to reduce its overall carbon impact and will continue to seek areas for improvement.

Following review, all 10 Waste Strategy objectives are still applicable and relevant to how we will manage our waste and resources up the waste hierarchy.

Updated Targets

The following tables show updated targets and consolidated actions to achieve the targets until the end of the Strategy period. Indicative timescales for delivery of the actions is provided in Appendix A.

Table 5 -Updated Waste Prevention and Reuse Targets and Actions

Updated Targets/Actions – Waste Prevention and Reuse	
<p>We have reached our 2020 target of 475kg of household waste produced per person per year. However this has been achieved during a period of economic downturn. Taking this into consideration we have revised the targets.</p> <ul style="list-style-type: none"> • To reduce the amount of household waste arisings to 450 kg / person / year by 2017 • To reduce the amount of household waste arisings to 440 kg / person / year by 2020 	
Action	Indicators
<p>Development of a long-term, resourced engagement and awareness campaign including specific campaigns on the following:</p> <ul style="list-style-type: none"> • Prevention of food waste – Love food Hate Waste • Promotion of reuse opportunities in the Borough • Home composting • Promoting Junk mail prevention initiatives 	<ul style="list-style-type: none"> • Amount of waste generated • Amount of household waste generated per head • Results of waste composition studies • Increase in take up of compost bins
<p>Review opportunities for reuse of items collected via the council’s bulky waste collection service.</p>	<p>Reduction in the amount of bulky waste sent for waste treatment or disposal.</p>
<p>Review opportunities for reuse of materials deposited at the Household Waste Recycling Centre at Bickenhill.</p>	<p>Reduction in the amount of waste sent for waste treatment or disposal.</p>
<p>Targeted promotion of ‘No side waste policy’ with education and support.</p>	<ul style="list-style-type: none"> • Reduction in the amount of side waste presented and therefore requiring disposal • Reduction in the amount of litter in the targeted areas.

Table 6 - Updated Recycling and Composting Targets and Actions

Updated Targets/Actions – Recycling and Composting	
Reach the EU/English recycling target of 50% recycling by 2020, using best endeavours to exceed this target and reach 60% by 2020.	
Action	Indicators
Development of a resourced engagement and awareness campaign to encourage and sustain participation in the recycling service. Providing targeted support and communications where necessary. Use a wide variety of communication media to ensure wide coverage.	<ul style="list-style-type: none"> • Increased participation in recycling service – 80% or above. • Increased levels of recycling • Low levels of contamination • Reduction in the amount of waste requiring treatment
Review the method of collections including: <ul style="list-style-type: none"> • Range of recycling collected at the kerbside • Frequency of collections • Food waste collections • Review examples of best practice • What do residents want? 	<ul style="list-style-type: none"> • Increased participation in recycling service – 80% or above. • Increased levels of recycling • Low levels of contamination • Reduction in the amount of waste requiring treatment
Review the cost and efficacy of reward and recognition schemes for recycling.	Potential to incentivise and therefore increase recycling.
Minimum 60% recycling rate (excluding rubble) for HWRC by 2020, aspirational 70% target Optimising the amount of waste diverted from landfill	
Action	Indicators
Review operations at the HWRC – considering practicality of increasing the range of materials that can be reused and recycled.	Increase in the amount of waste diverted from landfill.
Research and review examples of best practice regarding operations and performance of Household Waste Recycling Centres – identifying approaches to increase diversion from landfill.	Increase in the amount of waste diverted from landfill.
Proactive engagement of site staff with sites users assisting them to recycle and not dispose of material taken to the site.	Increase in the amount of waste diverted from landfill.
100% of schools having access to recycling services by 2020	
Action	Indicators
We will continue to provide a recycling service to schools. However increasingly schools are making their own arrangements for recycling through their own waste disposal contracts.	Increase in the number of schools with access to recycling.

Table 7 - Updated Resource and Waste Treatment Targets and Actions

Updated Targets/Actions – Resource Management and Waste Treatment	
<ul style="list-style-type: none"> Reduce the amount of household waste sent for disposal to landfill to 10% by 2020. Seek to derive environmental benefit from waste that cannot be recycled by recovering materials, energy and heat from the materials processed. 	
Action	Indicators
While having in place proactive mechanisms to reduce waste to landfill – ensure that the council has long-term landfill security for waste that cannot currently be treated by any other means.	Long term landfill contract in place with no minimum tonnage commitments
In conjunction with partners at Coventry City Council and Warwickshire County Council – consider the feasibility of pre-separation of material to recover potential recyclables prior to being processed at the Energy from Waste facility Economic and practical feasibility to be considered.	Potential to recover additional resources before waste is sent for final treatment.
Continue to seek detailed information regarding the treatment and end destination of materials from re-processors and update this material annually on the council’s website.	Material destinations will be made available on the website and kept up to date.

Table 8 - Updated Engagement and Communication Targets and Actions

Updated Targets/Actions – Engagement and communications	
Engage with schools, community groups and other interested groups, providing information about waste and recycling and the wider issues of littering. This will be achieved in conjunction with colleagues through the Eco school campaign and Love Solihull as well as targeted activities.	
Action	Indicators
Development of engagement packs for schools and community groups.	Informed and engaged groups.
Use a variety of media to inform residents regarding the waste and recycling service, using clear and positive language to convey key messages and information.	
Action	Indicators
Establish a group of ‘critical friends’ to provide feedback on proposed future communications and information.	Development of clear communication materials.
Investigate cost effective ways of reaching as many residents as possible by using different methods of communication – taking into consideration the demographics of the borough.	Communications are received and understood by as many residents in the borough as possible.

Table 9 - Carbon Reduction Targets and Actions

Updated Targets/Actions – Carbon Reduction

The performance based targets in the Strategy, which strive to manage waste up the waste hierarchy will have a positive carbon impact.

- Reducing the amount of waste produced
- Increasing reuse
- Increasing recycling
- Reducing waste treatment and improving the efficiency of the treatment
- Reducing landfill

These will all have a positive impact on the councils carbon position.

We will also work with our respective contract partners to move to more fuel efficient vehicles and adopt optimal driving techniques to reduce fuel use.

Action	Indicators
Assess carbon performance of new vehicles and equipment before purchasing to minimise carbon impact.	Reduction in carbon burden.

Reaching our Targets - Future Service Considerations

We have made progress against our targets since the start of the Strategy period, however we need to do more to reach our aspirational 60% recycling rate.

There have been changes in recycle market conditions and changes to definitions of end products from the recycling process which have had a negative impact on our recycling rate and has resulted in a reduction in our recycling rate since 2012 when we reached a recycling rate of 46%.

We are confident that the changes to the recycling service implemented in September 2014 will increase levels of recycling and we estimate that the changes will contribute 5% to our overall recycling rate, which will mean that we will recover the percentage that we have lost since 2012.

We now need to look forward to how we can achieve our targets and critically how much any future changes to the service to attain our targets will cost.

Options for increasing recycling are discussed in the following sections.

Education, encouragement and engagement

Clear, comprehensive and resourced education and engagement activities need to be in place to support increasing waste prevention, reuse and recycling.

Research and experience suggests that unless we continue to provide residents with information and updates regarding their service, participation and enthusiasm for recycling can wane.

Looking ahead we will review best practice examples and develop schemes and initiatives to engage customers and optimise participation in the service. To facilitate this we will need to invest in the resources needed to deliver these programmes. We now have a dedicated Community Engagement Officer and they will be tasked with developing programmes to encourage continued participation in the service. This will involve positive reinforcement but also where necessary we will need to take action to solve persistent problems such as issues with side waste and fly-tipping.

Kerbside collections of Food Waste

In the Waste Strategy we stated that we would consider food waste collections by 2015. The generation of food waste is clearly an issue and the composition study that we carried out in 2013 clearly shows that the highest proportion of waste in the rubbish bin is food waste.

In recent months, the generation of food waste also has a higher profile with actions now taking place at a national level to stem the generation of food waste from retailers and re-processors.

We have been promoting 'Love Food Hate Waste' at a local level, mainly passively, by providing information on our website and issuing press releases to coincide with the national campaign. We will be working with colleagues through 'Love Solihull' to highlight the issue of food waste and to encourage residents to reduce the amount of food waste that they produce. Reducing food waste at source is preferable to collecting food waste as this is at the top of the waste hierarchy – 'Prevention'.

Food waste is collected by almost half of local authorities in England, food waste collections tend to be introduced to support alternate weekly collections of rubbish as giving residents the option to remove 'smelly' waste from the bin.

Food waste can be processed either aerobically through in-vessel composting to produce compost or anaerobically through Anaerobic Digestion (AD) to produce biogas and a digestate. Since the Waste Strategy was adopted the number of AD plants in the region has increased and the processing costs have reduced.

Food waste can be collected separately in either a separate collection vehicle or by using a modified vehicle with a pod or it can be co-collected with garden waste. If it is co-collected with garden waste it reduces potential collection costs – but increases the processing costs of garden waste as it can no longer be composted in the open air and has to be either processed in an in-vessel composting facility or AD plant.

Before considering implementing a food waste collection service, we need to carefully consider the economics of collecting it. Recently, there have been cases of authorities withdrawing their food waste collections as they were collecting diminishing quantities of food waste and it was proving to be an expensive service to operate.

What is increasingly observed when implementing food waste collections is that there is an initial uptake of the service but as residents realise how much food waste they are throwing away, there is anecdotal evidence to suggest that they modify their purchasing and cooking habits and reduce the amount of food waste that is produced.

It is estimated that collecting food waste can add between 2-4% to the overall recycling rate in the short term given the constraints highlighted above.

Therefore, before the end of this Strategy period we will carry out a robust cost benefit analysis regarding the introduction of food waste to identify if there is a cost effective way of introducing the service, we will also engage with residents to see if there is an appetite for food waste collections or alternatives such as home composting.

Changes to collection frequency

The highest performing recycling authorities in England (top 20) all collect recycling and waste on an alternate weekly collection basis, with recycling collected one week and rubbish collected the following week.

Changing collection frequency of rubbish to fortnightly does increase levels of recycling as it essentially constrains capacity for rubbish and encourages residents to recycle more to

preserve capacity in their rubbish bins for non-recyclable items. If a comprehensive recycling service is provided, many residents find that they do not fill their rubbish bin weekly and can cope easily with less frequent collections of rubbish. Changing collection frequencies of rubbish also presents the potential to reduce collection costs.

The majority of authorities that have changed from weekly to fortnightly collections of rubbish also provide a collection for food waste whether it be weekly or fortnightly or collected separately or combined with garden waste.

Solihull is committed to collecting rubbish weekly until 2018. This was a condition of the funding provided by the Department of Communities and Local Government (DCLG) through their Weekly Collection Support Scheme.

However, it would be prudent to review collection frequencies within this Strategy period, in conjunction with a review of food waste collections. We will also have the opportunity to see what impact the recent changes to the recycling service have had on the quantity of residual waste collected and whether residents are finding that they are no longer filling their residual bins.

Use of the Household Waste Recycling Centre (HWRC)

The majority of waste that is sent to landfill is deposited at the Household Waste Recycling Centre at Bickenhill. We currently have operatives on site directing site users to the relevant containers, however we will need to give consideration to the future management of some material streams and will review how high performing HWRC's achieve diversion from landfill.

We currently do not check residency of site users as we accept that residents from Solihull will use sites in other authority areas and vice versa, however this is an area to review in the future.

Other points to consider to assist in the management of waste at the HWRC include:

- Open bag policy for black bagged waste
- Charging for non-household waste e.g. soil, rubble, DIY waste
- Solihull resident only policy

Engaging with Residents

To reach our strategy targets will potentially require some further significant service changes. Before making these changes we will engage with residents in the borough to determine their views on the service.

Waste Strategy Monitoring, Reviews and Updates

We will continue to review progress against the Waste Strategy Action Plan annually and will make this information available on our website.

We will also review our overall Strategy position in 2019, as the current Strategy is due to expire in 2020. However, if there is a significant change in EU or National Legislation before 2019, which needs to be considered as part of the Strategy, a review will be carried out before 2019.

Glossary of terms

Term	Definition
Anaerobic Digestion (AD)	Degrading organic wastes in a sealed vessel in the absence of oxygen to derive a combustible biogas and leave a solid and / or liquid digestate, that may, under certain limitations, be applied to land.
Bulky waste	Large items of household waste such as furniture and fridges. Typically a charged for service.
Carbon dioxide (CO ₂)	The most common 'greenhouse gas' – a contributor to climate change. The impact on climate change of a process is usually measured as Carbon Dioxide equivalents, in order to provide a common unit of measurement.
Civic Amenity Site	Refer to Household Waste Recycling Centre
Commercial waste	Waste arising from premises which are used wholly or mainly for trade, business, sport, recreation or entertainment, excluding municipal and industrial waste.
Composting	An aerobic, biological process in which organic wastes, such as garden and kitchen waste are degraded to form a compost that may usually be beneficially applied to land.
Contamination	When materials which cannot be recycled or composted are put incorrectly in the recycling or composting container. Contamination can result in recyclable or compostable waste being rejected. Rejected materials often have to be disposed of to landfill which incurs a cost and can impact on recycling and composting performance.
EU Directive	A European Community legal instruction, which is binding on all Member States, but must be implemented through the legislation of national governments within a prescribed timescale.
Energy from Waste (EfW)/ Energy Recovery	A term including a variety of technologies, although most energy recovery is through incineration with electricity generation taking place via the heat generated by the combustion (using a steam circuit).

Garden waste	Vegetation and plant matter from household gardens, local authority parks and gardens and commercial landscaped gardens.
Home composting	Compost can be made at home using a traditional compost heap, a purpose designed container, or a wormery.
Household Waste Recycling Centres (HWRCs)	A site at which householders can deposit household waste free of charge for reuse, recycling, composting or disposal.
In-vessel composting (IVC)	A process by which organic waste is composted inside enclosed units in the presence of air.
Local authority collected waste (LACMW)	This includes all waste under the control of local authorities or agents acting on their behalf.
Kerbside collection	Any regular collection of recyclables from premises, including collections from commercial or industrial premises as well as from households. Excludes collection services delivered on demand.
Landfill	An engineered site where waste is deposited onto or into the ground. Liquid discharge and gas are captured from most landfill sites, with gas often being used to generate electricity.
Landfill Tax	A tax levied by the Government for every tonne of waste sent for disposal to landfill. The tax rate in 2014 was £80/tonne and is set to increase by RPIX until otherwise notified.
Mini recycling centre (MRC)	A localised collection point for deposit of recyclates, e.g. glass, paper and cans. These are usually in the form of one or more banks for each material.
Prevention	Changing living practices or behaviour to avoid the generation of waste that would have otherwise occurred (e.g. using Real Nappies as opposed to disposables or registering to avoid receiving Junk Mail).
Producer responsibility	Producers and others involved in the distribution and sale of goods taking greater responsibility for those goods at the end of the product's life.
Recycling	Involves the reprocessing of wastes, either into the same product or a different one. Many non-hazardous industrial wastes such as paper, glass, cardboard, plastics and scrap metals can be recycled. Hazardous wastes, such as solvents can also be recycled by specialist companies, or by in-house equipment.

Residual/general waste	Waste that is 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.
Sustainable development	Development which is sustainable is that which can meet the needs of the present without compromising the ability of future generations to meet their own needs.
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.
Treatment	Involves the chemical, physical or biological processing of certain types of waste for the purposes of rendering them harmless, reducing volumes before landfilling, or recycling certain wastes.
Unitary Authority	A local authority which has the responsibilities of both Waste Collection and Waste Disposal Authorities.
Waste	A wide ranging term encompassing most unwanted materials and is defined by the Environmental Protection Act 1990. Waste includes any scrap material, effluent or unwanted surplus substance or article for which the owner intends to discard.
Waste arisings	The amount of waste generated in a locality over a given period of time.
Waste hierarchy	Sets out an order of preference for the management of waste based on environmental impact.
Waste Electrical and Electronic Equipment (WEEE)	Waste electrical or electronic devices. Includes a wide range of small and large items and their components.

Appendix A - Revised Waste Strategy Action Plan

The following Action plan provides an indicative timescale for carrying out the actions required to contribute to the Strategy targets.

It is anticipated that all of the actions and tasks identified below will be delivered by the Waste and Recycling Team and Contract Partners.

Tasks and Actions	Estimated Delivery Timescales
Waste Prevention and Reuse	
<p>Development of a long-term, resourced engagement and awareness campaign including specific campaigns on the following:</p> <ul style="list-style-type: none"> • Prevention of food waste – Love food Hate Waste • Promotion of reuse opportunities in the Borough • Home composting • Promoting Junk mail prevention initiatives 	Development of plan – July 2015.
Review opportunities for reuse of items collected via the councils bulky waste collection service.	August 2015
Review opportunities for reuse of materials deposited at the Household Waste Recycling Centre at Bickenhill.	Annual reviews
Targeted promotion of 'No side waste policy' with education and support.	June 2015
Recycling and Composting	
<p>Development of a resourced engagement and awareness campaign to encourage and sustain participation in the recycling service. Providing targeted support and communications where necessary.</p> <p>Use of a wide variety of communication media to ensure wide coverage.</p>	March 2015
<p>Review the method of collections including:</p> <ul style="list-style-type: none"> • Range of recycling collected at the kerbside • Frequency of collections • Food waste collections 	May 2018

<ul style="list-style-type: none"> • Review examples of best practice • What do residents want? 	
Review the cost and efficacy of reward and recognition schemes for recycling.	November 2015
Review operations at the HWRC – considering practicality of increasing the range of materials that can be reused and recycled.	Annual reviews.
Research and review examples of best practice regarding operations and performance of Household Waste Recycling Centres – identifying approaches to increase diversion from landfill.	July 2015
Proactive engagement of Bickenhill site staff with sites users assisting them to recycle and not dispose of material taken to the site.	Establish protocol by April 2015 On-going
We will continue to provide a recycling service to schools. However increasingly schools are making their own arrangements for recycling through their own waste disposal contracts.	Review arrangements 2015.
Resource Management and Waste Treatment	
While having in place proactive mechanisms to reduce waste to landfill – ensure that the council has long-term landfill security for waste that cannot currently be treated by any other means.	Review March 2016
In conjunction with partners at Coventry City Council and Warwickshire County Council – consider the feasibility of pre-separation of material to recover potential recyclables prior to being processed at the Energy from Waste facility Economic and practical feasibility to be considered.	2016
Continue to seek detailed information regarding the treatment and end destination of materials from re-processors and update this material annually on the councils website.	Annually

Engagement and Communications

Establish a group of 'critical friends' to provide feedback on proposed communications and information	March 2015
Investigate cost effective ways of reaching as many residents as possible by using different methods of communication – taking into consideration the demographics of the borough.	July 2015

Carbon Reduction

Assess carbon performance of new vehicles and equipment before purchasing to minimise carbon impact.	December 2015
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