



Staffordshire Waste Partnership

2013 Refresh of the
Joint Municipal Waste Management Strategy
for Staffordshire & Stoke-on-Trent
(2007 - 2020)

From **zero waste**
to landfill...

...towards a
resourceful economy



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Foreword

We all create waste in one form or another, whether at home, in the workplace, or through leisure pursuits. Staffordshire’s waste collection and disposal services are for many residents their primary interaction with their Local Council. Our residents have adapted well over recent years, as collection services have developed to divert waste from being thrown away to being reused or recycled, including composting. Surveys confirm high satisfaction levels of the provided services, resulting in a positive public response with Staffordshire recycling and composting over 50% of the waste collected. This compares with the national average of 41%.

The 10 local authorities in Staffordshire aim to work together on waste management issues within the Staffordshire Waste Partnership (SWP). In 2007, SWP published a Joint Municipal Waste Management Strategy and set an ambitious target of Zero Waste to Landfill by 2020. We achieved 50% recycling performance by 2012, ahead of the 2015 target, and I am pleased to announce that, with the opening of our state of the art Energy from Waste plant in 2014, it is predicated that we will achieve the 55% recycling performance target in 2014, ahead of the 2020 deadline.

Much has changed since 2007, not least the constraints on public sector finance and the need to ensure we provide efficient and affordable services our residents and businesses require, including a Governmental Waste Policy review in 2011. In meeting the targets set in 2007, and to address the changing landscape of waste management, it was decided that an update to the strategy was required. This refreshed strategy document provides a plan to determine new actions needed to take us to 2020, when the original strategy ceases. The delivery plan will be monitored every 3 months and formally reviewed annually to make necessary adjustments to take account of new opportunities and developments in technology.

This refreshed strategy focuses on waste prevention at the heart of our thinking, whilst maintaining the “zero waste” target. Collected waste is now considered as a valuable resource, as a commodity material for the production of items, or as a means of energy production through a wide range of new technologies. There is no easy solution, but with an effective partnership and close co-operation with our residents, stakeholders and businesses, there are a number of opportunities to allow us to continue to deliver efficient and effective services which are flexible and sustainable.



Councillor Ann Beech – Newcastle-under-Lyme Borough Council

Chair of the Joint Waste Management Board for Staffordshire Waste Partnership

Executive Summary

The 2013 refresh of the Joint Municipal Waste Management Strategy is an update to the 2007 full strategic plan, addressing the management of municipal solid waste within Staffordshire and Stoke-on-Trent to the year 2020. It has been prepared in partnership by Staffordshire Waste Partnership (SWP), which comprises Staffordshire County Council, Stoke-on-Trent City Council, and eight Staffordshire District/Borough Councils.

As the targets set in the 2007 strategy have been achieved ahead of their 2020 deadline, and changes in legislation and policy since 2007 resulted in alterations to the primary focus of waste management, a refreshed version of the 2007 strategy has been undertaken to reflect these changes and set new targets. Based on the key principles set out in the original strategy, the following updated principals (in no particular order) form the core objectives for the delivery plan in this refreshed strategy;

- Waste Prevention,
- Efficiency Savings,
- Resource Recovery,
- Carbon Reduction,
- Infrastructure & Contracts,
- Municipal Waste.

The following table summarises the key projects of the delivery plan;

Time frame	Project
Short term; immediate works	<ul style="list-style-type: none"> • Creation of a SWP Waste Prevention Plan. • Review of clinical waste services in South Staffordshire, aiming to implement alterations already underway in North Staffordshire. • Baseline research / data collation of all services, technologies and contracts, to assess current status, and identify gaps. • Agree a partnership procurement framework. • Create a Transport Managers Group to move forward on operational changes for efficiency savings.
Medium term; in place by the end of 2013	<ul style="list-style-type: none"> • Assess contracts according to end dates, undertaking review and alterations - focus on service contracts and local infrastructure. • Commercial waste service review and rebrand, including scoping of a single pricing structure and options for collaboration. • Bulky waste collection review, with proposition of contracted services using the third sector. • Improved WEEE facilities, including potential for reuse.
Long term; background projects	<ul style="list-style-type: none"> • Guidance document on available collection, process and disposal technologies, to aid future decisions. • Ongoing work to align the variety of policies of individual partnership authorities.

1. Introduction

The 2013 refresh of the Joint Municipal Waste Management Strategy (for here on in referred to as the refreshed strategy) is an update to the 2007 full strategic plan, addressing the management of municipal solid waste within Staffordshire and Stoke-on-Trent to the year 2020. It has been prepared in partnership by Staffordshire Waste Partnership (SWP), which comprises Staffordshire County Council, Stoke-on-Trent City Council, and the eight Staffordshire District and Borough Councils.

This is an update to the 2007 waste strategy, which stated waste management targets to be met by 2020. However, as the result of structured delivery and public willingness to adopt changes in waste management, the original targets have now been met. Furthermore, changes in legislation and policy since 2007 resulted in alterations to the primary focus of waste management. A refreshed version of the 2007 strategy has been undertaken to reflect these changes and set new targets.

This refreshed strategy provides key objectives as outlined in the Government’s Guidance on Municipal Waste Management Strategies, and is underpinned by a delivery plan (discussed in section 4 of this document). This document should be read in conjunction with the 2007 full strategy and associated Strategic Environmental Assessment, upon which this document is fundamentally based.

1.1 Staffordshire Waste Partnership

Staffordshire Waste Partnership (SWP) is made up of all ten councils operating in Staffordshire; 8 Borough or District Councils, Staffordshire County Council, and Stoke-on-Trent City Council. SWP comprises;

- Cannock Chase District Council
- East Staffordshire Borough Council
- Lichfield District Council
- Newcastle-under-Lyme Borough Council
- South Staffordshire District Council
- Stafford Borough Council
- Staffordshire Moorlands District Council
- Stoke-on-Trent City Council
- Tamworth Borough Council
- Staffordshire County Council.



Engaging local schools in waste issues

Figure 1 shows the areas covered by the partnership’s district, borough or city councils. Figure 2 highlights the structure of Staffordshire Waste Partnership.

Figure 1. Map of local authority areas within the Staffordshire Waste Partnership

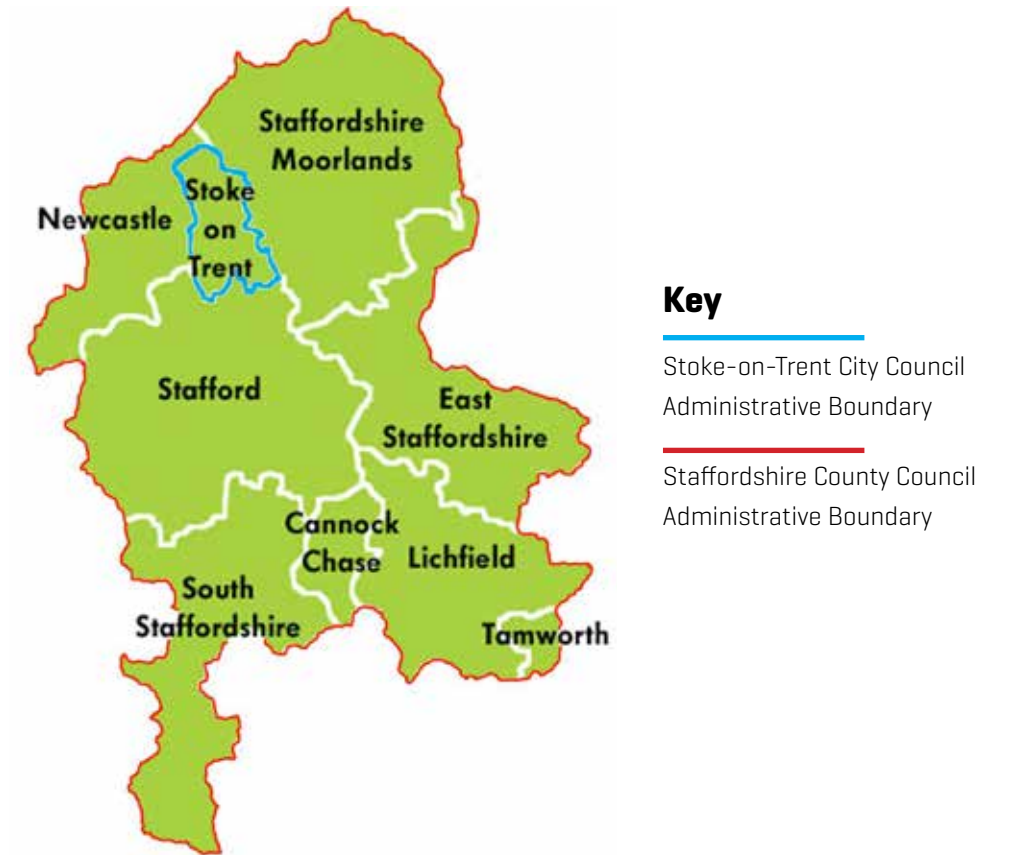
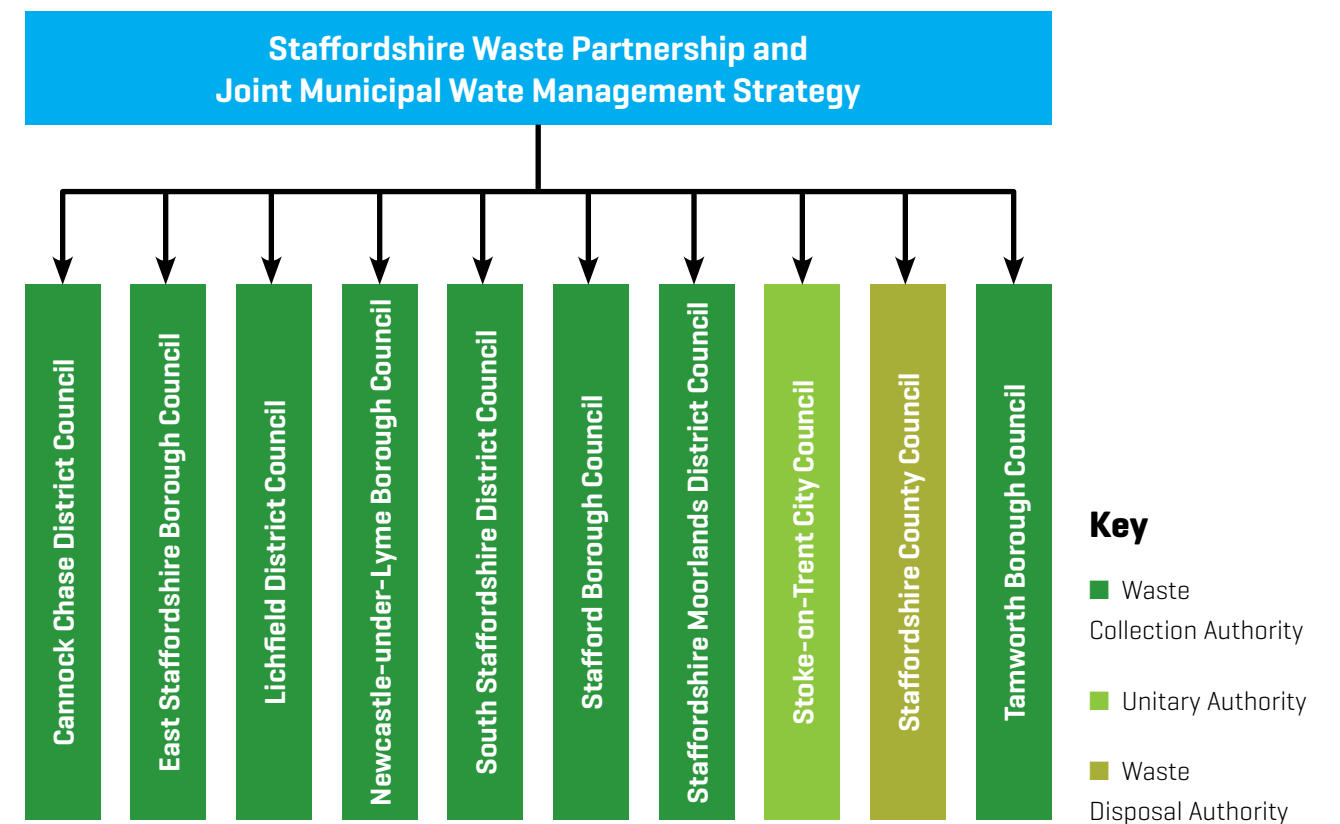


Figure 2. Staffordshire Waste Partnership structure



There is a wide range of existing and forthcoming European, national and local policies and legislation that determine the way waste is collected and managed throughout Staffordshire, as discussed in the 2007 strategy document. Such policy / legislation extends to include climate change and reduction of carbon emissions, resource efficiency, sustainable consumption and production, and increasing the role of waste prevention. The Government Review of Waste Policy in England 2011 was a key driver that highlighted the need to refresh the 2007 strategy. Table 1 provides an overview of key policies and legislation since 2007 which drive the need for this refreshed strategy.

Table 1. Key waste management policies and legislation since 2007

Policy / Legislation	Salient information
Waste Strategy for England 2007	<ul style="list-style-type: none"> Decouple waste growth from economic growth. More emphasis on waste prevention and reuse. Meet and exceed the Landfill Directive diversion targets for organic municipal waste in 2010/2013/2020. Increase diversion from landfill of non-municipal waste and secure better integration of treatment for municipal and non-municipal waste. Invest in infrastructure needed to divert waste from landfill and for hazardous waste management.
Revised EU Waste Framework Directive 2008	<ul style="list-style-type: none"> Emphasises resource efficiency and waste prevention. Waste hierarchy is a priority but Member States may depart from it if doing so results in a better environmental outcome. Member States must put in place waste prevention programmes by the end of 2013. The Commission must report on progress in waste prevention by 2011 and by the end of 2014, it has to set waste prevention and decoupling objectives for 2020. Member States must achieve a target of re-using or recycling 50 per cent of household waste (including paper, metal, plastic and glass) by 2020; and achieve a target of re- using, recycling or recovering 70 per cent of construction and demolition waste by 2020. Member States must set up separate collection for at least paper, metal, plastic and glass by 2015.
Waste Policy Review 2011	<ul style="list-style-type: none"> Adoption of a revised waste hierarchy which has a greater emphasis on prevention and re-use. No new recycling targets imposed on local authorities. Withdrawal of the Landfill Allowance Trading Scheme after the 2012/13 scheme year. Maintain landfill tax increases towards a floor of £80/tonne in 2014/15. A revised recycling and waste commitment for both household and business waste. Changes to Section 46 of the EPA – powers of Local Authorities to deal with certain waste offences. Abolishing proposals to introduce new bin taxes for householders based on the amount of waste produced.

Waste Regulations 2011	<ul style="list-style-type: none"> Requirements for waste collection, transport, recovery and disposal. Requires businesses to confirm that waste hierarchy is applied when transferring waste and include a declaration on the waste transfer /consignment note. Introduces two-tier system for waste carrier and broker registration, including the new concept of waste dealer.
Wealth from waste, Local Government Association’s local waste review, 2013	<p>Recommends the following Government changes;</p> <ul style="list-style-type: none"> Reinvestment of landfill tax receipts, Improvement to the quality of recyclable waste, Regulation changes to stop waste exportation, Improvements to capacity for high value recyclables, Encouragement reuse and reconditioning, Ensuring producers pay their share via PRN system, Introduction of financial reward schemes for residents.

In recent years, the Government has introduced a number of significant fiscal changes to local authorities, including significant reduction in public sector funding. This key economic driver has resulted in a challenge to ensure value for money, affordability and sustainability in our waste management. Landfill tax has risen in recent years, resulting in more costly disposal, meaning it has never been more financially important to source other waste management options.

A clear gap has been identified in the waste collection services provided across the county – trade waste is a large proportion of total waste arisings, however not all WCAs in Staffordshire offer a commercial collection service. Moreover, of those WCAs that do offer the service, it is greatly limited to residual collections only. This sector is a key waste producer that requires suitable collection services, which can generate an income through service charging. These important factors have therefore shaped the structure of this refreshed strategy.

Based upon these developments since 2007, the key legislative and economic drivers for current waste management practices have altered sufficiently enough to require a refreshed strategy document, reflecting the present situation.



Bails of processed recycling at the Material Recovery Facility

1.5 Purpose of the refreshed strategy

This document provides a framework for strategic decisions to be taken on the management of municipal solid waste (MSW) in Staffordshire and Stoke-on-Trent to the year 2020. It adopts a flexible yet focussed approach, recognising the need to respond to rapid developments of new ideas and opportunities. This refreshed strategy is needed to provide the context for preparing the new long term municipal waste management contracts that are due to come into operation over the next few years, in particular to develop options for contracts involving the Material Recycling Facility (MRF) at Aldridge, which end in 2015, and the North Staffordshire waste disposal contract, which ends in 2020.

The refreshed strategy has been prepared by officers within the Staffordshire Waste Partnership, and supersedes the 'Integrated Municipal Waste Management Strategy for Staffordshire and Stoke-on-Trent' (produced in 2003 and updated in 2007). The core principles set out in the original strategy remain unaltered but are now updated in this strategy for 2013 in order to reflect the changes faced since the original document, such as legislative pressure, economic drivers, service alterations and implementing new targets, having achieved those originally set out.

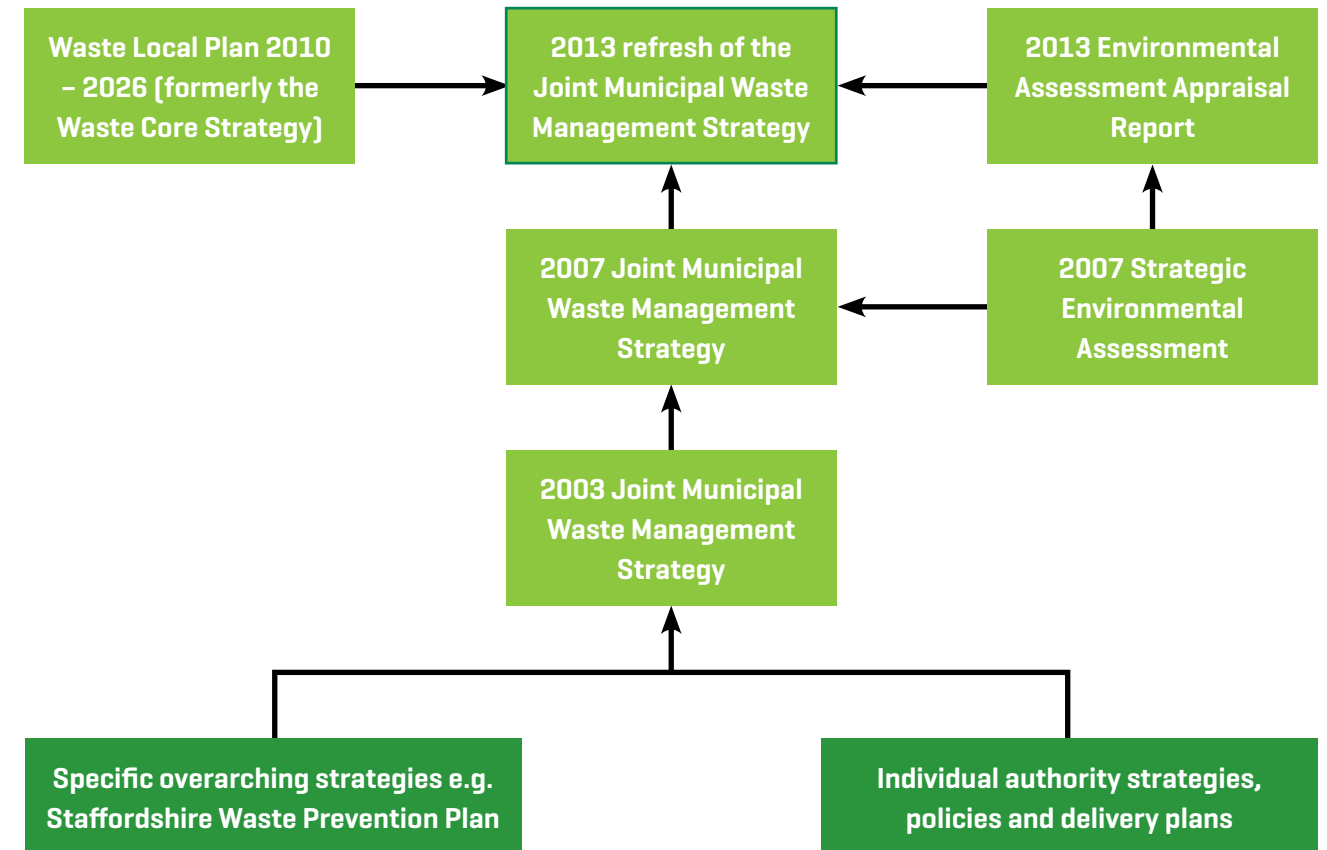
1.6 Structure of the refreshed strategy

The various strategic documents are all based on a partnership approach and will involve a wide range of strategic partners, all offering a diverse breadth of expertise. These partners will include the Waste Collection Authorities, Waste Disposal Authorities, producers and managers of non municipal waste, other public and private sector bodies, the voluntary sector and many other groups /organisations as needed. Collectively these partners will drive the waste strategy forward.

The refreshed strategy is structured so that each partner WCA will decide and develop the best collection systems which suit their area and deliver the core objectives (discussed in section 3 of this document) of the strategy in consultation with their local communities. Each partner will produce an individual Partner Authority Action Plan which will allow them flexibility in meeting local need, when delivering the plans set out by this refreshed strategy.

Whilst this refreshed strategy document supersedes the Joint Municipal Waste Management Strategies published in 2003 and 2007, both provide a context for how the strategic management of municipal waste management has evolved. Furthermore, this document should also be considered alongside the Waste Local Plan 2010, which sets out both the waste needs of the county and the areas which may be considered for waste development. Figure 3 shows how SWP related documents fit together to result in this refreshed strategy 2013.

Figure 4. SWP related waste management documents relevant to this refreshed strategy



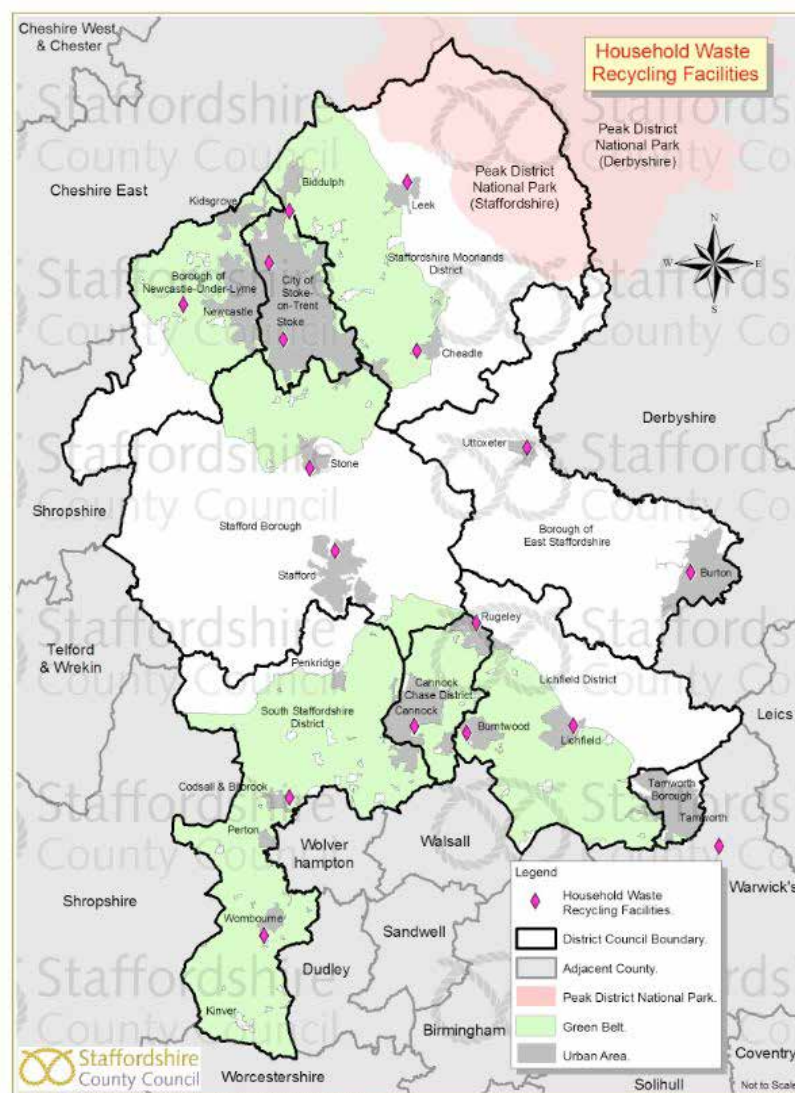
Recycling facilities at Household Waste Recycling Centres

2. Current Waste Management Position

In Staffordshire, the following waste management services are currently in operation;

- All eight WCA's and Stoke-on-Trent UA operate household waste and recycling collections, including free garden waste collections for at least one bin per household, and bulky waste collections. Services are delivered through a mixture of 'in-house' and contracted out services, which includes the third sector for bulky waste in some locations.
- 16 Household Waste Recycling Centres (HWRCs) are operated by Staffordshire County Council and Stoke-on-Trent UA (Figure 4).
- Over 300 bring banks, offering recycling facilities.

Figure 5. Map of Household Waste Recycling Centres (HWRCs) used by Staffordshire authorities [Waste Local Plan, 2010].



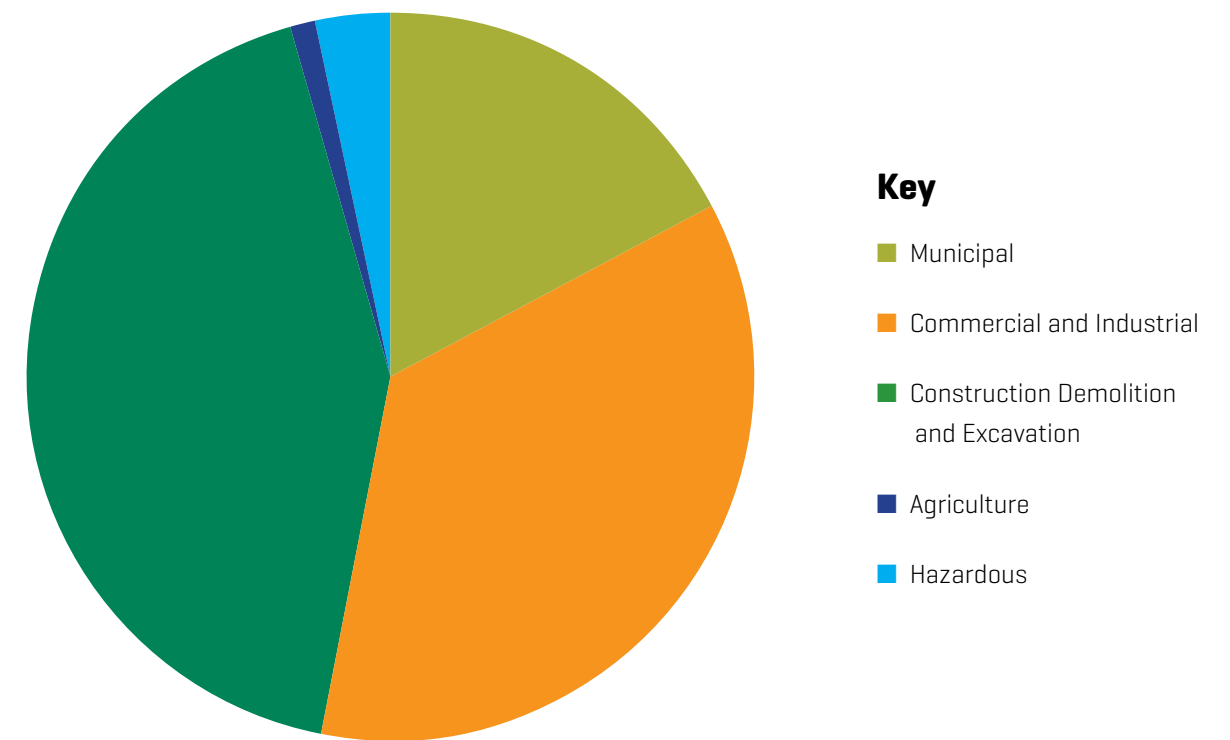
For more information the specific waste management services in each council administrative area, please contact your local council – contact details are available in the 'Useful Contacts' section of this document [section 5.1].

Staffordshire has made significant progress in managing waste sustainably, since producing the original strategy document in 2003. There has been investment in new collection schemes and facilities to improve recycling performance, including organic waste. This has allowed SWP to gain valuable experience in the use of a wide range of technologies, collection processes, and introduction of new waste streams. The advances made in each key area of waste management are discussed in the rest of this section.

2.1 Waste composition

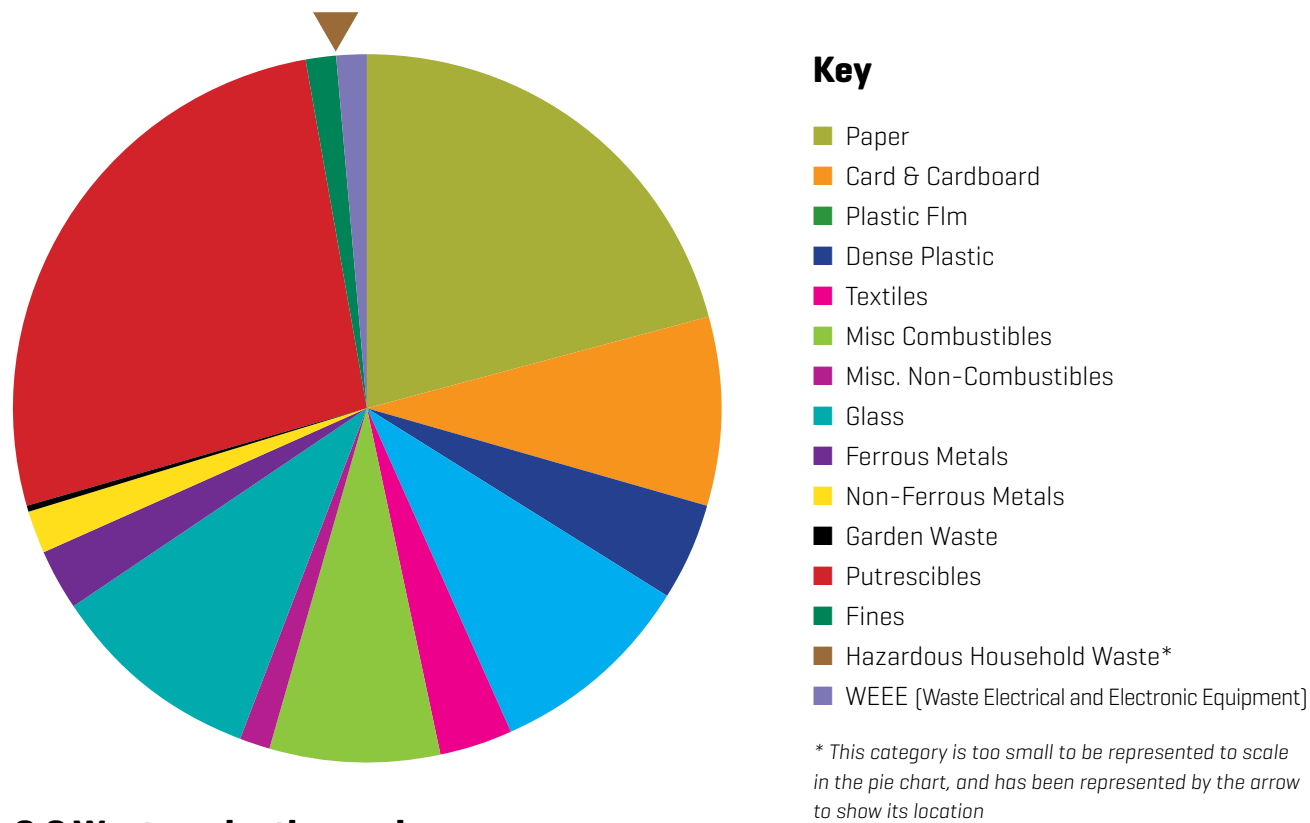
Municipal solid waste (MSW), mainly from households, currently makes up 14.7% of the total waste amount for Staffordshire and Stoke-on-Trent, with the majority of waste arisings produced by construction, demolition, commercial and industrial activities [Graph 1]. In 2006/07, Staffordshire generated approximately 614,000 tonnes of municipal waste. During the same time period, the county recycled 33% of its total waste arising. Compared with other counties, Staffordshire is performing well against a national average of county recycling rate at 41%.

Graph1. Pie chart showing the estimated controlled waste arisings in Staffordshire [Waste Local Plan, 2010].



Furthermore, recent compositional analysis has been used to estimate the composition of municipal waste across all Staffordshire areas in 2012 (Graph 2).

Graph 2. Pie chart showing the composition of municipal waste in Staffordshire in 2012



2.2 Waste reduction and reuse

Recent partnership work has resulted in engagement with approximately 6000 residents on the subject of waste prevention /minimisation. These campaigns included (but were not limited to):

- Delivering a £122,000 ‘Love Food Hate Waste’ (LFHW) campaign (2009 – 2011),
- Assisting with the delivery of a regional LFHW campaign across the West Midlands,
- Developing and delivering a £20,000 ‘Unwanted Mail’ campaign, which recently made the final for ‘Best waste prevention project’ at the LARAC awards,
- Developing new initiatives and methods to promote re-usable nappies in an attempt to engage a new audience,
- Assisting some local authorities with the roll out of new services.

Assuming these residents reduced the amount of waste they produced by 20% between 2009 and 2012, there has been the prevention of circa 2,400 tonnes across Staffordshire, attribute to waste reduction campaigns.

Reuse schemes are currently in their infancy across the county. Initial works include furniture reuse schemes where local authorities are working with a variety of third sector organisations, including Furniture Mine, YMCA, Home Comforts and the British Heart Foundation.

2.3 Types of waste

All WCAs in Staffordshire source segregate waste to separate out recyclable materials, however each council does this to a different degree, according to local need and service suitability. All WCAs offer kerbside recycling collections, a service to collect organic waste, and more specific services for less common items, such as bulky items and trade waste. Progress in these areas is discussed below.

2.3.1 Recycling

Since the original strategy was created in 2003, each of the eight WCAs has achieved above 50% recycling performance (total recycling, including composting), with Staffordshire Moorlands District Council achieving above 60% in 2012/13. At the same time, all partner authorities have seen a reduction in the volume of waste produced. Table 2 shows the recent dry recycling performance for each WCA and UA. Table 4 shows the total recycling rate (dry recycling and organic waste) per WCA for the same time period (2011/12).

Table 2. Dry recycling collected in 2012/13

	Total household waste (tonnes)	Total recycling (tonnes)	Recycling rate (%)
Cannock Chase District Council	38,087.33	10,785.18	28.3
East Staffordshire Borough Council	45,044.28	10,939.45	24.3
Lichfield District Council	41,783.47	11,583.07	27.7
Newcastle-under-Lyme Borough Council	47,700.11	8,979.80	18.8
South Staffordshire District Council	44,372.52	9,554.08	21.5
Stafford Borough Council	51,952.69	12,634.51	24.3
Staffordshire Moorlands District Council	39,675.67	8,365.58	21.1
Stoke-on-Trent City Council	100,453.77	23,459.20	21.7
Tamworth Borough Council	29,503.98	8,437.50	28.6
Total	438,573.82	102,738.37	23.5

2.3.2 Organic waste

Organic waste includes food waste and garden waste. The following services are available to collect and recycle organic waste;

- Separate food waste and garden waste collections by Newcastle-under-Lyme Borough Council only,
- Joint food and garden waste collection in the same bin, by East Staffordshire, Cannock Chase, Staffordshire Moorlands, Stoke-on-Trent, Lichfield and Tamworth councils,
- Separate garden waste collections by Stafford Borough Council and South Staffordshire District Council (where food is collected as residual waste in the general waste bin),
- Garden waste recycling at all HWRCs.

In Staffordshire, food waste accounts for approximately 15% of total waste arisings, and garden waste accounts for approximately 20%. Separate collections for organic waste have allowed more waste to be recycled, via composting and anaerobic digestion processes. Table 3 shows the percentage of the total waste collected from households that is collected separately, as a type of organic waste. Table 4 shows the total recycling rate (dry recycling and organic waste) per WCA for the same time period (2011/12).

Table 3. Organic waste for composting or treatment in 2012/13

	Total household waste (tonnes)	Total organic waste (tonnes)	Total rate (%) composted or treated
Cannock Chase District Council	38,087.33	9,605.75	25.2
East Staffordshire Borough Council	45,044.28	12,994.56	28.8
Lichfield District Council	41,783.47	12,699.2	30.4
Newcastle-under-Lyme Borough Council	47,700.11	15,622.51	32.6
South Staffordshire District Council	44,372.52	12,386.00	27.9
Stafford Borough Council	51,952.69	14,853.06	28.1
Staffordshire Moorlands District Council	39,675.67	13,320.24	33.6
Stoke-on-Trent City Council	100,453.77	13,328	13.3
Tamworth Borough Council	29,503.98	6,523.54	22.1
Total	438,573.82	111,332.86	25.4

Table 4. Total recycling rate, per Local Authority, for 2012/13

	Total household waste (tonnes)	Total recycling (tonnes)	Total recycling rate (%)
Cannock Chase District Council	38,087.33	20,390.92	53.5
East Staffordshire Borough Council	45,044.28	23,934.01	53.1
Lichfield District Council	41,783.47	24,282.27	58.1
Newcastle-under-Lyme Borough Council	47,700.11	24,602.31	51.5
South Staffordshire District Council	44,372.52	21,940.08	49.4
Stafford Borough Council	51,952.69	27,487.56	52.9
Staffordshire Moorlands District Council	39,675.67	22,685.82	57.2
Staffordshire County Council (Household Waste Recycling Centre tonnage only)	74,301.84	40,327.51	54.3
Stoke-on-Trent City Council	100,453.77	36,787.2	36.6
Tamworth Borough Council	29,503.98	14,961.04	50.7
Total	512,880.66	257,398.72	50.2

2.3.3 Other waste types

There are a number of specialist waste streams that WCAs now deal with;

- Clinical waste – Not all WCAs offer specialist collection services for clinical waste, as it poses certain health and safety risks. Those WCAs in North Staffordshire have offered suitable revised services since 2012, with plans to extend this to those WCAs in South Staffordshire in 2013 (see delivery plan in section 4.1).
- Bulky waste – Large items of waste, such as broken furniture, can be collected by specialist services on order from most WCAs. As furniture accounts for 42% of all bulky waste collections in Staffordshire, furniture reuse schemes are now in place in many areas.
- Electrical items (WEEE; Waste Electrical and Electronic Equipment) – By law, electrical items require suitable disposal and collection with residual waste is not appropriate for this, so most WCAs offer separate options for WEEE.
- Trade waste – Local Authority run commercial waste collection services are available for an extra cost in most areas of the county, however most authorities offer a residual waste collection service only.



Bulky waste collection services and reuse schemes are available for items like broken or unwanted furniture

2.4 Waste disposal and treatment arrangements

Through a mixture of joint arrangements and individual contracts, SWP utilises the following technologies as waste recovery options other than landfill;

- three in-vessel composting plants (for garden waste),
- one Anaerobic Digestion (AD) plant (for organic waste involving food),
- three dry recycling Material Recovery Facilities (MRFs),
- three waste transfer stations,
- two Energy from Waste Plants (for residual waste),
- suitable reprocessing of street sweepings.

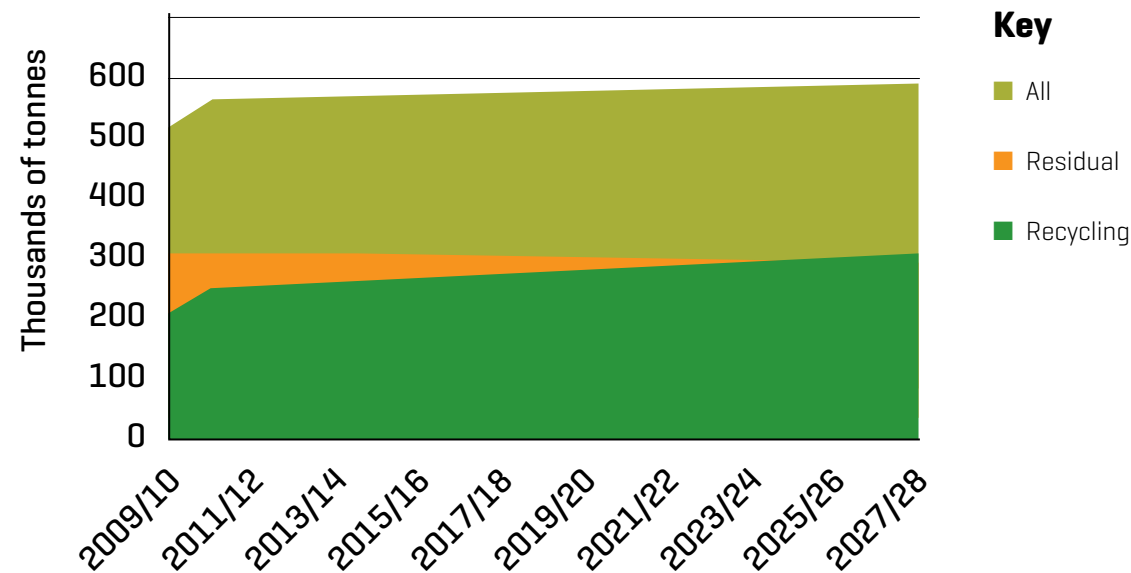
An Energy from Waste (EfW) plant, located in South Staffordshire, is currently under construction and is expected to be fully operational in 2014. It is expected that participation in this recovery method will divert waste from landfill disposal. The aim is to reduce the volume of waste to landfill disposal to less than 5% of total waste arisings.

2.5 Predicted waste growth

The implementation plan and core targets specified within this document are based upon predictions of waste growth in Staffordshire and Stoke-on-Trent over the next 15 years, as set out in the Waste Arisings Projections report [Valpak, 2012]. This allows the quantification and justification of new targets for this refreshed strategy [section 4]. Graph 3 summarises the progressive growth in waste arisings over the next 15 years. The general trend suggests that by 2027, not including expected population growth and associated increased housing numbers, on a like for like basis;

- overall waste arisings will increase by approximately 4%,
- collected residual waste will decrease by circa 25,000 tonnes,
- collected recycling will increase by approximately 50,000 tonnes.

Graph 3. A summary of predicted growth of waste arisings in Staffordshire and Stoke-on-Trent over the next 15 years [Valpak, 2012]



The indication that there will be a reduction in amounts of residual waste collected, and an increase in levels of recyclate collected, has the potential to positively alter the recycling rate across Staffordshire, but it is important to note that work on prevention and reuse will also have an effect on waste arisings.

3.0 Strategic Plans

Taking into account the current economic climate, associated drivers and legislative requirements, this refreshed strategy aims to provide a clear framework of collaborative working within SWP. This framework will assist in the development of consistent approaches to waste management across the county.

Reduction in total waste production over recent years can be attributed to, in part, the current economic climate, as austerity impacts buying habits. Going forward, the main challenge is to ensure that, as the economy improves and consumer confidence returns, unsustainable levels of waste production and therefore disposal do not also return.

Tackling the main issues as a partnership also requires the individual authorities' waste and minimisation strategies to be updated, allowing this refreshed strategy to be a simple overarching document which sits above the individual documents. As a result, there is a greater emphasis on the waste hierarchy, with waste prevention as the core of the strategic development of future waste management.

To facilitate this, this refreshed strategy has developed six key principles, which form the core objectives for the delivery plan;

- Waste prevention, including reuse,
- Efficiency Savings,
- Resource Recovery,
- Carbon Reduction,
- Infrastructure & Contracts,
- Municipal Waste.

The principals are in no particular order and have not been prioritised to form the above list.



Recycling collection vehicle

3.1 Core objectives

The core objectives are detailed below; however more information with regard to specific projects to deliver these objectives is included in the delivery plan (section 4.1).

3.1.1 Waste Prevention

To maintain zero waste to landfill and reduce the amount of local authority collected municipal and commercial residual produced in Staffordshire, benchmarked against the top 10% of residents, thus reducing the overall volume of waste that is treated, recovered, disposed, or recycled.

The Waste Regulations 2011 [England and Wales] require greater emphasis on the higher levels of the waste hierarchy (figure 5 in section 2.6), which highlights primary focus on waste prevention / minimisation and reuse. Local authorities have responsibility under the Waste Minimisation Act 1998 to promote waste reduction.

Waste prevention reduces the amount of waste entering the collection, processing and disposal system, which provides financial savings and reduces environmental impacts, such as lowering associated carbon emissions, avoiding harmful landfill disposal, and increasing material / item reuse, which reduces the consumption of valuable resources and raw materials. However waste prevention also poses challenges;

- decoupling waste prevention from economic trends,
- current popular cultural trends influencing the consumer driven economy has resulted in a throwaway society, which therefore requires effective communication for behavioural change,
- lower waste quantities and the changing nature of packaging and production materials may result in lower quality of collected materials, leading to increased cost for processing.

Waste minimisation and reuse was focused on in the 2007 strategy document, highlighting key areas of prevention as home composting and nappies via educational and awareness campaigns, working alongside reuse schemes. Operationally, reuse schemes remain a key factor to be improved upon to offer a better service for increased participation, as they have not yet been fully implemented to provide a high level service. As extensive works were undertaken to deliver the waste minimisation campaigns, this strategy will focus upon operational changes that can benefit local residents. However awareness and education campaigns will remain a strong point in conjunction with these works, as featured in proposals for SWP's Waste Prevention Plan. In addition, new contracts with Veolia (Four Ashes Energy from Waste plant) and FCC (HWRCs) also include the provision of waste education officers for community engagement on waste management issues.

Working in collaboration with WRAP (a Government funded recycling organisation), SWP has evaluated waste prevention activities currently undertaken (WRAP, 2012) and determined preventable tonnages of different types of waste via suitable waste prevention techniques (Table 5). This identified areas of significant potential to prevent waste entering collection and disposal services, which highlighted food, furniture and electrical items (WEEE) as waste streams to concentrate minimisation projects on. Reuse schemes for furniture and WEEE would also provide extensive social benefits to the local communities and environmental benefits.

Table 5. Potential preventable tonnage of waste through waste prevention techniques (WRAP, 2012)

Percentage of preventable tonnage captured	Preventable tonnage per annum			Total preventable tonnage minus WEEE per annum
	Food	Furniture	WEEE	
100%	9,000	4,400	2,000	13,400
75%	6,750	3,300	1,500	10,050
50%	4,500	2,200	1,000	6,700
25%	2,250	1,100	500	3,350

3.1.2 Efficiency Savings

To achieve efficiency savings across SWP, thus reducing the total budget for waste management below the rate of inflation.

Despite the current public spending restrictions, local authorities will continue to provide waste services which meet the high expectations of customers. In 2012, the cost of providing waste management services for Staffordshire, including collection, treatment, processing and disposal cost, was in excess of £45million. Of these costs, in excess of £42million can be attributed to transport, processing and disposal costs. As a result, the delivery plan will focus on these three key areas, ensuring SWP has the correct infrastructure in the right areas to reduce transport mileage (and therefore direct carbon emissions), provide comprehensive yet low cost processing services and disposal options.

To facilitate such reduction of costs requires further improvements in performance and service delivery achieved by collaborative working and sharing of best practice. It is important to consider the true cost of waste management in a two tier authority and identify financial savings for efficiencies in joint service and procurement opportunities. This will be conducted thanks to the shared commitment of SWP authorities to the vision of sustainable waste management for Staffordshire, which could expand to include other organisations, should joint working outside SWP present saving opportunities.

Reflecting local needs and differences in operating systems, contracts and infrastructure and measuring true success if efficiency gains from joint working, will prove to be challenging in achieving financial savings through improved efficiency.

3.1.3 Resource Recovery

To ensure the maximisation of resource value from collected materials, as a commodity or as energy provision.

In the last strategy [2007], a partnership wide recycling rate [including food waste] of 50% of total waste arisings was set as a formal target. This has been achieved however it is important to also recognise that collecting the source segregated materials results in maximum financial value for the materials as a commodity or as energy provision.

Scarcity of raw materials, particularly some rare earth metals, has a significant impact in global markets, results in the increased value of such materials recovered from waste. This could impact the product chain as scarcity of raw materials forces consideration of alternatives, which in turn impacts the range and volume of materials currently collected under waste services. This necessitates adaptable collection and treatment processes to meet market demands, that could lead to more variety in waste streams to include recovery of other viable materials depending on their value, which would affect kerbside collection routes. Strategic development therefore requires a flexible approach for future collection schemes and associated infrastructure requirements.

3.1.4 Carbon Reduction

To reduce the total carbon emissions for waste collection, processing and disposal activities 2% year on year, by ensuring consideration in future contract, infrastructure and procurement decisions.

In keeping with the targets that have been set in the UK Climate Change Act 2008, individual authorities have published adaptation plans which include actions to reduce the impact of their waste services on the environment and develop the management of these services to enable them to respond efficiently to Climate Change, as part of their Climate Change Strategies. All partnership authorities are also signed up to the Staffordshire Declaration on Climate Change.

The commitment to reducing carbon emissions has already been highlighted in achieving zero waste to landfill. SWP has therefore reduced the amount of landfill gas produced via degradation of waste under landfill condition. Landfill gas is primarily composed of methane which is a greenhouse gas that has an impact on the environment that is 23 times greater than the impact of carbon dioxide. However, there are further opportunities to reduce the carbon emissions, through waste prevention, item reuse, and recycling of materials to preserve raw materials / resources. In addition, waste processing methodology, and associated infrastructure can use and generate renewable energy and fuels which support national energy policies. This is a key driver for Stoke-on-Trent City Council, who recognise that increased use of renewable energy provides security of energy supply at an affordable price. New Staffordshire County Council disposal contracts now have a rolling 5% reduction in carbon emissions as a standard Key Performance Indicator [KPI].

Waste collection services and processing infrastructure will be appraised internally to SWP, using the Environment Agency's Waste & Resources Assessment Tool. Assessments can be made to alter service methodology and infrastructure accordingly, to support a low carbon economy.

3.1.5 Infrastructure and Contracts

To provide and support appropriate infrastructure with suitable contracts that ensure value for money, by developing procurement policies to maximise efficiency & sustainability.

Strongly linking with other core objectives, appropriate infrastructure supported by effective contracts could maximise the resource value of collected waste, provide efficiency savings with regard to practical aspects and collaborative procurement, and assist in the reduction of carbon emissions from waste services. Contracts need to be flexible to markets changes and material value fluctuations, in order to ensure efficient collection and high quality processing. From the extensive contracts register, key contracts will have an impending end date, including service contracts for several authorities in coming year, will be prioritised higher.

Key contracts to focus on include treatment contracts for each waste stream [and associated infrastructure requirements] and scoping of joint service contracts and other operational contracts. This aims to provide economies of scale, and further improve performance and sustainability of waste management; however it is important to reflect local needs. Contracts will be evaluated for potential savings and improvements when the contract is close to the end date, which necessitates a phased approach to this objective.

It is expected that, through the implementation of key contracts over the coming years, there is the potential to incorporate key infrastructure, where appropriate. This may also present further opportunities for efficiency savings.

3.1.6 Municipal Waste

To provide efficient and cost effective waste services to local residents and businesses.

SWP focus is shifting from household waste to all municipal waste collections including commercial waste, due to changes to government thinking as outlined in their review of waste policy in 2011. Our experience in shaping household waste collection services over the last decade has provided SWP with significant experience in treating waste differently. As a result, there is the opportunity to implement a comprehensive, county wide trade waste scheme, which could help local businesses to reduce their waste and therefore costs.

Development of commercial waste services has been identified as a key area of work to provide enhanced services to local businesses. This will build on work already undertaken in the north of the county which has identified this as significant opportunity to provide more cost effective and efficient services, offering a wide range of collections, including recycling and the potential for separate food waste.

Domestic collections remain at the core of our waste management. We aim to use our experience to offer effective and efficient services to our residents that compliment the wider requirements of source segregation, to meet government policy and to accommodate with advances in technology. Throughout any changes to these drivers, waste collection services will continue to provide residents with simple, easy to use services that meet their needs.

3.2 Strategic Environmental Assessment

A Strategic Environmental Assessment (SEA) was conducted for the 2007 strategy. According to the SEA Directive, an SEA is not required to be undertaken for this 2013 refreshed strategy, given that the 2013 refreshed strategy is fundamentally based upon the ethos of the 2007 strategy and provides ‘minor modifications’ to the focus of the strategy. To confirm this, an Environmental Assessment Appraisal Report conducted a short assessment of the 2013 refreshed strategies objectives, which identified no significant differences to the environmental impacts noted in the 2007 SEA. The conclusion that an SEA is not required for this strategy was agreed by the 3 statutory bodies regulating SEAs; Environment Agency, Natural England and English Heritage.

The 2007 Strategic Environmental Assessment can be accessed at; www.staffordshire.gov.uk/environment/rubbishwasteandrecycling/wastestrategy/JointMunicipalWasteManagementStrategy

The Environmental Assessment Appraisal Report forms appendix 2.

4. Strategy Implementation

4.1 Delivery Plan

This delivery of this refreshed strategy must be flexible to advances in technology, changes in policy / legislation, and alterations of community opinions. Based on the core objectives set out in the last section, a live delivery plan has been developed to implement this refreshed strategy. This plan is a working document that will be updated accordingly throughout the delivery process.

Table 6 summarises the projects of the delivery plan and prioritises them for future action. Appendix 1 details the full delivery plan of this 2013 refresh of the Joint Municipal Waste Management Strategy for Staffordshire and Stoke-on-Trent.

Table 6. Summary of key future projects

Time frame	Project
Short term; immediate works	<ul style="list-style-type: none"> • Creation of a SWP Waste Prevention Plan. • Review of clinical waste services in South Staffordshire, aiming to implement alterations already underway in North Staffordshire. • Baseline research / data collation of all services, technologies and contracts, to assess current status, and identify gaps. • Agree a partnership procurement framework. • Create a Transport Managers Group to move forward on operational changes for efficiency savings.
Medium term	<ul style="list-style-type: none"> • Assess contracts according to end dates, undertaking review and alterations - focus on service contracts and local infrastructure. • Commercial waste service review and rebrand, including scoping of a single pricing structure and options for collaboration. • Bulky waste collection review, with potential for contracted services using the third sector. • Improved WEEE facilities, including potential for reuse.
Long term; background projects	<ul style="list-style-type: none"> • Guidance document on available collection, process and disposal technologies, to aid future decisions. • Ongoing work to align the variety of policies of individual partnership authorities.

In addition to this delivery plan, this refreshed strategy is supported by individual action plans for each partner authority. The action plan will set out local activities that support the core objectives of this refreshed strategy, but allow the authority flexibility in delivery to support local need.

4.2 Monitoring Progress

The Joint Waste Management Board for Staffordshire and Stoke-on-Trent will be responsible monitoring progress and performance in delivering this refreshed strategy via the delivery plan. The delivery plan is intended to be a live document and practical management tool. SWP is committed to the on going monitoring, review and updating of the delivery plan, as required in accordance with SWP internal alterations or external changes in pressures.

Performance monitoring will be undertaken against a standard template to ensure county wide compliance, which will be reported for discussion to the Joint Waste Management Board. This monitoring will take place to a formal level yearly, with the production of an SWP annual report.

Additional monitoring will be undertaken in the meantime – informal performance monitoring of key criteria will be reported at Joint Waste Management Steering Group meetings, every six weeks. This is part of a mandatory requirement to provide regular updates on delivery plan progress, to ensure the ongoing employment of the SWP Officer, given that the role is funded by the financial savings achieved in the project work of the delivery plan.

4.3 Review

During the aforementioned monitoring process of this refreshed strategy, this document will continually be assessed in the annual reports as to it remains applicable. Should it no longer be applicable to the current waste management practices, a formal review will take place, resulting in either another refreshed strategy to update current plans, or an entirely new strategy, depending on the circumstances noted in the review.

If this refreshed strategy document is deemed to be applicable until the end of the reporting period in 2020, a formal review will take place at the end of the strategy coverage period. The overall strategy and associated strategic documents will then be formally reviewed in 2020 by the Staffordshire Waste Officer's Group, to determine progress against the core objectives and targets set in this document. Should another update be required to the strategy, following discussion with SWP's Joint Waste Management Board, a refresh of the strategy will be commissioned to reflect the changes at that point in time.

5. Helpful information

5.1 Useful contacts

For information on waste services in your local area, please contact your local authority;

Local Authority	Contact details / website
Cannock Chase District Council	01543 462621 customerservices@cannockchasedc.gov.uk www.cannockchasedc.gov.uk/waste
East Staffordshire Borough Council	0800 269098 environment@eaststaffsbc.gov.uk www.eaststaffsbc.gov.uk/services/wasteandrecycling
Lichfield District Council	0845 002 0022 waste.strategy@lichfielddc.gov.uk www.lichfielddc.gov.uk/recycling
Newcastle-under-Lyme Borough Council	01782 717717 wastemanagement@newcastle-staffs.gov.uk www.newcastle-staffs.gov.uk/environment
South Staffordshire District Council	01902 696203 waste@sstaffs.gov.uk www.sstaffs.gov.uk/your_services/environmental_services/waste_and_recycling.aspx
Stafford Borough Council	01785 619402 info@staffordbc.gov.uk www.staffordbc.gov.uk/binday
Staffordshire Moorlands District Council	0345 605 3014 Email via online form www.staffsmoorlands.gov.uk/sm/council-services/environment-and-waste/bins-and-recycling
Stoke-on-Trent City Council	01782 234000 WasteManagement@stoke.gov.uk www.stoke.gov.uk/ccm/navigation/environment/waste-and-recycling
Tamworth Borough Council	0845 002 0022 enquiries@tamworth.gov.uk www.recyclefortamworth.co.uk
Staffordshire County Council	0300 111 8000 or 01785 277452 recycling@staffordshire.gov.uk www.staffordshire.gov.uk/environment/rubbishwasteandrecycling

For more information on waste management in Staffordshire, please visit the Staffordshire Waste Partnership's website; www.recycleforstaffordshire.org

For information on what can be recycled, please visit www.recycled.products.org.uk

For information on recycling and waste at home, in schools and at work, please visit www.recyclenow.com

To remove your name from junk mailing lists, please contact the Mail Preference Service on www.mpsonline.org.uk or 0845 703 4599.

5.2 Glossary of terms and acronyms

AD – Anaerobic Digestion; a collection of processes by which microorganisms break down organic material in the absence of oxygen, producing biogas and fertilizer.

Organic Waste – Materials such as paper, food and garden waste which decompose through the action of bacteria or other microbes. Generally, organic waste that is sent to landfill is squashed under all the other waste and does not have access to air. Decomposition without air (anaerobic) causes methane. Methane is a powerful greenhouse gas which is believed to contribute to global warming.

Bring bank – Recycling site open to the public.

Bulky waste – Large items of household waste such as furniture or fridges together with some garden and DIY waste.

Commercial waste – Waste from premises used mainly for the purposes of trade or business, or for the purposes of sport and entertainment.

Composting – Decomposition of organic matter in the presence of oxygen (aerobic) to produce compost for use as a fertiliser or a soil conditioner.

County Council – Is the waste disposal authority in the administrative area of Staffordshire.

District Council – Is the waste collection authority in the administrative area of Staffordshire.

Energy from Waste – Conversion of waste into a usable form of energy, either by incineration, thermal treatment or the production of gas.

Household waste – Covers waste from household collections, street sweepings, bulky waste collections, hazardous household waste collections, litter collections, household clinical waste collections, separate garden waste collections, waste from Household Waste Recycling Centres and waste collected separately for recycling/composting schemes.

HWRC – Household Waste Recycling Centre.

Kerbside collection – Collection of recyclables typically from the curtilage of premises.

Landfill – The process of depositing waste in/ on the ground.

Industrial waste – Waste from any factory and from any site occupied by an industry.

In-vessel composting – aerobic decomposition of organic / organic materials, confined within a building, container, or vessel, to create better air circulation than open composting.

JMWMS – Joint Municipal Waste Management Strategy

MSW – Municipal Solid Waste; This includes all waste collected by a Waste Collection Authorities, or its agents, such as waste from households, parks and gardens, fly-tipping and any waste they collect from commercial or industrial premises.

MRF – Material Recovery Facility; a specialized plant that receives, separates and prepares recyclable materials for marketing to end-user manufacturers.

Recovery – Recovery of materials or energy from waste by methods such as recycling, energy generation and composting.

Recycling – Collection or recovery of reusable materials from waste, and their subsequent reprocessing to form useable products.

Reuse – The use of waste items such as bottles, packaging or electronic components for their original or for another purpose without reprocessing.

Staffordshire Declaration on Climate Change – A public acknowledgement of climate change, and a commitment to action / community leadership to reduce emissions, adapt to changes which are now inevitable, and help the people of Staffordshire to do the same.

SWP – Staffordshire Waste Partnership; a collaboration of the ten councils in Staffordshire, tackling waste management issues together.

Trade waste – Commercial waste collected by the Waste Collection Authorities.

Waste arisings – The quantity of waste generated within a specified area.

WCA – Waste Collection Authority; In Staffordshire, arrangements for the collection of municipal waste are the responsibility of the district councils [except for Stoke-on-Trent City Council, which is a Unitary Authority].

WDA – Waste Disposal Authority; In Staffordshire, arrangements for the final disposal of household waste is the responsibility of Staffordshire County Council [except for Stoke-on-Trent City Council, which is a Unitary Authority].

WEEE – Waste Electrical and Electronic Equipment.

Unitary Authority – a self sufficient council, who collects and disposes of its own waste, without relying on other councils [e.g. Stoke-on-Trent City Council].

5.3 References

Environment Agency's Waste & Resources Assessment Tool;
<http://www.environment-agency.gov.uk/research/commercial/102922.aspx>

Joint Municipal Waste Management Strategy for Staffordshire County Council and Stoke-on-Trent City Council; Headline strategy, Implementation plan and Strategic Environmental Assessment (ref. 402.1395.00001), SLR, 2007.

<http://www.staffordshire.gov.uk/environment/rubbishwasteandrecycling/wastestrategy/JointMunicipalWasteManagementStrategy.aspx>

Staffordshire and Stoke-on-Trent Joint Waste Local Plan 2010 – 2026 [Adopted March 2013];
<http://www.staffordshire.gov.uk/environment/planning/policy/wastecorestrategy/Version-for-adoption-March-2013.pdf>

Waste Projection Report, Valpak, 2012.

WRAP, 2012. Composition of kerbside and HWRC bulky waste (MPD006-002).

Appendix 1 – Strategy Delivery Plan *[live document]*

Core objective	Project	Actions
Waste Prevention	Agree a partnership wide approach to waste prevention	Produce a Waste Prevention Plan
		Identify required resources to deliver action plan / agree funding mechanism
	Viability of alterations to bin size	Gather baseline information from partnership authorities
		Propose a series of aligned guidelines on bin size for SWP agreement, to be included in individual local authority policies
	Establish how LFHW success can be measured in terms of tonnage	Undertake cost benefit analysis
	Research how we can increase bulky re-use across Staffordshire	Undertake scoping exercise, create business plan, consider 3rd sector involvement, implement new service
	Introduce more comprehensive WEEE collection services (to avoid WEEE as residual waste)	Improve facilities on HWRC
		Offer wider coverage on bring sites
Scope the potential for introducing reuse kerbside collections		
Improve clinical waste services	Implement cost saving measures trialling in North Staffordshire, to other areas	
Efficiency Savings	Baseline report on currently used technologies / schemes (and their efficiency)	Establish Transport Officers Working Group, to review transport / workshop arrangements, plus recommend partnership arrangements where efficiency and carbon savings can be delivered
	Review of new technologies	Produce cost benefit analysis and feasibility study to assess efficiency and carbon savings of adopting new technologies
Resource Recovery	Complete waste compositional analysis all waste streams using waste data flow information for tonnages and split of recycling materials	Stoke-on-Trent City Council to procure composition analysis
		Staffordshire County Council to use Valpak to research waste composition of recycling and organic materials
Carbon Reduction	Ensure consideration to carbon reduction throughout all SWP activities	Include carbon reduction in all future decisions - written into local policies
	Complete research into whether local authorities are using alternative technologies and how successful they have been in reducing carbon impact	Conduct research using WRAP, LARAC, CIWM, networks
	Map waste service facility locations in Staffordshire and nearby authorities	Mapping exercise
Contracts / Infrastructure	Fully assess current infrastructure for gaps	Produce contract register of all current contracts and associated infrastructure
		Scope out contracts alterations where efficiency and carbon savings apply
		Investigate potential to develop existing facilities, and provision of new facilities
	Agree procurement process / framework for SWP	Determine potential for SWP wide procurement, to achieve economies of scale for financial savings
Municipal Waste	Improve commercial waste services offered by authorities through development of a single vision	Agree SWP wide pricing structure and options for service development
		Develop singular marketing strategy

Appendix 2 – Environmental Assessment Appraisal Report, 2013



Staffordshire
Waste Partnership