Refresh of the Municipal Waste Management Strategy

A report from Overview & Scrutiny

Contents

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Preface

By Cllr Jerry Evans, Chair, Transport, Environment and Regeneration O&S Committee

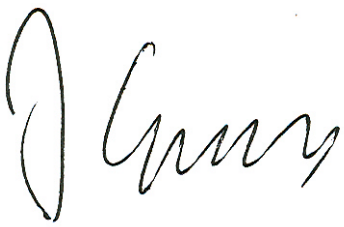
The City Council's Municipal Waste Management Strategy defines the city's strategic vision for managing municipal waste (that is, waste under the control of the local authority) from 2006 to 2026. We undertook this Scrutiny Review to support the refresh of the strategy, and anticipate a fuller strategy review taking place at the next rescheduled review point of 2016/2017.

We are encouraged that the City Council has doubled its rate of recycling in the past five years and is currently landfilling only around 5% of municipal waste (making the city one of the best performers in the UK). However, it is clear from our findings that if the city is to become "the first sustainable global city by 2026" and meet its overall carbon reduction target of 60% by 2020, then much more needs to be done to reflect these ambitions. We have identified a number of recommendations within this report to update the existing Municipal Waste Management Strategy to support the City Council's sustainability aims.

We believe the City Council committing to the feasibility work necessary to introduce heat recovery from the Tyseley Energy from Waste plant is an essential step as is increasing re-use within the city. Promoting re-use by altering the way the Council's 'bulky waste' is collected and the development of the re-use pilot scheme at the Norris Way Household Recovery Centre should help to drive down waste.

We have recommended regular and consistent analysis of residual waste and recycling to improve both planning and communication to support increasing participation in areas that are not currently making the most of the city's recycling services. We want to target resources to areas that most need them. Learning from the city's Nectar reward pilot scheme, which is the first project of its kind in Britain and increased recycling for paper / card in the two pilot areas, should also support increasing recycling contributions particularly in these times of unprecedented budget constraints.

I would like to thank all those who made this Review possible: Members of the Committee, officers from Veolia and Smurfit Kappa and within the City Council - in particular Chloe Tringham who accompanied the Review Group on our site visits and Scrutiny Officers Jenny Drew and Amanda Simcox.



Summary

Changing Basis for the Strategy

Although the UK is still producing over two hundred million tonnes of waste every year, waste projections have differed significantly from actual waste arisings. In Birmingham, instead of the 2% annual increase in waste that was predicted at the time the strategy was produced, there has been an annual average reduction in waste arisings of 3% since 2007/08 due to external factors, notably economic recession and producer reductions in packaging.

Progress against Strategy Commitments

City Council progress against strategy targets and performance compared with other Core Cities is mixed. Fleet and Waste Management services have achieved against recycling and reducing waste targets; and exceeded landfill targets (where it is one of the best performers in the UK) but have yet to define a re-use target.

Recycling

Although the City Council has doubled its rate of recycling and composting in the past five years, which is to be commended, we are clear more work is needed to achieve our recommended targets of 50% recycling by 2020 and at least 60% recycling by the end of the Strategy period. The need to improve communications relating to waste management and particularly guidance on recycling was a recurring theme during our evidence gathering. Lack of clarity and inconsistency has consequences for the city in: achieving targets; increasing costs for landfill or recycling and ensuring continued resident support for services.

Although a full evaluation has yet to be carried out for the Rewards Recycling projects being undertaken in Erdington and Cotteridge in partnership with Nectar (the first of their kind in Britain) early results look promising.

A key aspect of improving performance is refining what we do already to increase participation before introducing new services across the city. Nevertheless making the most of food waste is a key element missing from the current Municipal Waste Management Strategy given how significant food waste is in the waste we collect. While current external contract terms mean it will be very difficult for the City Council to be able to implement a city-wide household food waste recycling scheme before 2019, we wish to ensure that Fleet and Waste Management services are ready to introduce a scheme as soon as contractually possible.

Landfill

Landfill is not the issue for Birmingham it is for many other local authorities because of the existence of the Tyseley Energy from Waste facility. This has enabled the city to reduce substantially the amount of waste it has sent to landfill during the period the Strategy has been in place. We accept that in balancing cost with activity undertaken that some waste must go to landfill and so ‘zero waste to landfill’ is not an appropriate

target for Birmingham. Nevertheless we must continue to ensure we reduce waste sent to landfill to an absolute minimum.

Re-use

Increasing re-use is essential in minimising waste as recognised by the waste hierarchy which makes re-use the highest priority after waste prevention. Re-use in a municipal context is difficult to measure accurately but this does not preclude target setting.

We were encouraged by evidence from local social enterprises focusing on re-use and recycling about possibilities for increasing their range of work (where it did not compromise their charitable aims). The establishment of the re-use pilot scheme this year at Norris Way Household Recycling Centre in partnership with Jericho Foundation is just one example of this. We noted that Fleet and Waste Management services are considering how good practice on re-use from other core cities could be applied to Birmingham.

Information and modelling

The information the city has available for future service planning and modelling could be improved. Residual waste analysis has been useful but is not undertaken on a regular enough basis to enable consistent comparison. Recycling information is also not yet available by ward but should be with the roll-out of ward-based rounds.

Future Investment

Initial feasibility studies have identified a number of options to capture heat loss at the Tyseley Energy from Waste (EfW) plant and demonstrate that heat recovery there is commercially feasible. We are reassured to have heard that a joint working group of officers and Veolia specialists are both determining cost and delivery schedules for the best options.

Conclusion

While enabling Birmingham's current needs to be met more effectively, the recommendations we have proposed in this report have been made with future need, challenges and opportunities in mind. They recognise the biggest resource constraints we have faced yet in balancing costs and the services we provide. They also recognise the constraints of existing contractual arrangements. Lastly they exist to ensure the City Council fulfils its leadership role in reducing CO_2 emissions in its aim to be "the first sustainable global city by 2026" requiring it to be a low waste as well as low carbon economy.

Summary of Recommendations

	Recommendation	Responsibility	Completion Date
R01	That the Cabinet Member for Transport, Environment and Regeneration revises the current Strategy vision to recognise that Birmingham has agreed to reduce its overall carbon emissions target by 60% by 2026.	Cabinet Member for Transport, Environment and Regeneration	September 2012
R02	That the Cabinet Member for Transport, Environment and Regeneration rewords existing Strategy Target 1 as follows 'Aim to achieve levels of municipal waste reduction, year on year, which are better than the national average for England'.	Cabinet Member for Transport, Environment and Regeneration	September 2012
R03	That the Cabinet Member for Transport, Environment and Regeneration oversees scoping work to establish a revised current Strategy Target 2: 'aim to be the top metropolitan authority for waste arisings per person'.	Cabinet Member for Transport, Environment and Regeneration	September 2012
R04	That the Cabinet Member for Transport, Environment and Regeneration defines a specific re-use target as committed to in existing Strategy Target 3, to demonstrate the City Council's regard to the Waste Hierarchy.	Cabinet Member for Transport, Environment and Regeneration	September 2012
R05	That the Cabinet Member for Transport, Environment and Regeneration revises existing Strategy Targets 4 and 5 to commit to the City Council reaching a 50% recycling and composting target by 2020 and at least 60% by 2026. This reflects the City Council's aim of achieving beyond the current national government target of 50% recycling.	Cabinet Member for Transport, Environment and Regeneration	September 2012
R06	That the Cabinet Member for Transport, Environment and Regeneration revise Strategy Target 6 to reflect the principle that nothing shall be sent to landfill wherever economically and environmentally practicable that can be re-used, recycled or disposed of more effectively elsewhere.	Cabinet Member for Transport, Environment and Regeneration	September 2012

	Recommendation	Responsibility	Completion Date
R07	That the Cabinet Member for Transport, Environment and Regeneration amends Strategy Target 7 to capture the City Council's undertaking to gain best value for recyclable materials wherever economically and environmentally practicable i.e.: "To continue to develop recycling infrastructure to secure sustainable markets for all collected recyclable materials and gain best value for them wherever economically and environmentally practicable for the duration of this strategy." This is in line with existing Strategy objectives.	Cabinet Member for Transport, Environment and Regeneration	September 2012
R08	That the Cabinet Member for Transport, Environment and Regeneration updates the existing Strategy to ensure a clearer alignment with the City Council's Energy Strategy and Action Plan as well as the Total Waste Strategy to enable the City Council to take a 'Total Resource' view.	Cabinet Member for Transport, Environment and Regeneration	September 2012
R09	That the Cabinet Member for Transport, Environment and Regeneration agrees/demonstrates that all future re-use, recycling, energy recovery and disposal contracting options are considered and appraised (including for CO_2 reduction as well as other factors such as cost) to ensure the city has flexible and suitable provision that meets its long-term future needs.	Cabinet Member for Transport, Environment and Regeneration	December 2012
R10	That the Cabinet Member for Transport, Environment and Regeneration commissions a Waste and Resources Assessment Tool for the Environment (WRATE) analysis to calculate the potential impacts of all stages in the collection, management and processing of municipal waste.	Cabinet Member for Transport, Environment and Regeneration	September 2012
R11	That the Cabinet Member for Transport, Environment and Regeneration: a) agrees that regular and consistent analysis of residual waste and recycling is undertaken to allow for ongoing comparison of what is being collected from where in the city to improve planning and communications relating to the Waste Strategy in line with findings. b) that information be analysed to ward level, shared with Councillors annually and made publicly available.	Cabinet Member for Transport, Environment and Regeneration	September 2012

	Recommendation	Responsibility	Completion Date
R12	That the Cabinet Member for Transport, Environment and Regeneration revisits and updates the Communications Plan for Recycling to improve communications with households, notably on options for waste prevention, re-use and recycling.	Cabinet Member for Transport, Environment and Regeneration	September 2012
R13	That the Cabinet Member for Transport, Environment and Regeneration explores possibilities for re-use and recycling incentive schemes which are underpinned by learning from the 2012 Rewards Recycling pilot projects and elsewhere.	Cabinet Member for Transport, Environment and Regeneration	September 2012
R14	That the Cabinet Member for Transport, Environment and Regeneration undertakes the feasibility and development work necessary for the City Council to introduce a Food Waste Recycling Service by 2013.[1]	Cabinet Member for Transport, Environment and Regeneration	December 2012
R15	That the Cabinet Member for Transport, Environment and Regeneration: a) commits to ensuring heat recovery from the Tyseley Energy from Waste plant. b) reports back on joint working group progress in 2012.	Cabinet Member for Transport, Environment and Regeneration	December 2012
R16	Progress towards achievement of these recommendations should be reported to the Transport, Environment and Regeneration Overview and Scrutiny Committee in October 2012. Subsequent progress reports will be scheduled by the Committee thereafter, until all recommendations are implemented.	Cabinet Member for Transport, Environment and Regeneration	October 2012

[1] This was changed at City Council from 2020 to 2013.

1 Introduction

1.1 Purpose of the Review

1.1.1 The City Council's Municipal Waste Management Strategy defines the city's strategic vision for managing municipal waste (that is, waste under the control of the local authority[2]) from 1st July 2006 to 31st March 2026. It encompasses the targets set from the EU Landfill Directive and replaces the previous Birmingham Waste Management Strategy published in January 2000.

1.1.2 The strategy schedules review points in 2011/12 and 2016/17. This report sets out the findings from the Review.

1.2 Terms of Reference

1.2.1 The Transport, Environment and Regeneration O&S Committee agreed to undertake a brief Scrutiny Review of the Municipal Waste Management Strategy at their meeting on 18th October 2011.

1.2.2 The key question the Review sought to answer was:

> What updates and improvements need to be made to Birmingham's Municipal Waste Management Strategy?

1.2.3 The Review constitutes a refresh of the strategy, rather than a full review, with an emphasis on recommendations that revise targets to keep the strategy and target progress on track. As the City Council is committed to external waste management contracts until 2019, in its recommendations the Review Group focused predominantly on what it considered to be achievable within current contract terms. This includes further scoping and feasibility work to be undertaken between now and the next strategy review point to shape services post 2019. Fleet and Waste Management's Future Operating Model (FOM) does not form part of this Review due to ongoing negotiations.

1.2.4 Ensuring that the Review report was ready to be shared with Councillors before the end of the 2011/12 municipal year also required a brief review approach. This meant we were not able to look in detail at recommendations for the full spectrum of municipal waste. Instead we focused our attention predominantly on household refuse as it forms the vast majority of municipal waste.[3] It

[2] The focus of the Municipal Waste Management Strategy is primarily waste that the council has a role in collecting and managing - waste produced by householders; schools and at other council premises; from commercial premises collected by the council; litter and street sweepings; and other waste collected by the council, such as abandoned vehicles.

[3] From Waste Data Flow 2010-11 results, Birmingham collected 509,079.52 tonnes of municipal waste. Of this total 420,595.2 tonnes was household waste making household waste 83% of municipal waste collected during 2010-11.

is envisaged that a more detailed review of the Strategy will be carried out at the next interim review point in 2016/17.

1.2.5 We have assumed in producing the Review report, that the Strategy and associated action plan will be updated to take account of relevant Policy and Legislative changes (outlined in Section 2) that have taken place since the Strategy was adopted in 2006 without specific recommendations on these from the Review Group.

1.3 Methodology

1.3.1 The Scrutiny Review was conducted via a series of informal meetings and visits during November 2011 and January 2012. The Review Group consisted of three councillors led by Cllr Jerry Evans with Cllrs Robert Alden and Kath Hartley.

1.3.2 Members of this group met with the local management teams of key external contractors: Veolia (including a visit to the Tyseley Energy from Waste plant) and Smurfit Kappa (including a visit to the Nechells paper plant). We also met with Birmingham City Council officers responsible for monitoring the contracts as well as overseeing Birmingham's waste management and approach to sustainability. We spoke to a number of expert representatives representing a range of waste, resource and environmental interests. Lastly the Chair visited the nearest Anaerobic Digestion (AD) facility to Birmingham in Cannock, run by Biffa, to consider future infrastructure needs. A full list of witnesses is set out in Appendix A. We are grateful for their time and input.

1.4 The Report

1.4.1 In agreeing recommendations, we have taken into account those made in previous related Overview & Scrutiny Reviews namely:

- *Recycling: Looking to the Future* (2006);
- *Containers for Waste* (2007);
- *Reducing and Recycling Business Waste* (2010).

1.4.2 Chapter 2 sets out the context to the Strategy including national and local policy which underpins it.

1.4.3 Chapter 3 sets out key Review findings from evidence received.

1.4.4 Chapter 4 sets out the overall conclusions for the Review recommending a number of ways in which the strategy specifically can be strengthened as well as work which supports it.

2 Context

2.1 The Municipal Waste Management Strategy

2.1.1 The City Council's Municipal Waste Management Strategy, adopted in November 2006, defines the strategic vision for managing waste under the control of the local authority from 2006 to 2026.

2.1.2 The current strategy vision is:

> To run a city that produces the minimum amount of waste that is practicable, and where the remainder is re-used, recycled or recovered to generate energy. The materials recovered through composting, recycling, re-use and from the energy recovery process will replace the need for extraction of virgin materials.
>
> The waste management strategy will be sensitive to local needs and will provide a service to help Birmingham become as clean and green a city as it can be. Birmingham City Council and the Constituency partners will provide a service that citizens are pleased to support, and where there is malpractice or deliberate misuse of the service, that this is dealt with efficiently to maintain a clean, safe and healthy environment[4].

2.1.3 This Strategy has the following five objectives to enable the vision to be achieved:

1. The Council will explore ways of reducing the amount of waste sent to landfill to an absolute minimum, recovering value from waste wherever economically and environmentally practicable through energy recovery and measures to increase re-use, recycling and composting;
2. The City Council and its partners will raise awareness among the wider community to view waste as a resource and will deliver communications activities and work with relevant stakeholders (such as community groups and schools) to promote the cultural change needed to significantly increase recycling and re-use and reduce the overall quantity of waste requiring treatment or disposal;
3. The City Council will develop recycling and composting systems that meet the targets set out in this strategy through methods that are acceptable and accessible to the residents of Birmingham;
4. The City Council will explore ways of working with other local authorities and will expand its partnership activities with the private and voluntary sectors to assist in delivery of this Strategy;

[4] Birmingham City Council (2006) Municipal Waste Management Strategy 2006 - 2026

5. The City Council will work with its partners and other agencies to provide efficient and effective enforcement of its services to contribute to a clean, green, safe and healthy environment.

2.1.4 The strategy includes the following seven prime targets:

- **Target 1:** Aim to achieve levels of municipal waste growth, year on year, which are lower than the national average for England;
- **Target 2:** Aim to be consistently better than average for metropolitan authorities for waste arisings per person (BVPI 84);
- **Target 3:** To set up measurement systems for waste re-use in order to define specific targets within 3 years;
- **Target 4:** To double the recycling and composting performance (from the current BVPI level of 17%) within five years (by 2011/12);
- **Target 5:** To reach a 40% recycling and composting rate by the end of the Strategy period (by 2026);
- **Target 6:** To reduce the proportion of municipal waste disposed of to land fill year on year;
- **Target 7:** To develop recycling infrastructure to secure sustainable markets for all collected recyclable materials for the duration of this strategy.

2.2 Government Policy Changes since 2006

2.2.1 This section highlights the most significant Government policy changes relevant to the Municipal Waste Management Strategy that have been introduced since the Strategy was first agreed.

Climate Change and Energy

2.2.2 The Climate Change Act 2008[5] contains two of the most challenging legal targets the government faces: an 80% cut in carbon emissions by 2050 (including a reduction of at least 34% by 2020) and 15% renewable energy production by 2020.

2.2.3 The main change relevant to the Municipal Waste Management Strategy is that supporting documents raise the possibility of allowing local authorities to keep funds generated through decentralised renewable energy schemes. This has implications for the future use of the Tyseley Energy from Waste (EfW) plant.

Government's Review of Waste Policy

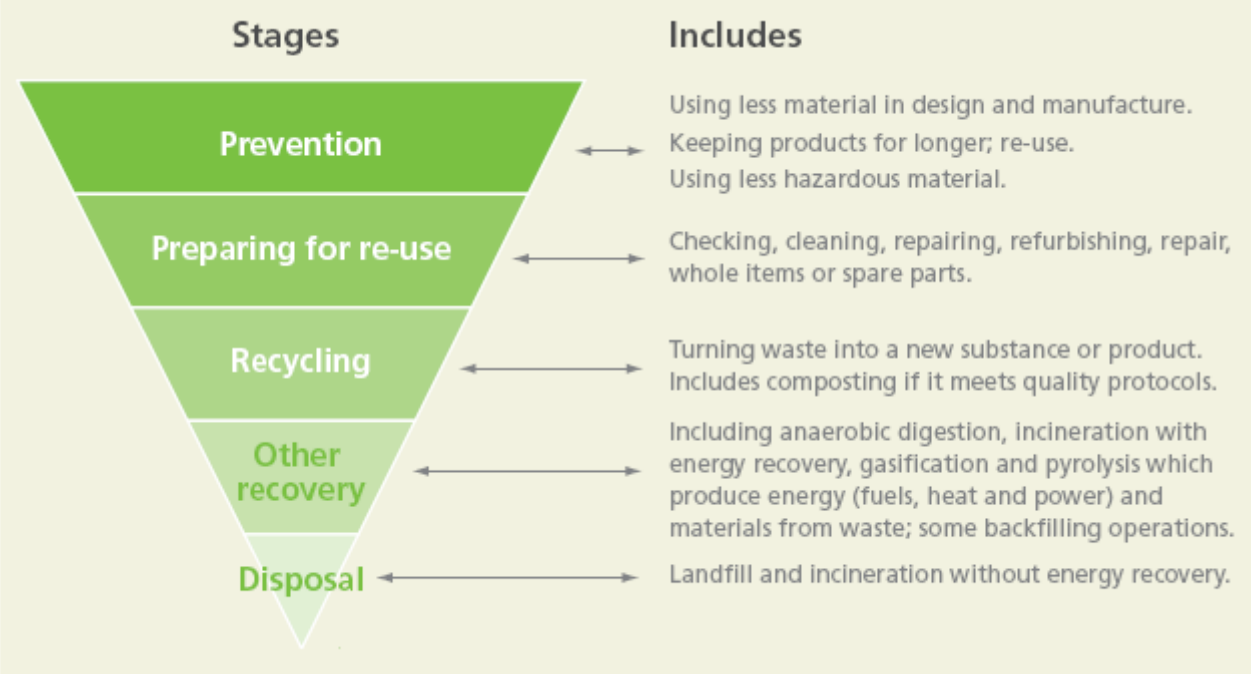
2.2.4 The Government's Review of Waste Policy in England 2011 report[6] was issued shortly before we began evidence gathering and was announced as a full review of all aspects of waste policy,

[5] See http://www.decc.gov.uk/en/content/cms/legislation/cc_act_08/cc_act_08.aspx
[6] DEFRA (2011) The Government Review of Waste Policy in England 2011

including Waste Strategy 2007, and service delivery. Led by the Department for Environment, Food and Rural Affairs (DEFRA) the Review spanned Government Departments including Energy and Climate Change (DECC) and Communities and Local Government (CLG). It was expressly positioned within the Government's broader strategic priorities: tackling the deficit; protecting the environment and addressing climate change; progressing localism and the 'big society'.

2.2.5 The Government Review was guided by the 'waste hierarchy' which is both a guide to sustainable waste management and a legal requirement. The hierarchy gives top priority to waste prevention, followed by preparing for re-use, recycling, other types of recovery (including energy recovery), and last of all disposal (e.g. landfill). Please refer to diagram 1.

Diagram 1: The Waste Hierarchy



2.2.6 In many cases, carbon acts as a good proxy for the overall environmental impacts of waste: generally speaking, the higher up the waste hierarchy waste is treated, the smaller the greenhouse gas impacts.

2.2.7 Government confirms that local authorities will continue to have the lead waste management role at the local level, and the crucial importance of waste services to communities and businesses – for many people, it is their primary interaction with the local council.

2.2.8 The Government's Review also confirms that existing EU targets remain in place. Government regards these as the baseline to achieving a zero waste economy in the medium term. The two targets applicable to municipal waste are:

- EU Landfill Directive targets on the diversion of biodegradable municipal waste from landfill in 2013 (50% on 1995 levels) and 2020 (30% on 1995 levels);

- Revised EU Waste Framework Directive target that 50% of waste from households is recycled by 2020. This includes composting and reusing waste.

2.2.9 The Government's Review makes a number of commitments and actions with only some of these having direct relevance to local authorities, for example DEFRA will end the Landfill Allowance Trading Scheme (LATS) at the end of 2012/13; and explore how local authorities can work with civil society and communities to provide space for re-use collections where possible at civic amenity and similar sites by the end 2012. Of indirect relevance is DEFRA's commitment to build on the success of existing voluntary agreements and work with business to identify and promote innovation which can reduce packaging. Government's stated pledge to reduce regulation is demonstrated by amendments and in some cases reductions to enforcement powers; proposed bin fines and taxes have been abandoned.

2.2.10 The Review sets out government expectation that the public sector, including local authorities, will be expected to lead by example i.e. minimising food waste through improved planning and procurement; and managing food waste in a sustainable way – that is by anaerobic digestion, composting or incineration with energy recovery. In the latter's case, government's aim is to get the most energy out of waste, rather than to get the most waste into energy recovery. The Review also announces plans to consult on introducing a restriction on the landfilling of wood waste and reviewing the case for introducing landfill restrictions on other materials, including textiles and biodegradable waste.

2.2.11 In summary the actions are mostly consistent with the government's commitment to localism, leaving local authorities to continue to decide the most effective design and delivery of waste services to provide to residents in line with local circumstances. EU directives on waste and landfill continue to provide the baseline targets with landfill taxes as the major spur for action. The exception is the new Weekly Collection Support Scheme which comprises a £250 million challenge fund to incentivise weekly refuse collections.[7]

2.3 Developments in Birmingham Policy and Services

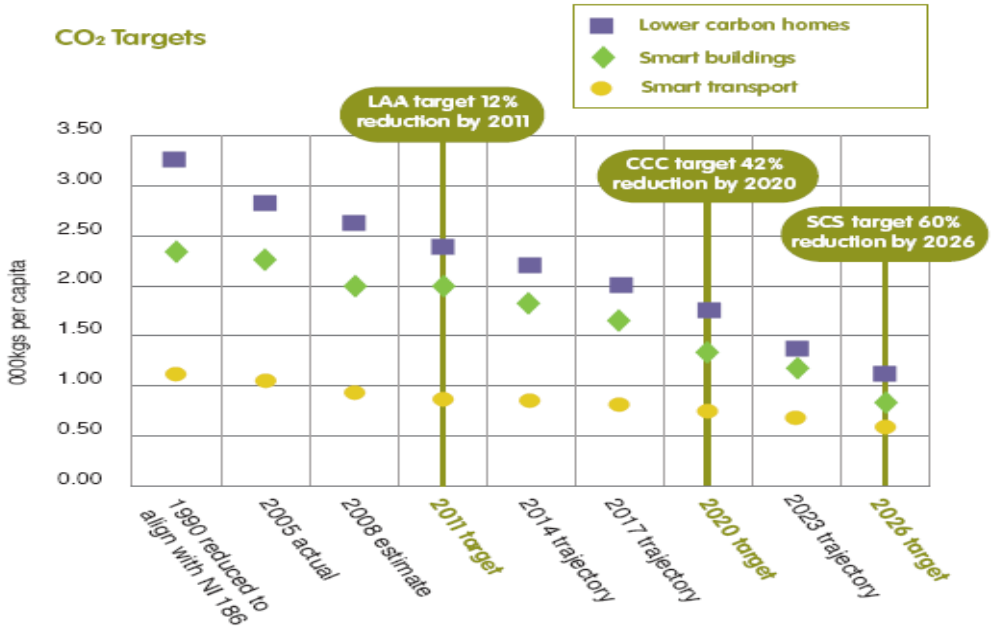
2.3.1 There have been a number of associated policy developments in Birmingham since the launch of the Municipal Waste Management Strategy, notably the agreement of the Birmingham Climate Change Action Plan 2010 and major changes to the planning policy framework. Changes have also been made to the city's recycling collection service and two pilot projects have recently been introduced: a reward recycling project scheme in association with Nectar and a re-use facility which is in the implementation stage.

[7] LGIU (2012*)* Local authorities, the coalition government and green policy: 2011 in review

Birmingham Climate Change Action Plan 2010

2.3.2 The Birmingham Climate Change Action Plan, agreed in 2010, provides the implementation framework for the Strategic Framework "Cutting CO_2 for a smarter Birmingham" (June 2008) and for the Birmingham Declaration 2015 (Dec 2009).[8] It sets out the first steps for achieving the City's 60% carbon reduction target by 2026 and transforming Birmingham to a low carbon low waste economy. Current carbon reduction targets for Birmingham are detailed in Diagram 2.

Diagram 2: Carbon Reduction Targets for Birmingham



* Note LAA: Local Area Agreement, CCC: Committee on Climate Change, SCS: Sustainable Community Strategy

2.3.3 The Climate Change Action Plan presents a number of key priorities that are directly related to the Municipal Waste Management Strategy. The key opportunities that are highlighted include:

- The use of energy generated through energy from waste facilities in district energy networks;
- The potential to generate and process a biomass feedstock from waste currently sent to landfill;
- Opportunities for harnessing bio-fuel from waste oils or biogas production from Anaerobic Digestion;
- Aspects of sustainable procurement and design to reduce the amount of residual waste generated.

[8] *Birmingham Declaration*, agreed at City Council 1 December 2009 http://birminghamnewsroom.com/wp-content/uploads/2009/12/FULL-DECLARATION.pdf

2.3.4 The Action Plan is set to be reviewed later this year.

Birmingham Planning Policy

2.3.5 Planning policy has changed significantly since the Municipal Waste Management Strategy was produced with the dismantling of the Regional Planning structure and the establishment of Local Development Frameworks (LDFs), which comprise statutory local authority planning policy documents produced to guide development. Central to all LDFs is the Core Strategy (effectively the replacement for the Unitary Development Plan).

2.3.6 Birmingham's Core Strategy constitutes a major policy review and when adopted (expected by the end of 2012) will form a city-wide spatial strategy[9]. It aims to provide a framework for sustainable growth and takes forward a number of key sustainability principles up to 2028.[10] Policy SP42, "Sustainable Management of the City's Waste", of the Core Strategy promotes the movement of waste up the waste hierarchy and supports the concept of self sufficiency whereby the city will aim to "manage an equivalent of every tonne of waste that arises".

2.3.7 Lastly the Core Strategy promotes the provision of new waste management facilities and identifies the Tyseley Industrial area as a focus for resource recovery. Its approach is consistent with 'the proximity principle', that is that waste should generally be disposed of as near to its place of production as possible, although it does recognise that some waste will still need to be managed outside of the city as balance needs to be struck between residential amenity and environmental and economic factors.[11]

Residual Waste and Recycling Collection

2.3.8 The City Council's crews continue to collect residual municipal waste in black sacks (each household receives a roll of twenty six sacks approximately every six months) or large containers for multi-occupancy residences such as flats. The service standard for waste collections is for waste to be collected from the doorstep but in practice this has become a kerbside collection through precedent. The vast majority of black sack waste is sent to the Tyseley Energy from Waste plant (EfW). Where the plant is operating at capacity, a small proportion of black sack waste is sent directly to landfill.

2.3.9 Birmingham introduced three fortnightly kerbside recycling collection schemes prior to the Strategy being launched:

- Blue box / bag for paper and card in 2003;
- Green box for glass bottles and jars, food and drinks cans and plastic bottles in 2005;
- Garden waste recycling (green sacks) or composting also in 2005.

[9] See http://www.birmingham.gov.uk/corestrategy
[10] Previously this was intended to be up to 2026
[11] ODPM (2004) Planning for Waste Management Facilities: A Research Study

2.3.10 However these have only been available across the city (reaching over 360,000 households) following the Strategy's implementation. Garden waste recycling collections are suspended during winter months due to the low demand usually experienced over this period.

Residual Waste Disposal

2.3.11 As was the case when the strategy was first launched, Veolia Environmental Services Birmingham (VESB) holds Birmingham's contract for municipal waste disposal and the operation of the Tyseley EfW until 2019. The facility started operating in 1996 and processes around 350,000 tonnes of municipal waste from Birmingham per year. Waste is currently processed through two streams generating 26.3 mega watts of electricity. The generation of electricity produces low grade heat at 34 degrees (Celsius) that currently dissipates into the atmosphere. The site also has a separate high temperature facility for processing clinical waste.

Household Recycling Destinations

2.3.12 Paper and card is taken to the Smurfit Kappa mill at Nechells for recycling and is made into 100% recycled paper. Glass/cans/plastic bottles currently go to a reycling plant in Four Ashes, Wolverhampton which uses a Materials Recycling Facility (MRF) that sorts by machine. These are less commonplace but mean the City Council can take mixed materials without sorting them at the kerbside, which is costly and time consuming. Garden waste is taken to composting facilities near the city and is composted on a large scale to be used for agricultural and landscaping purposes.

Pilot Project Activity

2.3.13 VESB operates five Household Recycling Centre (HRCs): Norris Way in Sutton Coldfield which will include a re-use pilot scheme for Birmingham residents (to be launched in 2012), Perry Barr; Lifford Lane in Kings Norton; Tyseley and Castle Bromwich. HRCs have broadened their capability since the Strategy was produced to support up to twenty different recycling streams reflecting the Government Waste Policy Review aims to increase re-use and recycling activity.

2.3.14 Most recently, the City Council teamed up with Nectar to pilot an initiative (1st September 2011 to 31st May 2012) in two areas of the city: Erdington and Cotteridge to determine if incentivising householders with reward points would increase the rate and volume of recycling in line with Government Waste Policy Review commitments to reward customers for recycling. This is the first scheme of its kind in Britain, with up to 4,500 homes able to benefit from the reward of 25 points per collection for recycling paper or card.[12]

2.3.15 The areas in Cotteridge and Erdington were selected because their current recycling participation rate was considered to be performing below that which might be expected compared with the rest of the city. The two rounds within these wards were also in close proximity to a large Sainsbury's store and a good proportion of householders in these areas have a Nectar Card.

[12] Residents are given a barcode sticker to attach to their recycling bins which are scanned by recycling collectors upon each visit.

2.3.16 Immediately prior to the start of the trial, 14.1% of all Cotteridge households were recycling. As at the beginning of November 2011, this had increased to 20.2%. In Erdington at the outset of the trial 17.2% of all households were recycling. By the middle of November 2011, this had increased to 20.6%. The Council has obtained supporting grant aid from DEFRA, of which approximately £15,000 will be used to undertake a full evaluation of the scheme.

3 Findings

3.1 Overview

3.1.1 This section covers the changing basis for the Strategy, briefly reviews changes beyond policy that have occurred since the Strategy was introduced and progress that has been made against Strategy commitments.

3.2 Changing Basis for the Strategy

3.2.1 Since the Municipal Waste Management Strategy was launched in 2006 there have been a number of changes in the basis for the Strategy:

- Although the UK is still producing over two hundred million tonnes of waste every year,[13] waste projections have differed significantly from actual waste arisings. In Birmingham, instead of the 2% annual increase in waste that was predicted at the time the Strategy was produced, there has been an average annual reduction in waste arisings of 3% since 2007/08;
- Nationally the UK economy has not grown as expected. Economic recession has resulted in people buying and so throwing away less. Another aspect of unforeseen economic changes is that net migration into Birmingham and associated property building have contracted rather than grown as predicted;
- Like all City Council services, Fleet and Waste Management services have been tasked with making significant year-on-year budget savings (circa £7 million per year) since 2010 to meet recent budget pressures which are set to continue;
- In response to both consumer expectation and partnership working with government many major food producers, suppliers and retailers have reduced their packaging significantly and increased the amount of recycled materials in packaging using the Courtauld Commitment[14] and linked agreements so reducing the volume of household waste. The scope of related agreements is set to increase;
- Newspapers have historically been a major source of paper recycling. However the number in circulation has declined since the Strategy was introduced. Alongside this, the introduction of new and improved technologies since 2006 such as smartphones, tablets and e-book readers have increased the means for digital reading and so reduced the consumption of paper copies of newspapers, magazines, books and other documents;

[13] DEFRA (2011) The Government Review of Waste Policy in England 2011
[14] See http://www.wrap.org.uk/retail_supply_chain/voluntary_agreements/courtauld_commitment/phase_1/

- Birmingham set out its vision in 2008 of becoming the first sustainable global city by 2026 requiring the city be a low carbon as well as a low waste economy.

3.3 Progress against Strategy Commitments

3.3.1 We heard that City Council progress against Strategy targets is mixed. Fleet and Waste Management services have achieved against recycling and reducing waste[15] targets and exceeded landfill targets but have yet to define a re-use target.

3.3.2 This assessment compares with recent Audit findings on the City Council performance against Strategy commitments. The Annual Audit Letter 2010/11 for the City Council states that the Council's waste collection and recycling targets continue to be met, with the Council being one of the best performers in respect of levels of landfill. However it highlights the relatively low levels of recycling (31.5% – putting Birmingham in the bottom quartile of all local authorities for recycling performance); satisfaction with waste collection and recycling being comparatively low (worst and third quartiles respectively); and the costs being particularly high in waste disposal and waste collection.

3.3.3 It was considered the high costs were due to a number of factors including: the productivity and previous terms and conditions of Fleet and Waste Management services; the comparatively high levels of waste being collected from households; policy decisions not to charge for some aspects of waste collection such as bulky waste, clinical waste, asbestos; and particularly costs associated with the building and maintenance of the Tyseley Energy from Waste plant.

3.3.4 The Annual Audit Letter states:

> The Council is aware of these issues and has plans in place to reduce the overall expenditure in this area by £21m by 2013/14 (including negotiating cost reductions with its waste disposal contractor). As part of its cost reduction proposals the Council may wish to follow the example of other councils and introduce charging for some waste disposal services.

3.3.5 With the recommendation that:

> Members and officers should review the cost and effectiveness of the waste disposal and collection services, and consider how this can be improved.

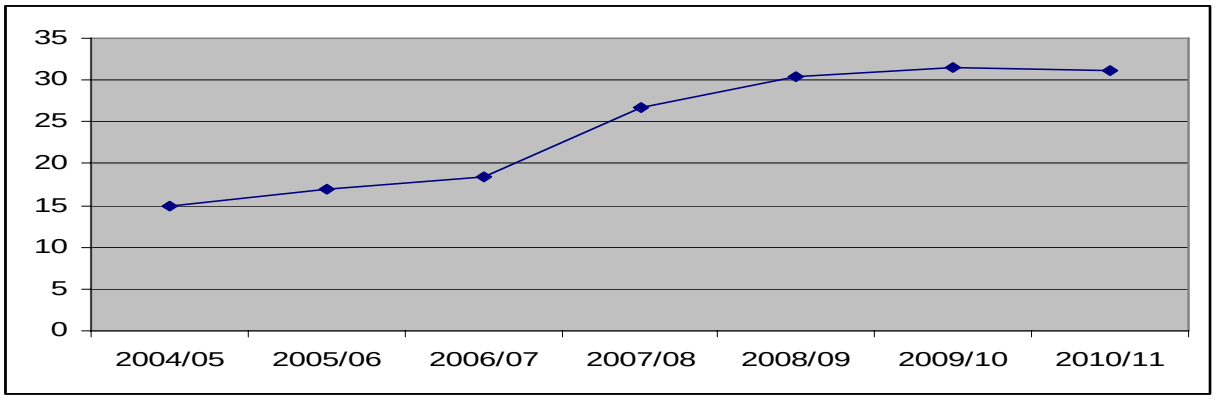
3.3.6 We were informed that the review of the Fleet and Waste Management service was underway and formed part of the Future Operating Model (FOM) which will reduce service costs.

[15] The waste minimisation target for 2009/10 was 737kg per household and actual outturn was 703kg. For 2010/11 the target was 727kg and actual outturn was 674kg.

Recycling

3.3.7 The City Council has doubled its rate of recycling and composting in the past five years (see Diagram 3). While the Review Group recognised the success in progress against targets so far, Officers from Fleet and Waste Management were quick to point out that achieving them was not entirely down to the Council's efforts but also due in part to resident support and other external factors.

Diagram 3: Percentage of Household Waste sent for Reuse, Recycling and Composting in Birmingham



3.3.8 Evidence clarified the continuing role of paper banks in addition to kerbside collections and Household Recycling Centres in achieving recycling targets. We heard that paper banks have been provided and serviced by Smurfit Kappa Recycling since the early 1990s and still collect approximately 25% of all the paper and cardboard recovered in the city. The recent decline in absolute volume has been mirrored in paper bank collections. Smurfit Kappa highlighted that the removal of paper banks could reduce the capture of material in the city by up to 25% which would not only affect recycling rates but City Council income. Fleet and Waste Management officers outlined the dynamic nature of recycling markets which means that income to the City Council is not guaranteed.

3.3.9 Smurfit Kappa's evidence indicates that paper banks remain an integral part of the recovery system for a number of reasons:

- Some people want the independence of recycling at their convenience;
- Not everyone feels able to store recyclables for up to a fortnight between collections;
- Community safety concerns – for example expensive item packaging left outside a house advertises that valuable items may be inside;
- Householders who feel that kerbside collections do not meet their needs prefer not to rely on this method.

3.3.10 Fleet and Waste Management officers recognised that there was more work needed to achieve the current final strategy target of a 40% recycling rate by 2026, the end of the strategy period. Communications relating to waste management and particularly guidance on recycling were a

recurring theme during our evidence gathering. We shared our frustrations with the inconsistency of information we had seen and its variable circulation. We were concerned that if we were confused, city residents were likely to be even more so.

3.3.11 In 2007, the Scrutiny Review *Containers for Waste*[16] sought assurances that dedicated communications work would continue beyond April 2008 when funding support from WRAP (Waste and Resources Action Programme) would come to an end. We are aware of useful work that has been undertaken since, for example the production of *Birmingham Recycling and Reuse Map,*[17] commissioned by Birmingham Environmental Partnership and launched in October 2010. The map is a clear and comprehensive directory at constituency level of all the city's participating reuse charity shops along with a complete list of kerbside recycling points detailing what can be recycled where. It is available as a leaflet and web version that can be easily updated to ensure its continuing relevance. However the map was not mentioned in evidence by Birmingham Environmental Partnership and has not been widely publicised.

3.3.12 Our concern about communications on waste services is not unique to Birmingham. WRAP highlight evidence[18] that half of householders hold back waste material because they are not sure whether it can be recycled or not. Equally a third of householders put material out for recycling even if they are not sure if it can be recycled because they think it should be. Both of these results have consequences for local authority performance in: achieving recycling targets; increasing costs for landfill or recycling and ensuring continuing citizen support for services.

3.3.13 Witnesses emphasised a key aspect of improving performance was refining what we do already to increase participation before introducing new services. Fleet and Waste Management officers also emphasised contractual and cost challenges for the City Council in introducing new recycling services such as food waste. We are aware that the Cabinet Member for Transport, Environment and Regeneration has already been in contact with the Department for Communities and Local Government (CLG) to put forward the City Council's ambition for a food waste recycling service. Councillors expressed their support at the City Council meeting on 1st November 2011 for a bid to CLG's Weekly Collection Support Scheme (mentioned in section 2.2.11) to support new recycling initiatives within the city as well as maintain weekly collections of residual waste.

3.3.14 We also heard there is significant potential to use anaerobic digestion facilities elsewhere if all planned facilities in the West Midlands are realised, which would not only reduce the need for direct investment by the City Council in infrastructure, but make food waste a valuable resource. Witnesses from Birmingham Friends of the Earth (BFOE) highlighted that making the most of food waste is a key element missing from the current Municipal Waste Management Strategy given the

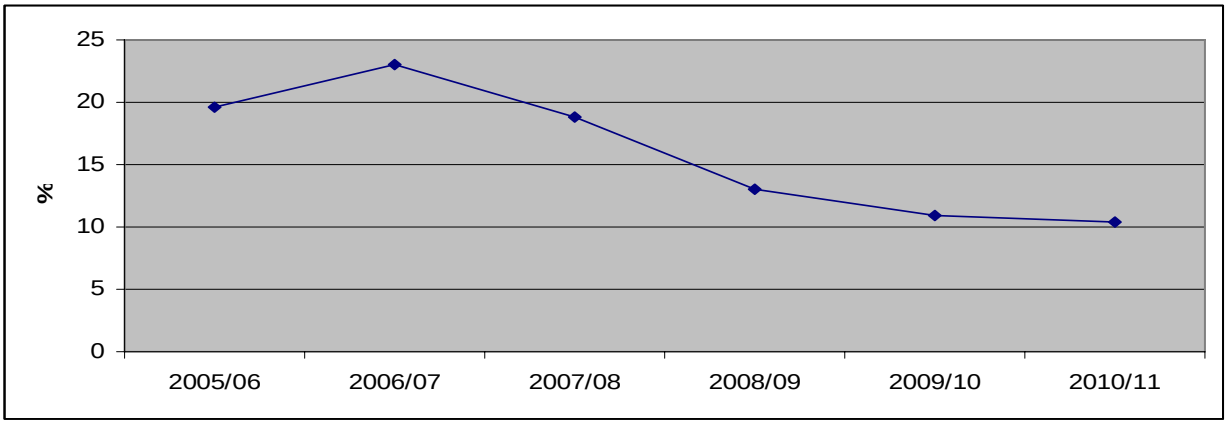
[16] See Reports Library at http://www.birmingham.gov.uk/scrutiny
[17] See http://www.bebirmingham.org.uk/recycling_map
[18] See Ward, P (2010) http://www.mrw.co.uk/home/how-councils-can-meet-recycling-expectations/8607606.article

amount of food waste collected by local authorities. Members received evidence that an average of 38% of residual waste was seen to be food waste in Birmingham.[19]

Landfill

3.3.15 The largest cost driver in the waste system for many local authorities is escalating landfill tax. We heard that landfill is not the issue for Birmingham as it is for many local authorities because of the existence of the Tyseley Energy from Waste facility. This has enabled the city to reduce substantially the amount of waste it sends to landfill during the period the Municipal Waste Management Strategy has been in place. Birmingham is currently landfilling around 5% of municipal waste making the city one of the best perfomers in the UK.

Diagram 4: Percentage of Municipal Waste sent to Landfill in Birmingham



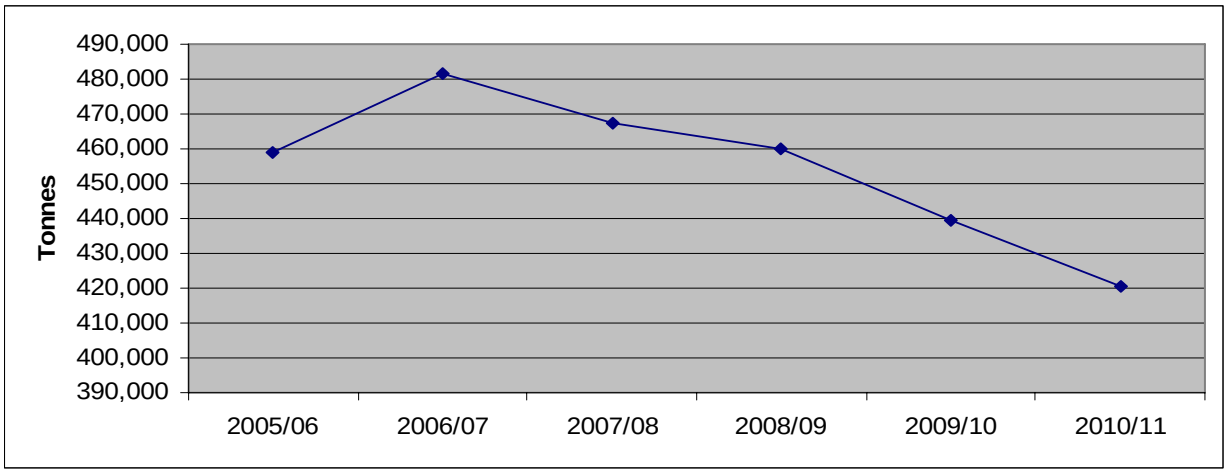
3.3.16 We heard from BFOE that 'zero waste to landfill' does not need to be a target for Birmingham as landfill is only an issue for biologically active waste that produces the powerful greenhouse gas, methane. If this has been removed, then only inert material is being land-filled. In terms of carbon balance, BFOE in their evidence put forward the argument for burying carbon-rich material if it cannot be composted, digested or recycled, so that it is kept out of the atmosphere.[20]

Waste Minimisation

3.3.17 Local Authorities seek to minimise household waste in a number of ways. These include: encouraging re-use (see section 3.3.20); enforcing policies around the collection of side waste forcing households to recycle more and using disincentives such as charging for any bulky waste collections. As Diagram 5 shows, waste arisings in the city have reduced significantly in recent years. In 2007/8 Birmingham collected 467,571 tonnes of household waste whereas in 2010/11 Birmingham collected 420,595 tonnes.

[19] E-mail received on the 24th January 2011 from Fleet and Waste Management
[20] Birmingham Friends of the Earth (2012) Review of the Municipal Waste Strategy 2011/12 Submission to the Transport, Environment and Regeneration Committee, 11th January 2012

Diagram 5: Total Household Waste in Birmingham[21]



3.3.18 We heard that Birmingham is unique amongst West Midlands local authorities in providing free bulky waste collections (for the first three collections of a maximum of six items) and special street collections, as well as accepting all black sacks put out for collection by households. We recognise Birmingham's history of taking any waste that people put out responding to resident views that it is better for local areas that it is collected than dumped elsewhere, or left to cause environmental health problems. It is also very difficult to prove which household is responsible for excess waste due to black sacks being left for collection on the kerbside. The City Council has made its position clear on the matter of both fortnightly refuse collections and charging for all bulky waste collections – neither will happen in the near future. This has been reinforced regularly since City Council voted on the issue in June 2007 and is a position we support.

3.3.19 We were made aware of Birmingham Friends of the Earth's (BFOE) petition calling for a halving of domestic waste tonnage by 2020 through a separate food waste collection (as outlined previously) and increased recycling recently submitted to the Cabinet Member for Transport, Environment and Regeneration.

Re-use

3.3.20 As has been identified, increasing re-use is essential in minimising waste. The greatest environmental benefits and costs savings to Birmingham will be delivered by producing less waste in the first place. We heard from both Fleet and Waste Management services, the local voluntary sector and expert organisations about the potential to increase re-use in the city and good practice the City Council could draw upon.

3.3.21 Internally it has been recognised that there is scope to improve the existing bulky waste collection process by refining the current contact centre process for recording collection requests. This would ensure more items are correctly identified as being re-usable so enabling better signposting (for

[21] http://www.defra.gov.uk/statistics/environment/waste/wrfg23-wrmsannual/

example to the Ladywood Furniture Project) for potential re-use options. At present any items collected by Fleet and Waste Management are crushed which can then only be incinerated.

3.3.22 With a suitable partner, more bulky waste collections could be offered (currently they are only available Saturday mornings) and an appointment system introduced to avoid items sitting outside households and so diminishing in value. Liverpool's establishment of the social enterprise Bulky Bob's was cited as good practice to use as a basis for any remodelling of the service. Bulky Bob's collects bulky waste, repairs it in its workshops and either sells it in their low-cost Revive stores or puts it to good use elsewhere on behalf of a number of local authorities in the North West.

3.3.23 We were reminded that re-use in a municipal context is difficult to measure accurately. The expansion and popularity of commercial sites, notably ebay, for selling on items and also the increasing use of voluntary-sector maintained and informal networks for giving away items no longer wanted for free such as Freegle indicate the interest in re-use. Clearly these resources are not designed for local authority monitoring and government nationally recognises that re-use is less well defined than recycling.[22] Nevertheless witnesses from BFOE, Ladywood Furniture Project and Jericho Foundation all stressed the importance of a separate re-use target distinct from recycling targets to ensure the emphasis placed on re-use within the Municipal Waste Management Strategy matches its place within the waste hierarchy.

3.3.24 We were encouraged by evidence from local social enterprises focusing on re-use and recycling on possibilities for increasing their scope of work where it did not compromise their charitable aims. Ladywood Furniture Project are already mentioned within the current Municipal Waste Management Strategy. In addition to their core business of supplying furniture to benefit claimants, they are in discussions with Fleet and Waste Management officers about how they might provide an assisted collection service to residents unable to move furniture to the kerbside for bulky waste/special street collections.

3.3.25 The Jericho Foundation (incorporating Birmingham Community Recycling, previously known as Brumcan) are involved in the City Council's Norris Way Household Recycling Centre re-use pilot scheme mentioned in section 2.3.13. If the Norris Way pilot is successful they said that they would like a City Council commitment that re-use is made possible at or adjacent to all of the Household Recycling Centres. Jericho are both re-using by working with Housing Associations to reprocess furniture whenever a property becomes empty and recycling wood into briquettes to help combat fuel poverty. They reinforced Fleet and Waste Management's recognition of the level of furniture that could be potentially re-used or recycled but which is currently broken up and incinerated.

3.3.26 Both the Jericho Foundation and Ladywood Furniture Project highlighted the potential role of waste diversion credits in supporting organisations with aims similar to theirs to increase re-use. It was estimated that there are up to ten charities already in existence in the city that would be able to collect and distribute more furniture if the City Council could pay waste diversion credits. We

[22] DEFRA (2011) Government Review of Waste Policy

hope that this possibility is taken into account in planning for when current external contracts expire.

Information and Modelling

3.3.27 Fleet and Waste Management officers acknowledged that the information they have available for future service planning and modelling could be improved. Residual waste analysis has been useful but is not undertaken on a regular basis to enable consistent comparison. Recycling information is also not yet available by ward but will be in conjunction with the roll-out of ward-based rounds.

3.3.28 We heard that unlike some other comparator cities, for example Sheffield, Birmingham had not applied WRATE (Waste and Resources Assessment Tool for the Environment). WRATE is a Life Cycle Assessment (LCA) software tool, produced by the Environment Agency, for comparing potential environmental impacts arising from different options for the management of municipal waste and similar wastes, providing results useful for decision-makers and stakeholders. It allows the modelling of all stages in the management and processing of waste, including waste collection, transport, treatment and disposal, and contains detailed LCA information relating to these activities. The LCA information takes account of the infrastructure required for these activities as well as the avoided impacts associated with materials and energy expenditure. Some witnesses recommended its use was worth exploring as a comprehensive assessment of services and technologies and their impact, particularly in terms of carbon reduction. We are aware that WRATE was used in part in developing Birmingham's Total Waste Strategy (TWS).[23] The TWS was commissioned by Birmingham Environmental Partnership in 2010. It builds on data acquired for Birmingham City Council's Waste Capacity Study[24] and considers options for reducing waste sent to landfill.

3.4 How Birmingham Compares to other Cities

3.4.1 We recognise it is difficult to make direct comparisons between Birmingham and other cities for a number of reasons, including different demographics and infrastructure. It is therefore usual to use other Core Cities as a comparison as they are the largest city economies outside London. Tables 1 and 2, which detail 2010-11 statistics for municipal and household waste, were the key figures we used when considering Birmingham's comparative progress and potential future targets.

[23] SKM (2011) Birmingham Total Waste Strategy Final Report, for Birmingham City Council
[24] SKM Enviros (2010) Birmingham Waste Capacity Study Final Report, Report for Birmingham City Council

Table1: Core Cities Municipal and Household Waste Data 2010-11[25]

	Total Municipal Waste Collected Tonnes	Total Household Waste Collected Tonnes	Household Waste sent for Recycling, Composting or Reuse	Household waste not sent for Recycling, Composting or Reuse	Total Municipal Waste sent to Landfill
Birmingham	509,080	420,595	131,001 (31%)	289,594 (69%)	53,393 (10%)
Bristol	174,717	161,436	60,344 (37%)	101,092 (63%)	100,864 (58%)
Leeds	337,525	317,558	110,112 (35%)	207,446 (65%)	223,082 (66%)
Liverpool	-	191,676	51,333 (27%)	140,343 (73%)	-
Manchester	-	185,792	47,969 (26%)	137,823 (74%)	-
Newcastle	152,248	110,893	37,051 (33%)	73,842 (67%)	91,170 (60%)
Nottingham	153,796	116,132	41,337 (36%)	74,795 (64%)	21,684 (14%)
Sheffield	218,170	210,120	61,564 (29%)	148,555 (71%)	34,715 (16%)

3.4.2 Table 2 shows that Birmingham collected the second highest amount of household waste per person for 2010/11. This is an improvement on the previous year which was 435 kg and the highest of the Core Cities.

Table 2: Core Cities Household Waste Collected Per Person and Not Sent for Recycling etc. 2010/11

	Population	Number of Households	Total Household Waste Collected Per Person (Kg)	Household waste not sent for Recycling, Composting or Reuse Per Person (Kg)
Birmingham	1,028,700	424,190	409	282
Bristol	433,100	188,520	373	233
Leeds	787,700	337,100	403	263
Liverpool	442,300	214,520	433	317
Manchester	483,800	218,270	384	285
Newcastle	284,300	123,510	390	260
Nottingham	300,800	131,850	386	249
Sheffield	547,000	238,390	384	272

[25] Information provided by Fleet & Waste Management from the Waste Data flow database

4 Conclusions and Recommendations

4.1 Introduction

4.1.1 As stated in Section 1 of this report, our approach to considering the current Municipal Waste Management Strategy was planned to support a refresh of the strategy rather than a full review, with the primary emphasis being on keeping the strategy and targets up-to-date. We anticipate a fuller strategy review taking place at the next rescheduled review point of 2016/2017. This timing also fits with the terms of the City Council's relevant external waste contracts which are in place until 2019.

4.1.2 Nevertheless, while enabling Birmingham's current needs to be met more effectively, recommendations have been made with future needs, challenges and opportunities in mind. They recognise the biggest resource constraints we have faced yet in balancing costs and the services we provide; and respond to latest budget consultation feedback on priorities for waste management services. They also recognise the constraints of existing waste contract arrangements. They take account of Birmingham's size, existing infrastructure and diverse population. Lastly they reflect the City Council's vision and priorities notably 'Stay Safe in a Clean, Green City' as well as its approach of supporting individual citizen responsibility in helping us to achieve our sustainability objectives.

4.2 Strategy Vision

4.2.1 As outlined in Section 2.3, Climate Change legislation contains the most stretching targets which have yet been applied to local authorities. In addition to legal requirements, the City Council recognises its leadership role in reducing CO_2 emissions in its aim to be "the first sustainable global city by 2026"[26] and its overall carbon reduction target of 60% by 2020. It is clear that the City Council's approach to municipal waste management is central to reducing its carbon footprint and so this needs to be stated upfront in the strategy.

	Recommendation	**Responsibility**	**Completion Date**
R01	That the Cabinet Member for Transport, Environment and Regeneration revises the current Strategy vision to recognise that Birmingham has agreed to reduce its overall carbon emissions target by 60% by 2026.	Cabinet Member for Transport, Environment and Regeneration	September 2012

[26] Birmingham City Council (2008) Birmingham 2026 - Sustainable Community Strategy

4.3 Specific Target Changes

4.3.1 In response to one of the Review key lines of enquiry 'are the targets the right ones?' we identified a number of revisions and updates to the seven existing strategy targets. The central themes underpinning these revisions were reinforcing the need to treat waste as a resource and to move waste up the waste hierarchy.

4.3.2 We felt that rephrasing the first two strategy targets positively is needed to:

- Reflect the City Council's sustainability ambitions;
- Set the tone for the next substantive strategy review;
- Make clear its commitment to reducing waste year on year above the national average for England.

	Recommendation	**Responsibility**	**Completion Date**
R02	That the Cabinet Member for Transport, Environment and Regeneration rewords existing Strategy Target 1 as follows 'Aim to achieve levels of municipal waste reduction, year on year, which are better than the national average for England'.	Cabinet Member for Transport, Environment and Regeneration	September 2012
R03	That the Cabinet Member for Transport, Environment and Regeneration oversees scoping work to establish a revised current Strategy Target 2: 'aim to be the top metropolitan authority for waste arisings per person'.	Cabinet Member for Transport, Environment and Regeneration	September 2012

4.3.3 Target 3 in the Strategy is 'to set up measurement systems for waste re-use in order to define specific targets within 3 years'. We recognise the current problems of collating and compiling information relating to re-use, as much of it is reliant on individual reporting and the Voluntary and Community Sector as outlined in Section 3.3.23. Nevertheless evidence we heard emphasised that a specific re-use target must be defined within the Strategy to ensure it is paid the attention it merits. This would strengthen the City Council's regard to the waste hierarchy as recognised in the Cabinet Member's response to the Scrutiny Review: *Reducing and Recycling Business Waste*[27] which advised that the waste hierarchy would be incorporated into all Fleet and Waste Management communication initiatives. We were encouraged by proposals we heard for the Norris Way HRC re-use pilot site (where it would be possible to measure re-use accurately) and if successful the potential to replicate plans elsewhere in the city.

[27] See Reports Library http://www.birmingham.gov.uk/scrutiny

	Recommendation	Responsibility	Completion Date
R04	That the Cabinet Member for Transport, Environment and Regeneration defines a specific re-use target as committed to in existing Strategy Target 3, to demonstrate the City Council's regard to the Waste Hierarchy.	Cabinet Member for Transport, Environment and Regeneration	September 2012

4.3.4 Strategy targets 4 and 5 relate to recycling and composting performance.[28] Target 4 'to double the recycling and composting performance (from the current BVPI level of 17%) within five years (by 2011/12) has been met. Target 5 'to reach a 40% recycling and composting rate by the end of the Strategy period' (by 2026) ought to be increased to 50% by 2020 and at least 60% by 2026. Achieving the current national government target of 50% recycling by 2020 as set out by the EU Waste Framework Directive and then beyond would reflect the City Council's aim of being a leading green city. The 50% recycling rate by 2020 is also in line with other local authorities who are either aiming for the 50% recycling rate by 2020 (i.e. Leeds and Liverpool) or a minimum of 50% recycling target by 2020 (i.e. Manchester). Also other local authorities such as Staffordshire Moorlands District Council have already achieved a 60% recycling rate.

	Recommendation	Responsibility	Completion Date
R05	That the Cabinet Member for Transport, Environment and Regeneration revises existing Strategy Targets 4 and 5 to commit to the City Council reaching a 50% recycling and composting target by 2020 and at least 60% by 2026. This reflects the City Council's aim of achieving beyond the current national government target of 50% recycling.	Cabinet Member for Transport, Environment and Regeneration	September 2012

4.3.5 While landfill targets are not the issue that perhaps they are for other comparator cities due to the existence of Tyseley Energy from Waste plant, clearly Birmingham must continue to ensure it reduces waste sent to landfill to a minimum and our recommendation is about refining the existing Strategy landfill target. We accept, in line with the Total Waste Strategy stakeholder consultation findings[29] and balancing cost with activity undertaken, that some waste must go to landfill to ensure our Municipal Waste Management Strategy is credible and realistic.

4.3.6 However, we must ensure that nothing shall be sent to landfill that can be re-used, recycled or disposed of more effectively elsewhere where this is practical economically and environmentally.

[28] In this context, composting refers to green waste collected and does not include home composting
[29] SKM Enviros (2011) Birmingham Total Waste Strategy Final Report, for Birmingham City Council

This is in line with the existing Strategy objective of exploring ways of reducing the amount of waste sent to landfill to an absolute minimum[30] and a number of recommendations within this report will assist with this.

	Recommendation	Responsibility	Completion Date
R06	That the Cabinet Member for Transport, Environment and Regeneration revise Strategy Target 6 to reflect the principle that nothing shall be sent to landfill wherever economically and environmentally practicable that can be re-used, recycled or disposed of more effectively elsewhere.	Cabinet Member for Transport, Environment and Regeneration	September 2012

4.3.7 We recommend a minor change is made to the emphasis of Target 7 to reflect the City Council's aim to balance environmental considerations with ever pressing budget requirements. We recognise that the value that we can secure for recyclable materials is not only determined by current contractual arrangements but also the dynamics of markets for recyclates and the amount we are able to collect.

	Recommendation	Responsibility	Completion Date
R07	That the Cabinet Member for Transport, Environment and Regeneration amends Strategy Target 7 to capture the City Council's undertaking to gain best value for recyclable materials wherever economically and environmentally practicable i.e.: "To continue to develop recycling infrastructure to secure sustainable markets for all collected recyclable materials and gain best value for them wherever economically and environmentally practicable for the duration of this strategy." This is in line with existing Strategy objectives.	Cabinet Member for Transport, Environment and Regeneration	September 2012

4.4 Clearer Links to Birmingham's Energy Strategy

4.4.1 As outlined in Section 2, the strategy, policy and legislative context for Birmingham's Municipal Waste Management Strategy has changed significantly since the strategy was first issued in 2006. As stated in section 1.2, we have assumed in undertaking this Review that Fleet and Waste Management services will update the Strategy to take account of these changes along with associated target amendments without specific recommendations on these from the Committee.

[30] Birmingham City Council (2006) Municipal Waste Management Strategy 2006-2026 p.10

4.4.2 The one exception that we do wish to specify is linking the City Council's Energy Strategy more clearly to the Municipal Waste Management Strategy. It is clear that as Birmingham is able to exercise more flexibility in its waste contract provision there are options for linking the Municipal Waste Management Strategy to Energy Strategy aims, for example through the use of waste heat and electricity in offsetting energy generated through the use of fossil fuels. Ultimately making these links much more clear is essential for the City Council to take a Total Resource approach.

	Recommendation	**Responsibility**	**Completion Date**
R08	That the Cabinet Member for Transport, Environment and Regeneration updates the existing Strategy to ensure a clearer alignment with the City Council's Energy Strategy and Action Plan as well as the Total Waste Strategy to enable the City Council to take a 'Total Resource' view.	Cabinet Member for Transport, Environment and Regeneration	September 2012

4.5 Improving Information and Modelling to Consider all Impacts and Options

4.5.1 One of our main hopes resulting from our evidence gathering is that all future waste management options (for re-use, recycling, energy recovery and disposal) are considered and appraised in preparation for when existing contracts can be re-negotiated. We must ensure the city has flexible and suitable provision that meets its long-term future needs and maximises resources available, notably the Tyseley Energy from Waste plant.

4.5.2 We are aware that Fleet and Waste Management services are in the process of evaluating a range of potential options. We support the ongoing technical scoping of possibilities between now and the next Strategy review date as this recognises the rapid changes in associated technologies, for example Anaerobic Digestion (AD) plants. We are encouraged that future contracts do not need to be as long-term as current external contracting arrangements up until 2019.

	Recommendation	**Responsibility**	**Completion Date**
R09	That the Cabinet Member for Transport, Environment and Regeneration agrees/demonstrates that all future re-use, recycling, energy recovery and disposal contracting options are considered and appraised (including for CO_2 reduction as well as other factors such as cost) to ensure the city has flexible and suitable provision that meets its long-term future needs.	Cabinet Member for Transport, Environment and Regeneration	December 2012

4.5.3 To support recommendation nine we have identified a number of recommendations to assist improved evidence gathering and modelling. These reinforce the suggested Monitoring Framework

of the 2010 Birmingham Municipal Waste Capacity Study to allow for trends to be monitored and future needs reviewed on a regular basis in order that all options and associated impacts can be considered equally.

Waste and Resources Assessment Tool for the Environment (WRATE)

4.5.4 The Waste and Resources Assessment Tool for the Environment (WRATE) allows the modelling of all stages in the management and processing of waste as well as the infrastructure required for these activities and the avoided impacts associated with materials and energy expenditure. Although as a decision-making tool WRATE analysis will not necessarily provide a definitive answer and clearly needs to be used in conjunction with other criteria, it seems to have provided useful results for other comparator cities and was recommended in evidence gathering. While we heard Birmingham has not applied WRATE in its entirety, elements were used in the production of the Total Waste Strategy. Given the range of waste management options Birmingham needs to evaluate fully during the remainder of the Strategy period we would like to see WRATE analysis used to assist the process.

	Recommendation	**Responsibility**	**Completion Date**
R10	That the Cabinet Member for Transport, Environment and Regeneration commissions a Waste and Resources Assessment Tool for the Environment (WRATE) analysis to calculate the potential impacts of all stages in the collection, management and processing of municipal waste.	Cabinet Member for Transport, Environment and Regeneration	September 2012

Regular Analysis of Residual Waste

4.5.5 It was clear from the evidence we heard from Fleet and Waste Management officers that analysis undertaken so far of residual waste has been a useful exercise. We wish to see such analysis carried out regularly and extended to recycling to enable both ongoing comparison and, most importantly, effective modelling of Birmingham's waste arisings.

4.5.6 In a city of Birmingham's size and diversity this is essential to ensure assumptions made about Birmingham's future needs are as accurate as possible. Having several years' real figures on which to base forecasts and plan services accordingly is especially important in preparing for Birmingham's waste needs post-2019. We are clear that Birmingham must plan for a new resource-efficient, low-waste economy and can only do so with improved data. This will also assist with communication and support increasing participation in areas that are not currently making the most of the recycling services.

	Recommendation	Responsibility	Completion Date
R11	That the Cabinet Member for Transport, Environment and Regeneration: a) agrees that regular and consistent analysis of residual waste and recycling is undertaken to allow for ongoing comparison of what is being collected from where in the city to improve planning and communications relating to the Waste Strategy in line with findings. b) that information be analysed to ward level, shared with Councillors annually and made publicly available.	Cabinet Member for Transport, Environment and Regeneration	September 2012

4.6 Improving Communications and Engagement

4.6.1 Unsurprisingly improving communications has featured in some form of recommendation in all previous Scrutiny Reviews linked to waste. This Review is no different in emphasising the need for improved communications to increase participation and engagement. Various stakeholder evidence we received cited communications as being central to our ambitions of reducing waste and increasing re-use and recycling. These findings also featured in work to develop the city's Total Waste Strategy.

4.6.2 We are concerned that waste specific communications are not being approached strategically. As a result, communication with residents about waste prevention, re-use and recycling as well as disposal options continues to be inconsistent and so unsatisfactory. While we are mindful of resource constraints, not all improvements, for example improving web-based information, require a substantive budget beyond staff time. We see a targeted approach recognising Birmingham's diverse communities as the most cost-effective way of increasing participation. Improving communications must become an increased priority for Fleet and Waste Management services.

	Recommendation	Responsibility	Completion Date
R12	That the Cabinet Member for Transport, Environment and Regeneration revisits and updates the Communications Plan for Recycling to improve communications with households, notably on options for waste prevention, re-use and recycling.	Cabinet Member for Transport, Environment and Regeneration	September 2012

4.7 Learning from Local Pilot Projects and Elsewhere

4.7.1 Although a full evaluation has yet to be undertaken of the Rewards Recycling pilot projects being undertaken in Erdington and Cotteridge early results look promising. We look forward to hearing how local learning on incentives can be used to increase re-use and recycling, for example could

incentives be used in the development of the Norris Way HRC re-use pilot scheme? One other possibility mentioned in evidence gathering was linking incentives to local town centre management schemes to encourage spend with local small retailers (so increasing local sustainability in its widest sense) as well as national retail partners. We note that Fleet and Waste Management services are already considering how good practice on re-use from other comparator cities, such as the establishment of Bulky Bob's in Liverpool, could be applied to Birmingham.

	Recommendation	**Responsibility**	**Completion Date**
R13	That the Cabinet Member for Transport, Environment and Regeneration explores possibilities for re-use and recycling incentive schemes which are underpinned by learning from the 2012 Rewards Recycling pilot projects and elsewhere.	Cabinet Member for Transport, Environment and Regeneration	September 2012

4.8 Future Investment

4.8.1 We agree with the central message of the Scrutiny Review report: *Containers for Waste* that any future changes in recycling collections should be focused on value for money and increasing recycling rates.

4.8.2 While current external contract terms mean it will be very difficult for the City Council to be able to implement a city-wide household food waste recycling scheme before 2019, we wish to ensure that Fleet and Waste Management services are ready to realise said scheme as soon as contractually able, especially as an average of 38% of residual waste was seen to be food waste in Birmingham.

	Recommendation	**Responsibility**	**Completion Date**
R14	That the Cabinet Member for Transport, Environment and Regeneration undertakes the feasibility and development work necessary for the City Council to introduce a Food Waste Recycling Service by 2013.[31]	Cabinet Member for Transport, Environment and Regeneration	December 2012

4.8.3 We are aware that a feasibility study has been undertaken which has identified a number of options to capture heat loss at the Tyseley Energy from Waste plant and demonstrates that heat recovery there is commercially feasible. We were reassured to hear that a joint working group of officers and Veolia specialists are both determining cost and delivery schedules for the best options.

[31] This was changed at City Council from 2020 to 2013.

4.8.4 We were also interested in learning more about the City Council's and Tyseley Environmental Enterprise District (TEED) team's work on reviewing options for the use of the heat generated by any new system and opportunities within the Eastside area to ensure that, as this area develops, maximum potential is made of the availability of heat from the Energy from Waste plant. Regrettably the Review timescale limited the details we were able to hear on these, as a result we are keen to hear further information as work progresses.

	Recommendation	**Responsibility**	**Completion Date**
R15	That the Cabinet Member for Transport, Environment and Regeneration: a) commits to ensuring heat recovery from the Tyseley Energy from Waste plant. b) reports back on joint working group progress in 2012	Cabinet Member for Transport, Environment and Regeneration	December 2012

4.8.5 The recommendations we have proposed in this report exist to ensure the City Council recognises its leadership role in reducing CO_2 emissions in its aim to be "the first sustainable global city by 2026"[32] and meet its overall carbon reduction target of 60% by 2020.

4.9 Progress with Implementation

4.9.1 To keep the Transport, Environment and Regeneration O&S Committee informed of progress in implementing the recommendations within this report, the Cabinet Member for Transport, Environment and Regeneration is recommended to report back on progress periodically. This will be carried out through the established tracking process.

	Recommendation	**Responsibility**	**Completion Date**
R16	Progress towards achievement of these recommendations should be reported to the Transport, Environment and Regeneration Overview and Scrutiny Committee in October 2012. Subsequent progress reports will be scheduled by the Committee thereafter, until all recommendations are implemented.	Cabinet Member for Transport, Environment and Regeneration	October 2012

[32] Birmingham City Council (2008) *Birmingham 2026* - Sustainable Community Strategy

Appendix A: Witnesses

The Committee is very grateful to the following for their assistance with this Review:

- Conor Barry, Ladywood Furniture Project;
- Nick Brown, Organic Recycling PSI Leader, Biffa;
- Michelle Climer, Waste Data & Operations Manager, Fleet and Waste Management, Birmingham City Council;
- Ian Humphreys and Phil Johnson, NISP;
- Kevin Mitchell, Assistant Director, Fleet and Waste Management, Birmingham City Council;
- Steve Mitchell, Regional Managing Director, Steve Haywood, Plant Manager, Charlotte Walkington, Environmental Analyst, Veolia;
- John Newson, Joe Peacock and Chris Crean, Birmingham Friends of the Earth;
- Pete Smallwood, Social Enterprise Manager, Jericho Foundation;
- Sandy Taylor, Head of Climate Change and Sustainability, Birmingham City Council;
- Chloe Tringham, Head of Strategy & Customer Support, Fleet and Waste Management, Birmingham City Council;
- Tommy Wallace, Director, Fleet and Waste Management, Birmingham City Council;
- Simon Weston, Managing Director, Dave Cowing, Commercial Manager (Birmingham), Paul Clarke, Strategic Director, Smurfit Kappa;