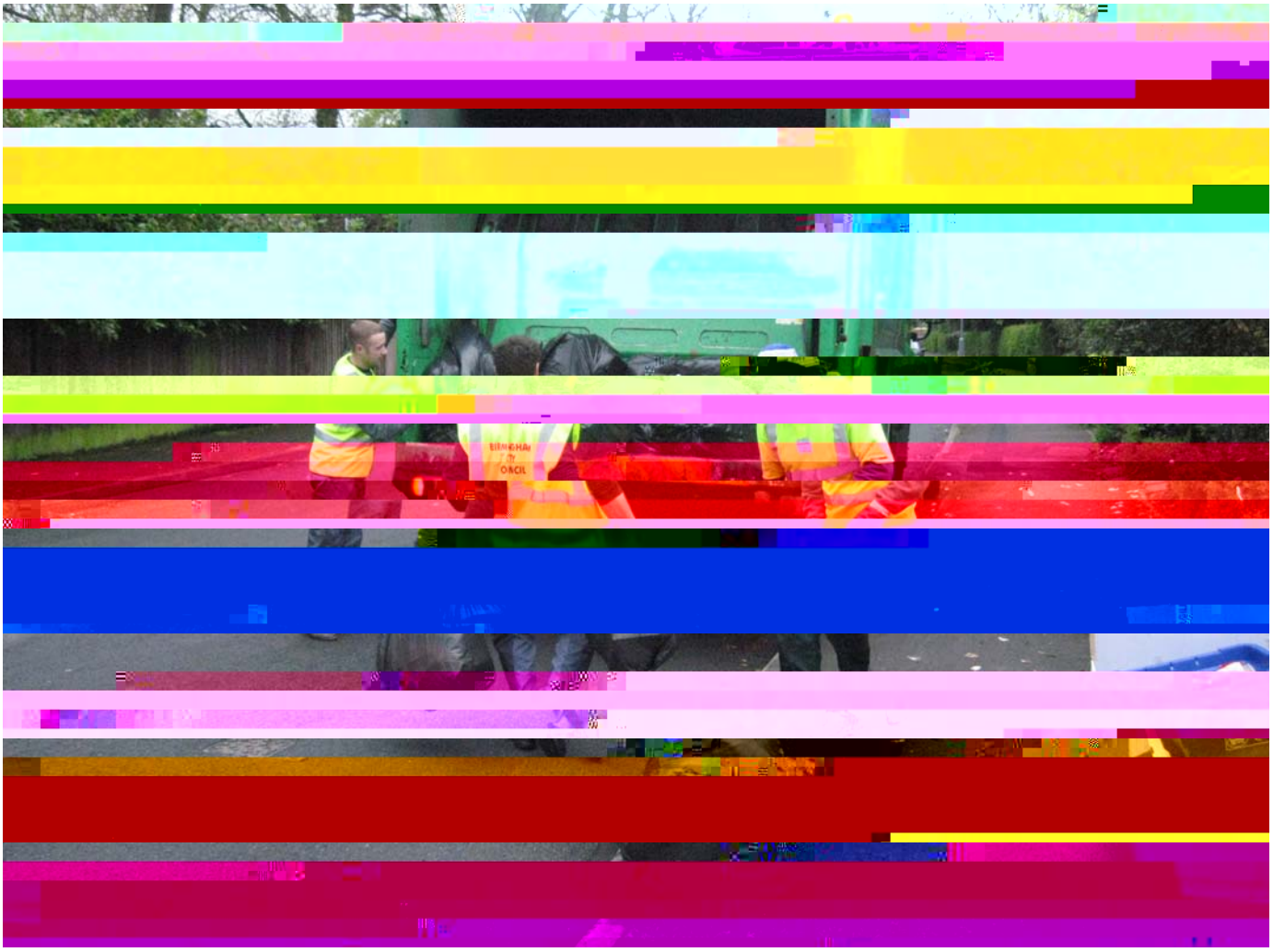
Refresh of the Municipal Waste Management Strategy



A report from Overview & Scrutiny

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Preface

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

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

Summary of Recommendations

	Recommendation	Responsibility	Completion Date
R01			

	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		

	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 3.1(o)-1.8(8007 Twos

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

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

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 City2gl2tnh12 -30.005772(n be. (ver67(tituency partners)-5.5(will)-5.5(pr

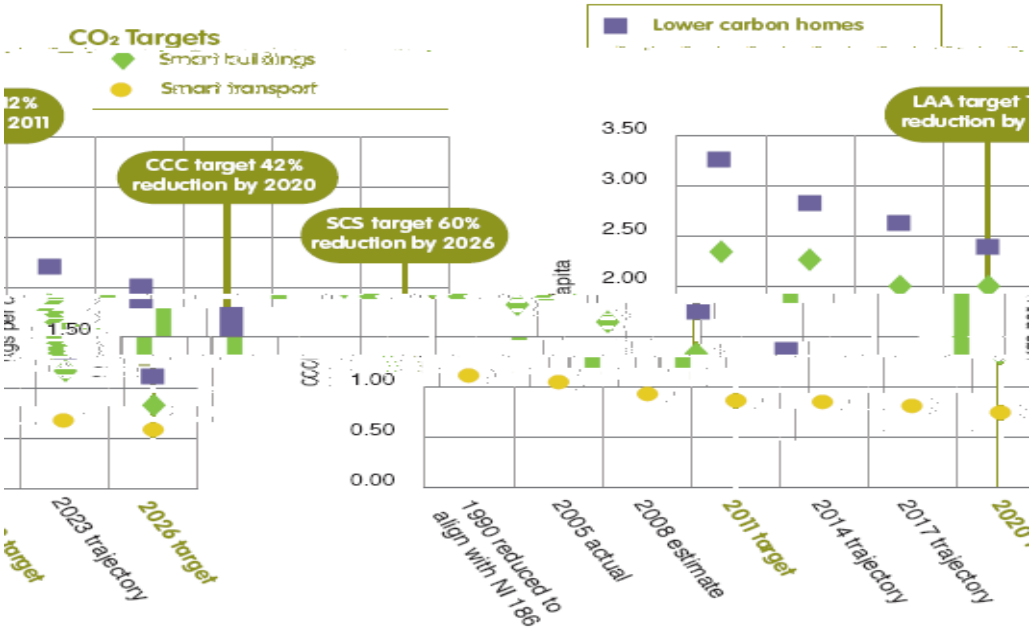
5. The City Council will work with its partners and other agencies to provide efficient and effective

including Waste Strategy 2007, and service delivery. Led by the Department for Environment,

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 keg

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 sinc

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 householderciments ar(of)-5.4(tore)-4. Nf thcard2.

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.

- 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

recurring theme during our evidence gathering. We shared our frustrations with the inconsistency

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. Birm

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

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					

4 Conclusions and Recommendations

4.1 Introduction

4.1.1

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
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 woul

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

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

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