# Committee: Sustainable Communities Overview and Scrutiny Panel

Date: 26 May 2011

Agenda item: **7**Wards: All Wards

# Subject: Scrutiny review on efficient household waste management and the environment – draft report

Lead officer: Julia Regan, Head of Democracy Services

Lead member: Councillor John Sargeant, Chair of the task group review

Forward Plan reference number: not applicable

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#### **Recommendations:**

- A. That the Sustainable Communities Overview and Scrutiny Panel considers and endorses the report arising from the scrutiny review of efficient household waste management and the environment, attached at Appendix 1.
- B. That the Panel considers whether it wishes to:
  - send the task group's report to Cabinet for initial discussion on 20 June 2011 as set out in its report in paragraph 125 onwards;

and/or

- ask the task group to reconvene to carry out further work on service and financial modelling and report back at a later date.
- C. If the Panel agrees to forward the review report to Cabinet for approval and implementation of the recommendations, this should be by means of an action plan to be drawn up by officers and relevant partners working with the Cabinet Member(s) to be designated by Cabinet.

#### 1. PURPOSE OF REPORT AND EXECUTIVE SUMMARY

1.1 To present the draft scrutiny review report on efficient household waste management and the environment to the Sustainable Communities Overview & Scrutiny Panel for endorsement and seek agreement to forward the report to Cabinet for approval and implementation of the review recommendations.

#### 2. DETAILS

- 2.1 The Sustainable Communities Overview and Scrutiny Panel, at the request of Cabinet, agreed at its meeting on 7 December 2010 to set up a scrutiny task group in order to investigate the proposed use of wheeled bins for the collection of household waste. The Panel appointed a small task group to carry out the review and report back to its May 2011 meeting.
- 2.2 The task group subsequently agreed a broader remit in order to look at all aspects of domestic waste collection, taking into account value for money and environmental considerations rather than focusing on wheeled bins.
- 2.3 The task group's report is evidence based, drawing on and reflecting the wide range of written and oral evidence received. The task group spoke to a number of expert witnesses and visited other authorities in order to learn about best practice and experience elsewhere. Members also spoke to service managers, refuse workers and officers at Merton Priory Homes as well as examining performance and financial information.
- 2.4 The task group have recognised that, given more time, more complex models could be examined in order to investigate the extent to which financial savings could be made by changing work patterns and exploring the impact of adopting "energy from waste" for the disposal of residual waste.
- 2.5 The Sustainable Communities Overview and Scrutiny Panel is therefore asked to consider whether it wishes to:
  - send the task group's report to Cabinet for initial discussion on 20 June 2011 as set out in its report in paragraph 125 onwards;

and/or

• ask the task group to reconvene to carry out further work on service and financial modelling and report back at a later date.

#### 3. ALTERNATIVE OPTIONS

3.1 The Overview and Scrutiny Panel can select topics for scrutiny review and for other scrutiny work as it sees fit, taking into account views and suggestions from officers, partner organisations and the public.

#### 4. CONSULTATION UNDERTAKEN OR PROPOSED

- 4.1 In carrying out its review, the task group received a wide range of written evidence, spoke to expert witnesses and undertook five visits to identify good practice elsewhere and to discuss emerging findings. The task group agreed not to embark on a public consultation exercise as members were already familiar with and understood the range and divergence of views.
- 4.2 Appendix 1 of the task group's report lists the written evidence received and Appendix 2 lists the witnesses at each meeting.

#### 5. TIMETABLE

5.1 The task group was established by the Sustainable Communities Overview and Scrutiny Panel and so this report will be presented to its meeting on 26 May 2011 for the Panel's approval.

5.2 The Commission will then send the report to the Council's Cabinet on 20 June 2011 for initial discussion.

#### 6. FINANCIAL, RESOURCE AND PROPERTY IMPLICATIONS

6.1 The task group received financial modelling information and have made recommendations on the basis of the information provided, some of which will have financial implications. Any specific resource implications will be identified and presented to Cabinet when the report is forwarded for approval and response.

#### 7. LEGAL AND STATUTORY IMPLICATIONS

7.1 None for the purposes of this report. Scrutiny work involves consideration of the legal and statutory implications of the topic being scrutinised.

## 8. HUMAN RIGHTS, EQUALITIES AND COMMUNITY COHESION IMPLICATIONS

8.1 It is a fundamental aim of the scrutiny process to ensure that there is full and equal access to the democratic process through public involvement and engaging with local partners in scrutiny reviews. Furthermore, the outcomes of reviews are intended to benefit all sections of the local community. An Equalities Impact Assessment has been completed as part of the review process and is available on request from the Scrutiny Team.

#### 9. CRIME AND DISORDER IMPLICATIONS

9.1 None for the purposes of this report. Scrutiny work involves consideration of the crime and disorder implications of the topic being scrutinised.

#### 10. RISK MANAGEMENT AND HEALTH AND SAFETY IMPLICATIONS

10.1 None for the purposes of this report.

## 11. APPENDICES – THE FOLLOWING DOCUMENTS ARE TO BE PUBLISHED WITH THIS REPORT AND FORM PART OF THE REPORT

11.1 Appendix 1 – Draft review report on efficient household waste management and the environment.

#### 12. BACKGROUND PAPERS

12.1 Notes of task group meetings on efficient household waste management and the environment.

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**London Borough of Merton** 

### Report and recommendations arising from the scrutiny task group review of efficient household waste management and the environment

**Sustainable Communities Overview and Scrutiny Panel** 

May 2011

#### Task group membership

Councillor John Sargeant (Chair)
Councillor David Dean
Councillor Jeff Hanna
Councillor Mary-Jane Jeanes
Councillor Russell Makin
Councillor David Simpson

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#### **Acknowledgements**

The task group would like to thank our expert witnesses – Mary Corin, Chris Mills, Matthew Thomson and Tom Walsh – who gave up their time to share their knowledge with us. We would also like to thank colleagues in the three London boroughs who kindly invited us to visit so that we could learn from their experience.

We would also like to thank Cormac Stokes, Head of Street Scene and Waste, and his colleagues who provided us with detailed service and cost information, as well as the staff at Garth Road who took time to talk to us.

All contributors are listed in Appendix 1 and Appendix 2 of this report.

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#### Foreword by the Review Chair

Our Task Group was set up in January with a remit to look at the full range of options for waste collection services in Merton. The key issue was whether wheelie bins should be introduced to collect household refuse and recyclables.

Waste collection is one of the most visible, and sometimes the most contentious, service the Council provides. With the prospect of further spending cuts and the national imperative to ramp up recycling, it's a service we have to get right.

But with so many aspects to consider, and so many criteria we could apply, defining what is "right" is not so simple. What may be right for one council could be quite inappropriate for another. So as a Task Group, we asked ourselves what is the right answer for Merton.

We were also keenly aware that the "right" answer can change over time. When I was a student in the 1970's I worked in Merton's refuse collection service every summer. I loved it. But the right answer then would leave our customers now seriously unimpressed. Similarly, and more seriously, we know that as changes occur over the coming years, in technology, landfill tax, household behaviour, packaging and so on, the service must respond and change. The Task Group were keen to see a service which drives up recycling now, as well as providing the flexibility to react to new opportunities and new circumstances in the future.

I would like to thank all my task group colleagues for the work they have done. As a cross-party group, we achieved a high degree of unanimity. Although our brief could be seen as "wheelie bins, yes or no", we realised at an early stage that we had to range more broadly across the whole area of waste management to deliver a meaningful answer to that question. In the process the Task Group generated several important conclusions which we strongly hope can be implemented. I would pick out targeted communications, promoting re-use and the particular challenge of raising recycling rates in flats.

I also offer my warm thanks to the cross-section of expert witnesses who addressed us and also to our council officers and several in neighbouring boroughs who provided many valuable insights and useful data to help us progress our work.

Finally, may I sincerely thank Julia Regan, our Scrutiny Officer. Julia has performed a series of minor miracles, turning our thoughts into prose and turning around drafts of our report so rapidly it belied the time and effort she devoted to us.

John Sargeant Chair of the Task Group

#### **Executive Summary**

The task group was set up at the request of Cabinet in order to investigate the proposed use of wheeled bins for the collection of household waste. The task group agreed a broader remit in order to look at all aspects of domestic waste collection, taking into account value for money and environmental considerations rather than focussing on wheeled bins.

The report is evidence based, drawing on and reflecting the wide range of written and oral evidence received. The task group spoke to a number of expert witnesses and visited other authorities in order to learn about best practice and experience elsewhere. Members also spoke to service managers, refuse workers and officers at Merton Priory Homes as well as examining performance and financial information.

The task group has concluded that the most cost effective method should be used for the collection of household waste, as long as this does not adversely impact on the objectives of waste minimisation and maximisation of recycling.

The task group was not convinced that adopting the widespread use of wheeled bins would encourage residents to reduce the amount of refuse or to recycle more, believing that wheeled bins tend to keep rubbish "out of sight and out of mind".

Furthermore, the costings provided to the task group clearly show that using wheeled bins would be more expensive than the current collection method of sacks for landfill refuse and boxes for recycling. The task group also found that the current method has the advantage of flexibility in terms of resilience for the future and is conducive to improving recycling rates.

The task group has therefore recommended, on the basis of evidence received, that the current collection methods are retained. The task group recognise that more complex models could be examined to explore the scope for financial savings and improved recycling within current and potential alternative collection methods. The models could reflect opportunities for changing work patterns, new technology and enhanced communications to households.

The Task Group recognised the significant role that food waste collection can play in reducing landfill and improving street cleanliness. However, data submitted suggested that extending the current scheme to the remaining 30,000+ households in Merton would not be cost-effective. It has therefore recommended that Cabinet receive and carefully examine detailed costings before taking any decision to complete the roll out of the food waste collection.

A number of the task group's recommendations are aimed at further improving communication with residents, particularly those who are not recycling at present.

The recommendations are listed in full overleaf.

### List of task group's recommendations

	Responsible decision making body
Recommendation 1 (paragraph 21)	
We recommend that the Director of Environment and Regeneration review how the refuse collection and street cleaning crews communicate with each other in order to ensure that street cleaning takes place immediately after refuse collection.	Cabinet
Recommendation 2 (paragraph 26)	
We recommend that waste minimisation should be one of the guiding principles to be taken into account by Cabinet when taking decisions about the collection, management and disposal of household waste.	Cabinet
Recommendation 3 (paragraph 32)	
We recommend that the Council should more actively encourage the re-use of household items in order to reduce waste. The Council could advertise the local "freecycle" website at the recycling and re-use centre and in council communications such as My Merton and the council tax leaflet.	Cabinet
Recommendation 4 (paragraph 34)	
We recommend that the Council should advertise local reuse services such as companies that collect used lightbulbs, batteries, small electrical goods etc.	Cabinet
Recommendation 5 (paragraph 37)	
We recommend that the Council investigate ways of promoting the re-use of items of bulky waste, including the possibility of a third party taking over the collection in order to increase the level of re-use.	Cabinet
Recommendation 6 (paragraph 43)  We recommend that Cabinet receive and carefully examine costings before taking any decision to complete the roll out of the food waste collection to the remaining 30,000+ households in Merton.	Cabinet
Pacommondation 7 (paragraph 46)	
Recommendation 7 (paragraph 46)  We recommend that the Council work in partnership with Merton Priory Homes to continue to explore ways of maximising the collection of food waste from flats.	Cabinet Merton Priory Homes

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Pagementation 45 (paragraph 91)	
Recommendation 15 (paragraph 81)  We recommend that the Director of Environment and	Cabinet
Regeneration keeps abreast of technological	
developments in order to identify opportunities for	
changing waste collection and disposal methods so that	
greater value for money may be achieved, as well as	
meeting environmental and waste minimisation objectives.	
Recommendation 16 (paragraph 93)	
We recommend that the Council develops a	Cabinet
communication strategy to encourage the public to re-use	
and recycle. This should be a complex strategy that	
targets different messages to different groups, based on	
the typologies identified by WRAP in its "barriers to	
recycling" report. Communication should include	
information on what happens to recyclable materials after	
collection and cost savings achieved through reducing the	
amount sent to landfill. Publicity and clear signage should	
also be put on containers, including cost information.	
Every opportunity should be taken to communicate re-use	
and recycling messages, including each issue of My	
Merton and the council tax leaflet.	
Merton and the council tax leanet.	
Recommendation 17 (paragraph 94)	
We recommend that all communication with the public	Cabinet
should use words that are in common use.	
Communication materials from Kingston provide a good	
example of this approach.	
Recommendation 18 (paragraph 96)	
We recommend that the Council continue to work with	Cabinet
Merton Priory Homes, other registered social landlords,	Merton Priory
WRAP and other expert organisations to identify the most	Homes
effective way of communicating messages to encourage	
their tenants to recycle and re-use.	
Recommendation 19 (paragraph 98)	
We recommend that strong links should be developed	Cabinet
between the waste collection service and the	
communications team so that communications becomes	
an integral part of the service. We would prefer this to be	
provided by a designated officer in the communications	
team. Alternatively work could be kick-started by buying-in	
expertise, for example from the Royal Borough of	
Kingston Upon Thames who provide the communications	
lead for the South London Waste Partnership.	
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Recommendation 20 (paragraph 100)	
We recommend that the Director of Environment and	Cabinet
Regeneration considers the best way in which to use the	
collection crew as ambassadors for recycling. This would	
include identifying and leafleting households that are not	
participating in recycling (or only putting out small	
quantities). Leaflets could be left for those who mix	
recycling and landfill waste. A stepped approach could be	
taken whereby reminders at first and then warning leaflets	
are left, leading ultimately to non-collection when	
recyclable materials are put in with landfill waste. Results	
from the current trial of yellow and red cards to encourage	
residents to present their landfill waste sacks correctly	
should help to design the scheme.	
December dation 04 (somewhall 444)	
Recommendation 21 (paragraph 111)	
We recommend that the Council continues to collect	Cabinet
landfill waste from plastic sacks and provides boxes for	
the collection of dry recyclables.	
Pagemendation 22 (paragraph 112)	
Recommendation 22 (paragraph 112)	0.1: (
We recommend that Cabinet investigate the feasibility of	Cabinet
buying lids for the recycling boxes and running a trial in	
one part of the borough in order to evaluate whether this	
makes a difference to the quantity and quality of recycling material collected and to the amount of litter on the street.	
material collected and to the amount of litter on the street.	

## Report of the Efficient Household Waste Management and the Environment Scrutiny Task Group

#### Introduction

#### **Purpose**

- 1. The Sustainable Communities Overview and Scrutiny Panel, at the request of Cabinet, agreed at its meeting on 7 December 2010 to set up a scrutiny task group in order to investigate the proposed use of wheeled bins for the collection of household waste.
- 2. In his letter to the Panel's Chair, the Deputy Leader of the Council wrote:
  - "Labour in Merton made a clear pledge at the 2010 election on this subject. We remain committed to achieving this objective but we also recognise the challenging financial circumstances facing the authority, especially following the significant cuts to local government funding announced by the coalition government in the recent Comprehensive Spending review. Given this new position and in recognition of the difference of opinion that exists on the issues of wheeled bins and their impact on increasing recycling rates, delivering cleaner streets and securing savings in operational costs, we believe that the subject will benefit from consideration through the scrutiny process".
- 3. The Panel appointed a small working group of councillors to carry out this work and report back to the Panel's meeting on 26 May 2011.
- 4. At its first meeting the task group discussed its remit and agreed that it should look at all aspects of domestic waste collection rather than focus on wheeled bins.
- 5. The task group agreed the following terms of reference:
  - to scrutinise current and alternative methods of domestic waste collection;
  - to evaluate each model, taking into account value for money, impact on the environment, lessons learned from other authorities, likely future technological and other changes;
  - to make recommendations to Cabinet on how domestic waste collection should be arranged in future.
- 6. Members agreed that the main themes for the task group to address should be value for money and environmental considerations.

#### What the task group did

- 7. At its first meeting the task group received a presentation from the Director of Environment and Regeneration and the Head of Street Scene and Waste. This provided information and enabled questioning and discussion on service objectives, the legislative context, current provision, cost and performance information, the advantages and disadvantages of different types of provision and possible future scenarios.
- 8. A number of expert witnesses attended subsequent task group meetings to share their knowledge and answer questions. The task group asked for their views on what factors should be taken into account when evaluating different methods of domestic waste collection and whether there are any trade-offs between these factors. They were also asked for their thoughts on how to reduce the amount of refuse sent to landfill and increase the proportion recycled.
- 9. The expert witnesses were:
  - Mary Corin, rValue Resource Development, an independent consultant with extensive municipal and waste management experience. rValue's business focus is to promote the use of Value Chain manufacturing principles to ensure that maximum value is extracted from materials recycled by society, at minimum cost.
  - Chris Mills from WRAP (Waste & Resources Action Programme), drew from WRAP's research and good practice information as well as his personal experience of working on numerous recycling schemes across the country, including the food waste pilot in Merton.
  - Matthew Thomson from the London Community Resource Network, a social enterprise charity supporting organisations and communities working to manage resources sustainably, especially through waste prevention, reuse and recycling. LCRN has a strong track record of local, regional and national delivery influencing policy and providing advice on best practice.
  - Tom Walsh from Sustainable Merton, a community led initiative which gives local residents, organisations and businesses the chance to stimulate practical action. The aim is to make the local area a sustainable community at a time of peak oil and climate change.
- 10. The task group has also considered a wide range of written evidence including:
  - the 2005/6 scrutiny review of waste collection
  - Mayor of London's draft Municipal Waste Management Strategy
  - various research reports from WRAP (Waste and Resources Action Programme)
  - transcript of evidence taken at London Assembly session on waste financial incentive schemes

- 11. Task group members undertook five visits to identify good practice elsewhere and to discuss emerging findings:
  - Wandsworth a borough that has weekly collection of black sacks for landfill refuse and orange sacks for dry recyclables, chargeable collection of green and bulk waste. Planning to send all landfill waste to an energy from waste plant. No separate food waste collection – residents are encouraged to reduce the amount of food waste they produce in the first place and to home compost the remaining waste.
  - Croydon a borough that collects landfill waste weekly from wheeled bins and recycling fortnightly from two boxes (blue box for paper, card, textiles and shoes; green box for glass, tins, cans and plastic bottles). Chargeable collection of bulk waste. Green waste collected – residents buy sacks for £1. No separate food waste collection – residents are encouraged to reduce the amount of food waste they produce in the first place and to home compost the remaining waste.
  - Kingston Upon Thames a borough that has fortnightly collection of landfill waste from wheeled bins, weekly collection of dry recyclables from boxes (separated at kerbside) and cardboard in white sacks. Weekly food waste collection with free biodegradable liners. Kingston Community Furniture and the Appliance Re-use Centre (ARC) collect, reuse where possible, or recycle white goods and household furniture – charged. Charged collection of bulky waste. Various chargeable options for garden waste.
  - Merton Priory Homes discussion of the impact of various waste collection methods on Merton Priory Homes' residents, including how to encourage recycling and practical issues around collection of food waste. Followed by site visit to look at recycling arrangements on the Ravensbury Estate.
  - Garth Road depot discussion with the waste collection team on practical issues encountered on waste collection rounds.
- 12. The task group asked officers to provide annual waste management and capital costs for a number of different models of domestic waste collection.
- 13. The task group agreed not to embark on a public consultation exercise as members were already familiar with and understood the range and divergence of views.
- 14. Appendix 1 lists the written evidence received by the task group and Appendix 2 lists the witnesses at each meeting.
- 15. This report sets out the task group's findings, conclusions and recommendations. The task group's recommendations run throughout the report and are set out in full in the Executive Summary at the front of this document.

#### Household waste collection in Merton

- 16. Merton Council currently (at 1 May 2011) provides:
  - weekly collection of landfill waste from black sacks (that residents provide for themselves)
  - weekly collection of dry recyclable waste (paper, card, glass, cans, tins) from green and purple boxes
  - weekly collection of food waste from 50,000 households (remaining 30,000 not currently covered) – outside food bin, kitchen caddy and starch liners supplied
  - free bulky waste collection of up to 5 items once every 3 months charge for additional items
  - no collection of garden waste residents encouraged to home compost or take garden waste to re-use and recycling centre at Garth Road
  - wide range of materials accepted at Garth Road Re-use and Recycling Centre
- 17. We have received evidence that the quality of the refuse collection service has improved in recent years. The number of missed bins per 100,000 collections has reduced from 102 in 2006/7 to 67 in 2010/11. High levels of satisfaction were expressed in the 2010/11 annual resident satisfaction survey 73% of respondents rated recycling facilities as good or excellent (up from 69% in 2009/10) and 72% rated refuse collection as good or excellent (up from 69% in 2009/10).
- 18. We were pleased to hear that the proportion of recyclable and compostable waste collected has increased and that Merton now ranks 11<sup>th</sup> out of the 33 London boroughs. The service manager informed us that this improvement is mainly due to the introduction of the food waste collection and increased use of the re-use and recycling centres.

#### Street cleaning

- 19. We were informed that around 50% of street litter originates from refuse bags and recycling boxes so street cleaning is co-ordinated to be carried out on the same day as refuse collection (after collection has taken place).
- 20. Our own observation contradicts the assertion that street cleaning follows shortly after refuse collection. We have observed a lack of coordination in practice that leaves litter created during the refuse collection lying on streets for a considerable period of time. Members of the collection crew we spoke to at Garth Road told us that one of the reasons for this is that they vary their route to avoid wasting time in traffic, thus making it difficult for sweepers to follow the vehicle.
- 21. There is clearly scope for better coordination between waste collection and sweeping. We therefore recommend that the Director of Environment and Regeneration review how the refuse collection and street cleaning crews communicate with each other in order to ensure that street cleaning takes place immediately after refuse collection. (recommendation 1)

#### Waste minimisation

- 22. All the people we spoke to during the course of this review have urged us to advocate waste minimisation as a fundamental principle of the Council's waste management strategy, particularly for waste that is sent to landfill, for both financial and environmental reasons.
- 23. We understand that Wandsworth Council has a strong policy of waste minimisation to reduce the amount of waste generated in the first place. They have a target to reduce waste tonnage by 5% each year and have removed £500,000 from the budget on the assumption that this will be achieved.
- 24. We heard that levels of household waste have been declining nationally. We were pleased to hear that the overall level of waste collected by the Council has decreased around 100,000 tonnes was collected ten years ago compared to 85,600 tonnes this year. However, a cautionary note was struck on our visit to Kingston when we found out that they have experienced a slight increase in tonnage this year after several years of reduction. This may be a consequence of changing consumer behaviour as the borough emerges from recession and is something we will need to watch closely.
- 25. We also heard although a reduction in the amount of waste generated per household is expected in future years, the anticipated growth in the number of households in Merton may counteract this so that the total quantity of waste collected is likely to remain at a similar level. Vigorous efforts to minimise the amount of waste generated are therefore imperative.
- 26. We therefore recommend that waste minimisation should be one of the guiding principles to be taken into account by Cabinet when taking decisions about the collection, management and disposal of household waste. (recommendation 2)
- 27. We have identified a number of routes to minimising waste:
  - re-use of items that would otherwise be thrown away (discussed in paragraphs 29-37)
  - separate collection of food waste so that this can be composted rather than being sent to landfill (discussed in paragraphs 38-48)
  - maximising the collection of "dry recyclables" (paper, plastics, tin, glass etc) so that these can be sold for re-use rather than being sent to landfill (discussed in paragraphs 49-70)
- 28. These approaches are complementary and should be underpinned by effective and continuing communication with the public, discussed in paragraphs 86-101.

#### Re-use

- 29. We are keen to ensure that as many items as possible are re-used, either by individual households or subsequent to collection from households, in order to divert them from going to landfill sites.
- 30. Measuring re-use is complicated but we understand that the government is proposing to publish re-use targets for councils later this year, probably based on re-use of furniture and other large items.
- 31. Secondhand and charity shops, on-line forums such as "freecycle" (where individuals can advertise items that they wish to give away) and the Council's Re-use and Recycling Centre at Garth Road provide relatively easy ways by which households can dispose of unwanted items that could be of use to others.
- 32. We recommend that the Council should more actively encourage the re-use of household items in order to reduce waste. The Council could advertise the local "freecycle" website at the recycling and re-use centre and in council communications such as My Merton and the council tax leaflet. (recommendation 3)
- 33. The Waste Batteries and Accumulators Regulators 2009 came into force recently, requiring retailers selling batteries to provide collection and recycling facilities for their eventual disposal. We would like to increase public awareness of this requirement, for example by using the Council's website to list information on which local retailers provide this service.
- 34. We therefore recommend that the Council should advertise local reuse services such as companies that collect used lightbulbs, batteries, small electrical goods etc. (recommendation 4)
- 35. The Council's bulky waste collection service is another way for households to dispose of unwanted furniture and other large items, including electrical and white goods. We understand that the bulky waste collected is either recycled or sent to landfill, with no re-use of items. We heard that a voluntary group (Croydon ARC) carried out a piece of work in Merton last year which estimated that around 40% of the bulky waste they collected from households could be re-used. We also heard that Kingston Council pay their local ARC to collect bulk waste on their behalf so that items can be re-used where possible.
- 36. In order to encourage re-use it is important that households have access to a service that will collect bulky waste from their doorstep. This may also reduce the amount of fly tipping in the borough. Whether this service is provided free or not is secondary, in our opinion, to promoting the use of this service and ensuring maximum re-use of items collected.
- 37. We recommend that the Council investigate ways of promoting the re-use of items of bulky waste, including the possibility of a third

#### party taking over the collection in order to increase the level of reuse. (recommendation 5)

#### **Food waste**

- 38. We have been convinced of the benefits of removing food waste from landfill by providing a separate collection from households. Although the quantity collected seems small it is significant in weight terms as food waste is dense 5kg of food waste is the size of a football whereas 5kg of plastics takes up a much larger space.
- 39. Some authorities (including Kingston and the Somerset Waste Partnership) have found that when they introduced a separate food waste collection, the weight of landfill waste was reduced by more than the weight of the food waste collected.
- 40. Similarly, the collection crew that we spoke to at Garth Road told us that the amount of waste collected on the Mitcham round had reduced from 22 tonnes to 16 tonnes once they started collecting food waste separately.
- 41. We were pleased to hear that funding has been provided by the Mayor of London for around 12,000 food waste containers to be delivered to flats in the borough. We understand that the Council currently has around 6,000 containers in stock.
- 42. We have received information from the Head of Street Scene and Waste indicating that rolling out the food waste collection would incur additional revenue and capital costs. He has also informed us that plans to adopt an energy from waste scheme is projected to handle the disposal of residual waste from 2014/15. This could render the separate collection of food waste obsolete. These points warrant further investigation.
- 43. We therefore recommend that Cabinet receive and carefully examine costings before taking any decision to complete the roll out of the food waste collection to the remaining 30,000+ households in Merton (recommendation 6)
- 44. We recognise that the separate collection of food waste poses particular practical difficulties for residents who live in flats. There may not be space to keep a food waste caddy in a small kitchen. Residents may be deterred from participation by the distance between their flat and the communal collection point.
- 45. Merton Priory Homes have been piloting the collection of food waste at several larger estates. At their Sadler Close estate in Mitcham, when food waste recycling was implemented, cleaners assisted residents by taking food waste for recycling to the main recycling point on the estate. Merton Priory Homes have also been working with the Council and are

considering the feasibility of food waste disposal into larger on-site composters. Twice annually this compost would then be used on the estate's own communal flower beds. This initiative would not only save money, as collections would not be required, but more importantly, local residents would see the benefits of their efforts in recycling their food waste, improving buy-in, especially knowing that their communal gardens would flourish as a result.

- 46. We heard that Kingston provide flats with a supply of food waste lining bags every 3 months in recognition of the level of resident turnover and that this helps to increase participation rates.
- 47. We recommend that the Council work in partnership with Merton Priory Homes and other registered social landlords to continue to explore ways of maximising the collection of food waste from flats where this service is already in place. (recommendation 7)
- 48. We note that research by WRAP indicates that the collection method chosen for landfill waste impacts on the amount of food waste that is put out by residents for recycling. WRAP found that the amount of food waste collected is increased most by a fortnightly residual waste collection combined with a weekly food waste collection because residents prefer to get rid of food quickly. Use of black sacks also increases the food collection rate, although to a lesser degree, as residents don't like to leave food in black sacks where it can fall prey to cats, foxes etc.

#### Recycling

- 49. We believe that in the immediate future there should be an emphasis on driving up the level of residents' participation in recycling.
- 50. We were advised that there is a market for the raw materials that are collected through recycling and that this could be financially advantageous to councils. Paper, card and textiles have a market value, though prices fluctuate. The extent of the financial benefit to councils will depend on the arrangements (in-house or contracted out) for the collection and disposal of these materials.
- 51. To achieve maximum value, councils should seek an optimum balance between collection costs and the quality of the materials collected.
- 52. We understand that there is a trade-off between ease of recycling for residents, take-up by residents and value for the council. Co-mingled collection of dry recyclables (where all materials are collected from residents in a single container and subsequently separated) is simplest for the public and helps to increase participation in recycling. Separation of paper from plastic and glass either through residents using different containers for each or through "kerbside separation" by the collection crew yields higher quality materials and thus greater financial value but is more complex for residents.
- 53. We believe that there is a level of participation in recycling at which a separate collection of individual components would make economic sense and it would become easier to convince the public of the value of this. We have concluded that until this "tipping point" is achieved it would be better to retain a co-mingled collection in order to continue to increase the proportion of households participating.
- 54. Given our current rate of recycling, we recommend that the Council should continue to have a co-mingled recycling collection service in order to drive up the recycling rates. (recommendation 8)
- 55. We further recommend that the Council should keep the recycling collection methods under review in order to identify the point at which the separate collection of individual components becomes financially advantageous. The Council should then change the service accordingly and should provide clear communication to residents, setting out the reasons for the change as well as the new collection requirements. (recommendation 9)
- 56. We recommend that the Director of Environment and Regeneration should continuously monitor the market and provide regular reports to the relevant Cabinet Member on the value of the raw materials obtained from the recycling collection. (recommendation 10)

- 57. We further recommend that Cabinet should ensure that future contracts relating to the collection, management or disposal of waste are sufficiently flexible to enable the council to benefit from changing market conditions in relation to the value of raw materials. (recommendation 11)
- 58. We heard various views about what type of container should be used for collecting recycled waste in an ideal world. From these we have identified two principles size and visibility:

#### Size

- 59. A WRAP study on barriers to recycling found that the capacity of the containers used had more impact on participation rates than the type of container (box, bag, wheeled bin). The study also found that people are less concerned about the number of containers required as long as they are fit for purpose, convenient, easy to use and suitable for their house type.
- 60. It is therefore important that the Council doesn't limit the amount of recycling that households can put out by providing too small a container. We note that households may request additional recycling boxes to meet their own requirements.

#### Visibility

- Visibility has obvious benefits. If the amount of recycling put out is visible there will be a certain amount of pressure to "keep up with the neighbours" that should encourage recycling. Visibility would also enable collection crews to easily see if the correct materials have been put in, thus reducing the level of "contamination" of recyclables by landfill waste and increasing its value.
- 62. The black bags currently used for landfill waste have the disadvantage of not enabling the collection crew to see whether residents have placed recyclable materials inside them instead of in the recycling boxes. Use of clear plastic bags would overcome this problem.
- 63. We recommend that the Council work with local supermarkets to encourage the stocking of clear plastic refuse sacks with a view to making the use of clear sacks a future requirement for the collection of landfill waste. (recommendation 12)
- 64. We were advised that recycling levels would be increased if neighbouring authorities had consistent labelling and policies on what can be recycled so that it is not confusing for residents who move between authorities. We would like to see a common approach adopted but would not wish this to delay the implementation of the Council's own communications strategy.

- 65. We therefore recommend that Cabinet should work towards establishing a common approach to the range of materials which can be recycled among the authorities within the South London Waste Partnership. (recommendation 13)
- 66. As with food waste, residents living in flats may find the logistics of recycling more difficult in particular the distance between their home and the communal recycling bin. This distance is necessary in order to prevent smells and fire risk. We discussed these issues with Merton Priory Homes and heard that the biggest disincentive is the need to keep the containers inside the flats (health and safety reasons prohibit keeping them in corridors or landings).
- 67. We were impressed by the efforts that Merton Priory Homes are making to make recycling as easy as possible for their tenants. We visited one estate on which communal recycling bins had recently been installed. We noticed that the labelling and colour coding of bins could be improved to clearly indicate what should be put in each one. Our inspection of the bins showed that each one contained a mix of landfill and recyclable refuse.
- 68. We understand that recyclable bags (such as the orange sacks used by Wandsworth Council) could be used to store recyclables and then be thrown into the communal bin thus eliminating the need to return a container to the flat therefore making participation easier and encouraging uptake.
- 69. We also understand that it would be possible for Merton residents who live in flats that have a communal recycling point to use ordinary plastic bags to store their recyclables and then throw the bag into the recycling container. This would make recycling easier and would thus boost the recycling rate.
- 70. We therefore recommend that the Council, Merton Priory Homes and other registered social landlords provide information to residents who live in flats with communal recycling bins telling them that they can put their recyclables in to an ordinary plastic bag and then throw the recycling bag into the bin. (recommendation 14)

#### Flexibility and planning for the future

- 71. We heard that there are numerous permutations of waste collection methods in use around the country. What is best for an authority should be determined by local circumstances, the needs of residents and the authority's long term strategy on waste minimisation.
- 72. We were urged to ensure that decisions made to reach short term targets did not have unintended consequences for longer term goals. In particular, we were advised to consider future arrangements for waste disposal and to take these into account when making recommendations about waste collection methods.
- 73. An example of this strategic approach is the decision by Wandsworth Council to send all its residual waste to an "energy from waste" plant rather than to landfill. This decision is based on their view that energy from waste is the most cost effective and efficient option for waste disposal and has a carbon footprint that is comparable to recycling. They will continue to collect dry recyclables because of the current financial incentives, targets and popularity with residents.
- 74. There are many uncertainties about the future in relation to the management of household waste:

#### Government regulations

- 75. Landfill tax was introduced by the government in 1996 in order to ensure that the cost of sending waste to landfill reflected its environmental impact, thereby making alternative disposal methods more cost-effective and helping the UK to reach targets for more sustainable waste management.
- 76. The tax has increased each year, reaching £56 per tonne on the first of April 2011. It is set to increase by £8 per year over the next three years. It is unclear as to whether the tax will continue to increase beyond 2014/15.
- 77. The future direction of other government regulation is also unclear. Reuse targets may be introduced. Recycling targets may be replaced by carbon standards.

#### Market and technological opportunities

- 78. The fluctuating price of materials makes it difficult to predict if and when it will become cost effective to collect individual recycling materials separately.
- 79. New technologies may enable a higher proportion of plastic waste to be recycled in future.

- 80. Energy from waste technology may develop to such an extent that it becomes the most cost efficient and environmentally friendly method of waste disposal. This would necessitate a re-think of the Council's approach to recycling.
- 81. We recommend that the Director of Environment and Regeneration keeps abreast of technological developments in order to identify opportunities for changing waste collection and disposal methods so that greater value for money may be achieved, as well as meeting environmental and waste minimisation objectives. (Recommendation 15)

#### Household behaviour

- 82. It is unclear whether the amount of waste produced per household will continue to decrease or whether, as the borough moves out of recession, it will start to increase again.
- 83. Similarly, it is unclear as to whether participation in recycling will increase. If it does, the Council may reach a point at which separate collection becomes more cost effective than co-mingled collection. We believe that the current collection, using two containers, provides sufficient flexibility to make any changes that might be needed for future separation of recyclable materials.
- 84. We may reach a point at which the amount of landfill waste is reduced such that a fortnightly collection becomes feasible. Furthermore, if a weekly collection of recyclables and food waste is retained, we were advised that a fortnightly collection of landfill refuse can provide an additional incentive to recycle.
- 85. Given these uncertainties, we believe it would be wise to have collection methods that can be more easily adapted to changing circumstances, minimising disruption for residents and cost to the Council.

#### Communication with residents

- 86. We see powerful, targeted, relevant and ongoing communication as an integral part of the Council's long term waste management strategy. We would like to see clear messages on what can be recycled and what can't (including which plastics can be recycled).
- 87. Messages to encourage recycling and re-use should be designed so that residents can see how the financial and environment benefits will impact on them.
- 88. Communication is particularly important when changes are made to collection methods. If people aren't clear about the reasons for change then they are less likely to comply with the change. Information on what happens to the refuse after it has been collected would also help to encourage people to recycle more.
- 89. We heard that Wandsworth's reduction in the overall tonnage of waste collected has been underpinned by an "intensive public education process" that included door to door visits to spread recycling and waste minimisation messages. They have also spread the message through the council magazine, adverts on the side of refuse vehicles and the support of local environmental groups.
- 90. Kingston found that communicating complicated messages to all households has been a big challenge. They kept residents updated during the pilot, seeking and sharing honest feedback (both positive and negative) in order to learn from the pilot. Communications messages were phased during the roll out of the new service to align with delivery of the new waste containers.
- 91. We can learn from the experience of others who have identified what messages work best and how to convey them. In particular, WRAP can advise on the most cost effective way of getting these messages across to different communities. WRAP have researched and categorised the varying motivation and attitudes towards recycling, identifying different "nudges" to encourage different groups of people to recycle.
- 92. We believe that an effective communication campaign would pay for itself by increasing the proportion of waste that is recycled and reducing the amount of landfill tax for which the Council is liable.
- 93. We recommend that the Council develops a communication strategy to encourage the public to re-use and recycle. This should be a complex strategy that targets different messages to different groups, based on the typologies identified by WRAP in its "barriers to recycling" report. Communication should include information on what happens to recyclable materials after collection and cost savings achieved through reducing the amount sent to landfill.

Publicity and clear signage should also be put on containers, including cost information. Every opportunity should be taken to communicate re-use and recycling messages, including each issue of My Merton and the council tax leaflet. (recommendation 16)

- 94. We further recommend that all communication with the public should use words that are in common use. Communication materials from Kingston provide a good example of this approach. (recommendation 17)
- 95. We recognise that Merton Priory Homes and other registered social landlords have a particular opportunity to use their billing system to make the cost of collecting landfill and the financial benefits of recycling clear to their tenants.
- 96. We recommend that the Council continue to work with Merton Priory Homes, other registered social landlords, WRAP and other expert organisations to identify the most effective way of communicating messages to encourage their tenants to recycle and re-use. (recommendation 18)
- 97. We were impressed by the approach that Kingston had taken in involving their communications team throughout a pilot scheme and subsequent introduction borough wide of a new waste collection service. Kingston's telephone contact centre staff were trained to understand the new system so that they could deal with the majority of enquiries.
- 98. We recommend that strong links should be developed between the waste collection service and the communications team so that communications becomes an integral part of the service. We would prefer this to be provided by a designated officer in the communications team. Alternatively work could be kick-started by buying-in expertise, for example from the Royal Borough of Kingston Upon Thames who provide the communications lead for the South London Waste Partnership. (recommendation 19)
- 99. We were impressed by the evident efforts taken by collection crews at Garth Road to advocate recycling, encourage households to present their waste correctly and separate landfill waste from recyclables. With more materials, e.g. handbills targeting specific issues they could be even more effective.
- 100. We recommend that the Director of Environment and Regeneration considers the best way in which to use the collection crew as ambassadors for recycling. This would include identifying and leafleting households that are not participating in recycling (or only putting out small quantities). Leaflets could be left for those who mix recycling and landfill waste. A stepped approach could be taken whereby reminders at first and then warning leaflets are left, leading ultimately to non-collection when recyclable materials are

put in with landfill waste. Results from the current trial of yellow and red cards to encourage residents to present their landfill waste sacks correctly should help to design the scheme. (recommendation 20)

101. We discussed the need to encourage supermarkets to reduce the amount of packaging and increase the recycled content of their packaging materials. We concluded that these issues are outside the remit of this task group. We do however recognise the important contribution that can be made and were pleased to hear that WRAP has been working with the supermarkets to advise them on these issues.

#### Service modelling

- 102. The task group asked officers to provide annual waste management and capital costs for the following models, all to assume separate collection of food waste:
  - wheeled bins for landfill and boxes for recyclables
  - wheeled bins for landfill and for recyclables
  - black sacks for landfill and boxes for recyclables
  - black sacks for landfill and wheeled bins for recyclables
- 103. The costings we received are set out in Appendix 3.
- 104. We believe that the most cost effective method should be used for the collection of household waste as long as this does not adversely impact on the objectives of waste minimisation and the maximisation of recycling.
- 105. The costings in appendix 3 clearly show that using wheeled bins (options 2-4) would be more expensive than the current method of sacks for landfill refuse and boxes for recycling (option 1).
- 106. The Head of Street Scene and Waste told us that he sees the adoption of wheeled bins as an opportunity to change working practices and shift patterns in order to achieve cost reductions. Based on the costings that we have seen, we are unclear as to how this would be achieved.
- 107. We have heard much about the perceived advantages and disadvantages of wheeled bins. We have not been convinced that adopting the widespread use of wheeled bins would encourage residents to reduce the amount of refuse or to recycle more as wheeled bins tend to keep rubbish "out of sight and out of mind".
- 108. We note that the refuse workers that we spoke to at Garth Road did not favour wheeled bins. Their main concern was the additional time required to take bins to and from the refuse vehicle, especially in streets where cars were closely parked. There was also the issue of time taken to return the bins back to the right households from the point where they were massed for tipping into the vehicle. However, they also said that using wheeled bins could reduce street litter by preventing some recyclables from blowing away.
- 109. We believe that the current methods are the most flexible in relation to responding to future technological and other changes.
- 110. We therefore recommend that the Council continues to collect landfill waste from plastic sacks and provides boxes for the collection of dry recyclables. (recommendation 21)

- 111. We recommend that Cabinet investigate the feasibility of buying lids for the recycling boxes and running a trial in one part of the borough in order to evaluate whether this makes a difference to the quantity and quality of recycling material collected and to the amount of litter on the street. (recommendation 22)
- 112. Individual residents who wish to use wheeled bins to store their refuse are welcome to buy their own in order to do this as long as they use plastic sacks inside the wheeled bin so that the refuse workers can take them out and throw them into the cart.
- 113. We think that in the longer run that increasing the proportion of refuse that can be recycled (food waste and dry recyclables) will lead to a reduced level of landfill that will permit a fortnightly collection thus yielding significant cost savings.
- 114. We recommend that if the quantity of landfill waste reduces significantly then the council should consider collecting it less frequently than at present, perhaps continuing to collect more frequently from those households that have little or no outside space. Weekly collection of recyclable material and food waste should be retained. (recommendation 22)
- 115. Merton is a member of the South London Waste Partnership, which currently procures waste disposal and treatment facilities for four boroughs. The next stage for this partnership may be shared services or joint procurement of waste collection. If this were to happen, standard collection methods across the partnership would help to reduce costs.

#### **Concluding remarks**

- 116. We have been convinced of the need to pursue the twin objectives of waste minimisation and recycling maximisation, supported by a programme of continuing and clear communication to residents.
- 117. We are also convinced that a separate collection of food waste would make a significant contribution to reducing the weight of refuse going to landfill. However, we have received information indicating that providing a separate food waste collection to every household would incur considerable cost.
- 118. We have therefore recommended that Cabinet receive and carefully examine costings before taking any decision to complete the roll out of the food waste collection to the remaining 30,000+ households in Merton.
- 119. We have urged the Council to review recyclable materials as a resource that could yield financial benefits given the right market conditions.
- 120. We are agreed on the principle of avoiding collection methods that would discourage recycling or re-use.
- 121. We are also agreed that the Council should adopt the most cost effective method for the collection of household waste as long as this does not adversely impact on the objectives of waste minimisation and the maximisation of recycling.
- 122. The costings that we have been given (set out in Appendix 3) clearly show that the current method of sacks for landfill refuse and boxes for recycling is the most cost effective. The current methods have the advantage of flexibility in terms of resilience for the future and are also conducive to improving our recycling rates.
- 123. We recognise that more complex models could be examined to explore the scope for financial savings and improved recycling within current and potential alternative collection methods. The models could reflect opportunities for changing work patterns, new technology and enhanced communications to households.
- 124. The Sustainable Communities Overview and Scrutiny Panel is therefore asked to consider whether it wishes to:
  - send this report to Cabinet for initial discussion on 20 June 2011 as set out in paragraphs 125 onwards;

#### and/or

 ask the task group to reconvene to carry out further work on service and financial modelling.

#### What happens next?

- 125. This task group was established by the Council's Sustainable Communities Overview and Scrutiny Panel and so this report will be presented to its meeting on 26 May 2011 for the Panel's approval.
- 126. The Panel will then send the report to the Council's Cabinet on 20 June 2011 for initial discussion.
- 127. The Cabinet will be asked to provide a formal response to the Commission within two months, as required by the Council's Constitution.
- 128. The Cabinet will be asked to respond to each of the task group's recommendations, setting out whether the recommendation is accepted and how and when it will be implemented. If the Cabinet is unable to support and implement some of the recommendations, then it is expected that clearly stated reasons will be provided for each.
- 129. The lead Cabinet Member (or officer to whom this work is delegated) should ensure that other organisations to whom recommendations have been directed are contacted and that their response to those recommendations is included in the report.
- 130. A further report will be sought by the Panel six months after the Cabinet response has been received, giving an update on progress with implementation of the recommendations.

#### **Appendices**

#### **Appendix 1: written evidence**

Report and recommendations arising from a scrutiny review of waste collection, London Borough of Merton, February 2006

Note to task group – headline update since 2005/6 scrutiny review of waste collection, Head of Street Scene and Waste, London Borough of Merton, 12 January 2011

Waste collection – presentation to scrutiny task group, 12 January 2011

Wheelie bins boosting recycling rates, Local Government Association press release 19 June 2009

London's Wasted Resource. The Mayor's Draft Municipal Waste Management Strategy – public consultation draft executive summary, October 2010, Mayor of London

Data on number of households, waste tonnage, costs and absence due to work related injury, London Borough of Merton, 3 March 2011

Presentation by Mary Corin, rValue Resource Development, 3 March 2011

Barriers to recycling at home, WRAP, August 2008

Kerbside recycling: indicative costs and performance, WRAP, June 2008

Evaluation of the WRAP separate food waste collection trials, WRAP, June 2009

Landfill waste and recycling services in Kingston, Director of Environment. Royal Borough of Kingston Upon Thames, 21 March 2011

Reports on recycling and refuse collection service (March 2008) and waste management (October 2006), Royal Borough of Kingston Upon Thames

Waste financial incentive schemes, transcript of item, Environment Committee, 4 November 2010, London Assembly

Food waste rollout – briefing paper, 6 May 2011, Head of Street Scene and Waste

Additional options for garden waste – briefing paper, 6 may 2011, Head of Street Scene and Waste

#### Appendix 2: list of oral evidence

#### Speakers:

Chris Lee, Director of Environment and Regeneration, 12 January, 19 April and 16 May 2011

Cormac Stokes, Head of Street Scene and Waste, 12 January, 19 April and 16 May 2011

Mary Corin, rValue Resource Development, 3 March 2011

Chris Mills, Rotate Adviser, Local Government Services, WRAP (Waste & Resources Action Programme), 3 March 2011

Tom Walsh, Sustainable Merton, 14 March 2011

Matthew Thomson, Chief Executive, London Community Resource Network, 14 March 2011

Councillor Andrew Judge, Cabinet Member for Environmental Sustainability and Regeneration, 16 May 2011

Councillor Mark Betteridge, Deputy Leader and Cabinet Member for Performance and Implementation, 16 May 2011

#### Visits:

London Borough of Wandsworth, 17 February 2011, Peter Brennan, Director of Leisure and Amenity Services and Peter Robinson, Assistant Director of Leisure and Amenity Services.

London Borough of Croydon, 1 March 2011, Ian Stupple, Director of Street Services and Malcolm Kendall, Head of Waste and Recycling, Croydon Street Services.

Royal Borough of Kingston Upon Thames, 21 March 2011, Rob Dickson, Director of Environment, Rachel Sherman, Service Manager (Waste) and John Haynes, Media Officer.

Merton Priory Homes, 5 April 2011, Lesley Smith, Neighbourhood Teams Manager and Glen Burnell, Estate Services Manager.

Garth Road depot, 14 April 2011.

Appendix 3 Service model costings

Wheeled Bin Collection Options - Estimated Costs (2011/12 prices - excludes flats)

	ш	Baseline								
£ Each	Existi + F	Existing (Residual + Recycling)	Optio	Option 1 (As now)	Optior bins res recyc	Option 2 (Wheeled bins residual - retain recycling boxes)	Option bins   retain re	Option 3 (Wheeled bins recycling - retain residual black sacks)	Option bins re	Option 4 (Wheeled bins residual and recycling)
<b>Employees</b> (includes planned o/t, agency leave cover & PPE)	Nos	ਲ	Nos	ਖ਼	Nos	ભ	Nos	ભ	Nos	ભ
LGV Driver 27,668	4	387,352	4	387,352	17	470,356	17	470,356	12	581,028
23,479 42 56	<b>56</b>	986,118	<b>56</b>	986,118 <b>1,373,470</b>	<b>57</b>	939,160 <b>1,409,516</b>	<b>58</b>	962,639	<b>63</b>	986,118 <b>1,567,146</b>
<b>Transport</b> (includes additional maintenance)										
52,388	4	733,426	4	733,426	17	890,589	17	890,589	21	1,100,139
Spare vehicle (ratio 1:5)	3.0	157,163	3.0	157,163	4.0	209,550	4.0	209,550	4	209,550
17,415	4	243,810	4	243,810	17	296,055	17	296,055	21	365,715
	ı	1,134,399	ı	1,134,399		1,396,194	ı	1,396,194	l	1,675,404
Total Revenue	"	2,507,869	1 11	2,507,869		2,805,710	1 11	2,829,189	1	3,242,550
Variance with baseline				0		297,841		321,320		734,681

PO3 Project Officer Wheeled bin temporary storage Computerised routing planning Consultancy management advice	£30,000	£30,000 £50,000
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140,000

Capital

£140,000

£2,800,000

£46,000

£250,000

£30,000

£50,000

£330,000

£500,000

£4,146,000

£1,916,000

£1,916,000

# Notes:

Total Capital

Revenue assumes weekly collection as per current collection and tipping working patterns.
 Capital assumes entire rollout in one financial year.