

SUSTAINABLE DEVELOPMENT SELECT COMMITTEE		
Report Title	Waste & Recycling Service Options in Lewisham - Update	
Key Decision		Item No. 5
Ward	ALL	
Contributors	Strategic Waste & Environment Manager	
Class	Part 1	Date: 3 rd March 2015

1. Summary

- 1.1 This report updates the Committee following the meeting in October 2014, on Lewisham's future waste and recycling services.

2. Recommendations

- 2.1 To note and comment on the contents of the report, which:
- Provides the Committee with the latest information on the potential waste & recycling service options;
 - Provides information on the work being undertaken to ensure compliance with the Waste Regulations;
 - Recommends that a report compiling the service options and a recommendation to consult with our residents is presented to Mayor & Cabinet in June 2015.

3. Service Options

- 3.1 At the last meeting four options were proposed following an Efficiencies Review of the waste and recycling services. These are summarised below:
- Option 1 (Baseline plus garden waste): Refuse collected weekly, recycling collected co-mingled weekly and garden waste fortnightly;
 - Option 2: Refuse collected fortnightly, recycling collected twin stream (i.e. paper separately from the rest of the recycling) fortnightly and garden & food waste collected weekly;
 - Option 3: Refuse collected weekly, recycling collected twin-stream fortnightly and garden waste fortnightly;
 - Option 4: Refuse collected fortnightly, recycling collected twin stream fortnightly, garden waste collected fortnightly and food waste collected weekly.
- 3.2 Since the last meeting Officers have been undertaking further analysis of the options and how they can be configured ensuring ease of use for residents,

operational deliverability, environmental impact and financial impact, which includes market conditions. Ultimately by looking at all of these options should ensure compliance with the Waste Regulations.

3.3 This further analysis has resulted in the inclusion of an additional option to be considered. This fifth option is the same as Option 4 except that instead of recycling collected twin stream (i.e. paper taken out), recycling remains as a co-mingled service:

- Option 5: Refuse collected fortnightly, recycling collected co-mingled fortnightly, garden waste collected fortnightly and food waste collected weekly.

3.4 The next sections detail the current work on the various factors.

4 Waste Regulations

4.1 Regulation 13 of the Waste (England and Wales) Regulations 2011 (as amended), transposes into English law Article 11 of the EU Revised Waste Framework Directive (2008/98/EC). Regulation 13 states that from 1 January 2015, waste collection authorities must collect waste paper, metal, plastic and glass separately. This duty is to ensure that recycle is of a high quality and that the quantity of recycle collected is improved. The duty is subject to two tests:

4.1.1 The Necessity Test: This is to ensure that waste undergoes recovery operations to facilitate or improve recovery, which tests if the material is of a sufficiently high quality? If yes, then it is not necessary to collect the materials separately from each other.

4.1.2 The Practicability or TEEP Test: Is it Technically, Environmentally or Economically Practicable (TEEP) to collect the materials separately from each other? If one of these is not the case, then it is not necessary to collect the materials separately from each other.

4.2 There is no statutory guidance on the requirements of Regulation 13, but a 'Route Map' was produced in England by local government stakeholders which sets out a process by which local authorities may assess their position in terms of compliance with the regulation.

4.3 Officers are currently conducting these tests using the 'Route Map' process, at the same time as developing and analysing the future waste and recycling service options. Below is a summary of the current work that is feeding into the options to be presented.

5 Technical Practicability

5.1 Following the sensitivity analysis of the Efficiencies Review the options are now being considered as to their operational deliverability. Some issues will also affect our residents' ease of use with the potential changes.

5.2 Some of the proposed options have the requirement for additional containers. As an inner London authority, the population density of Lewisham is quite dense, especially in the north of the borough. Property frontages are not big,

and in many instances with houses being divided into houses of multiple occupation, the requirement to house additional containers in these front gardens may be limited. Storing such containers on the street is not practical and would pose a hazard if stored on the pavement.

- 5.3 In addition limited space could also have an impact on the frequency of collection for certain properties.
- 5.4 As such, analysis is being undertaken as to what services could be delivered to the property type, and it may be that different services are offered to different property types.
- 5.5 Officers are also in the process of gathering evidence from other London authorities who have implemented similar services to Lewisham's proposed options, or have considered and rejected them. For example, at the current time, there are no inner London authorities that operate a fortnightly twin stream recycling service. Further, those inner London authorities that have in the past operated a twin stream service, now operate a co-mingled service and have seen tonnages increase, thereby facilitating improved recycling tonnages – a requirement of the Waste Regulations. Officers are in the process of talking to these other local authorities to identify any lessons learnt.
- 5.6 Other factors that are being considered are the impact of traffic congestion, which could compound service delivery as well as distance from Lewisham of potential waste and recycling facilities given the authority doesn't have its own waste transfer station. With all options consideration has to be given to the potential down time of the vehicles.
- 5.7 If we take an option that includes twin stream recycling, there are a number of additional operational issues to consider. The vehicles will have a split back, and if this isn't apportioned correctly, then one side may fill up quicker than the other. With these types of collection, the vehicle has to 'weigh-in' twice, either at the same facility or drive to a different facility to drop off the other material. This adds to down time, especially when you take into consideration that the nearest paper mills to Lewisham are approximately 27 miles away in Kent. This is just illustrative of a point, and there are alternatives to this, including bulking and then hauling to facilities rather than directly delivering, which are all being considered.
- 5.8 As we're collecting this data, it is being fed into our route optimisation software along with the yields of the proposed services to determine the operational deliverability of each of the proposed services.

6 Environmental Practicability

- 6.1 There are two aspects at looking at the Environmental issues around the proposed options. The first is around the carbon impact and the second around ensuring that a high quality recycle is produced.
- 6.2 For each of the options a carbon metric tool is being used to ascertain the carbon impacts of the options against the current service. The carbon metric includes an assessment of the emissions generated by producing and recycling materials as well as the emissions from the disposal process itself.

- 6.3 With regards to the quality of the recyclate, the revised Environmental Permitting Regulations require Materials Recovery Facility (MRF) operators to provide information on their output quality and initial data is expected to be published after June 2015.
- 6.4 Lewisham currently has an interim arrangement with Viridor Waste Management to sort and process its mixed dry recyclables, whilst the future of the waste and recycling services is being conducted. Viridor has stated that whilst each commodity that leaves the site will never be 100% pure as per the description of the commodity, the quality however, meets the input specification of the customer that is reprocessing these "raw material" commodities. As such this may satisfy the Necessity Test in that audited evidence may be available showing that the reprocessors are purchasing the sorted material from the MRF to a standard that satisfies their input specification.
- 6.5 In light of this, Option 5 with a comingled recycling service has been included within the proposed options. This does not preclude any of the other options with twin stream recycling being taken forward.

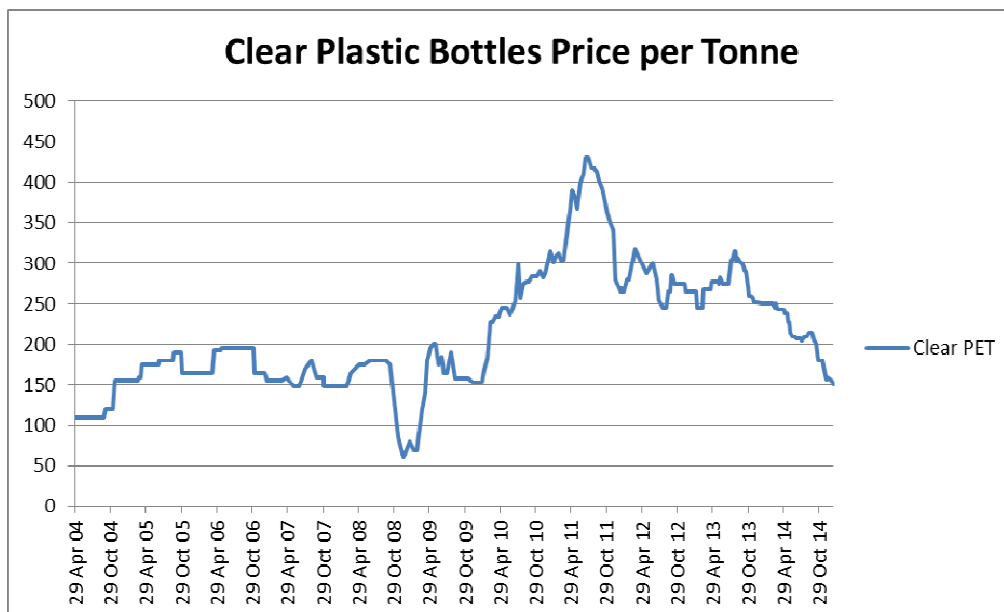
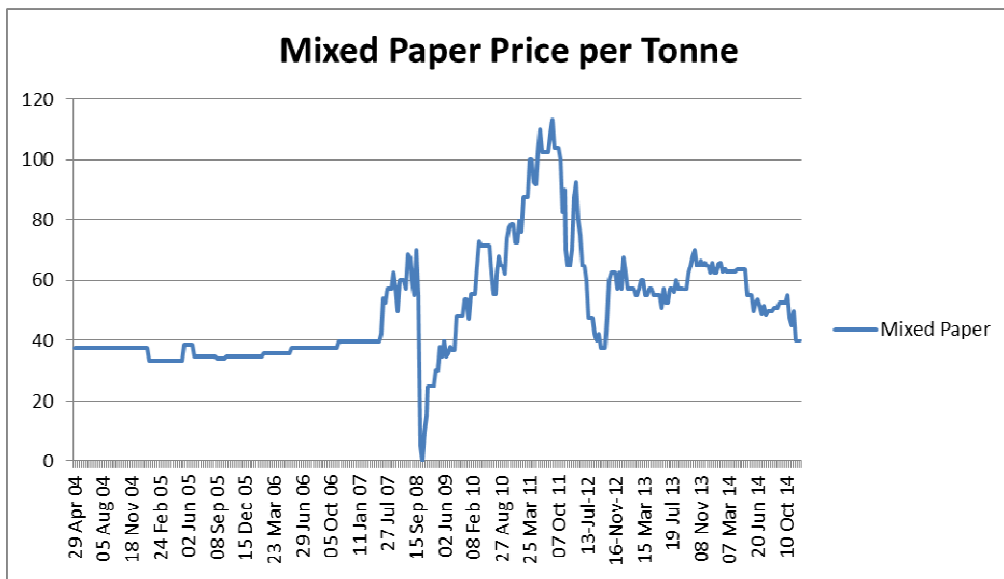
7 Economic Practicability

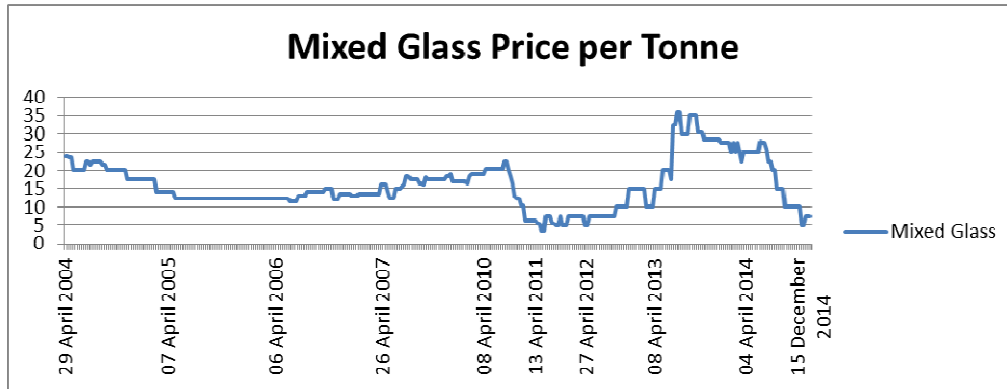
- 7.1 The economic practicability of the proposed services in terms of compliance with the Waste Regulations has been looked at in terms of cost of delivering the service and cost / income of disposal. The costs of implementing the proposed options were looked at as part of the Efficiency Review and the initial costs were used as a measure to determine which options should be considered further.
- 7.2 Using the Efficiency Review costs as a base, officers carried out a more detailed financial review of each option, comparing the baseline used in the review with the actual cost of current service provision, ensuring that local factors had been taken into account.
- 7.3 The tables in Appendix 1 show the potential cost of each option, measured against a baseline cost of the current service. It can be seen that potential cost reductions range from £0.03m to £1.3m.
- 7.4 Much of the forecast savings identified in the proposed options come from income generated from an annual subscription based garden waste service.
- 7.5 Modelling was initially based on 52,462 non-flatted households in Lewisham with 25% (13,115 households) subscribing to a charged garden waste collection in the proposed options. At a proposed £60 a year, this would generate an income of approx. £787k.
- 7.6 A benchmarking exercise against three other London Boroughs shows that on average approximately 20% of non-flatted households subscribe to a charged garden waste service. The sensitivity testing therefore tested the modelling of the proposed options against an uptake of 20% and 10%, bringing in an income of approx. £630k and £315k respectively. Please note that these are income figures only and do not account for any collection and disposal costs.
- 7.7 The other area that affects the financial modelling is market forces. Gate fees

for dry recycling can be more volatile than for organic waste and reprocessing plants and MRF's will submit tender prices against the current market conditions. Materials (paper, glass, metals and plastics) are commodities and are traded on the global market with weekly price fluctuations.

7.8 Over the past ten years the markets have fluctuated considerably and Lewisham was in the fortunate position of awarding a contract when the market was good and the contractor was offering a rebate (income) on the recycled materials. However, a few months into the contract the market for materials collapsed soon followed by China's Green Fence, which closed certain commodities markets to MRF and reprocessing plants. This had a knock on impact and Lewisham suffered a loss of income on the contract.

7.9 The graphs below show the commodity prices for a range of materials over the past ten years.





- 7.10 To add to the potential gate fee (or income) MRF's and reprocessors will analyse the composition of the delivered material and price accordingly as to whether these materials are collected together or separately, taking into account their operating costs, the cost of processing levels of contamination, and the potential income they would get over the life of the contract.
- 7.11 Other factors will also come into play including the price of oil affecting both transport costs of shipping materials around the world and upon the commodity price of the material (e.g. plastic) against using virgin material. Even despite contracts, some local authorities are seeing paper mills turn away paper that is not of a high enough quality or has got wet after being stored in boxes for a week due to wet weather.
- 7.12 .To this effect, the modelling has assumed a cautious range of potential disposal costs and income for dry recycling.

8 Conclusions and Next Steps

- 8.1 Officers are continuing to work up the proposed options against the 'Route Map' process looking at each of the options in terms of the Necessity and TEEP tests. The issues raised in this report aren't exhaustive, but give a flavour of the types of issues that need to be investigated when looking at the proposed options.
- 8.2 Some of these issues, once further analysis has been undertaken, will assist in identifying the true extent of operational deliverability of the proposed services.
- 8.3 However, other issues are more fluid such as the number of subscribers to a garden waste service and the fluctuations in the commodities market. This makes modelling the financial impact of the proposed options, to a large extent, only accurate at a given point in time.
- 8.4 Whilst undertaking this more detailed assessment Officers have deemed it prudent to keep options open and have included an Option 5. This option collects refuse fortnightly, recycling co-mingled fortnightly, garden waste fortnightly and food waste weekly.
- 8.5 It is proposed that a report is taken to the June Mayor & Cabinet meeting. This report will detail the proposed options, with a recommendation to consult

with the public on the proposed options.

9 Further Information

- 9.1 For further information please contact Sam Kirk, Strategic Waste & Environment Manager at sam.kirk@lewisham.gov.uk or 020 8314 2076.

Appendix 1

Summary - Low range disposal costs

Garden Waste @ 25%

Current Option No.	Collection costs £k	Bin costs £k	Disposal costs £k	Total cost £k	Subs. £k	Net cost £k	Movement from Baseline (Net) £k	Movement from Baseline (Gross) £k
Baseline	4,181	0	2,963	7,144	0	7,144	0	0
Option 1	4,367	0	2,719	7,086	787	6,299	-845	-58
Option 2	3,761	110	2,943	6,814	787	6,028	-1,116	-329
Option 3	3,953	59	2,685	6,697	787	5,910	-1,234	-447
Option 4	3,874	107	2,941	6,922	787	6,135	-1,009	-222
Option 5	3,575	107	2,906	6,588	787	5,801	-1,343	-556

Garden Waste @ 20%

Current Option No.	Collection costs £k	Bin costs £k	Disposal costs £k	Total cost £k	Subs. £k	Net cost £k	Movement from Baseline (Net) £k	Movement from Baseline (Gross) £k
Baseline	4,181	0	2,963	7,144	0	7,144	0	0
Option 1	4,367	0	2,730	7,097	630	6,467	-677	-47
Option 2	3,761	110	2,948	6,819	630	6,189	-955	-325
Option 3	3,953	59	2,695	6,707	630	6,078	-1,066	-437
Option 4	3,874	107	2,951	6,932	630	6,302	-842	-212
Option 5	3,575	107	2,916	6,598	630	5,968	-1,176	-546

Garden Waste @ 10%

Current Option No.	Collection costs £k	Bin costs £k	Disposal costs £k	Total cost £k	Subs. £k	Net cost £k	Movement from Baseline (Net) £k	Movement from Baseline (Gross) £k
Baseline	4,181	0	2,963	7,144	0	7,144	0	0
Option 1	4,367	0	2,750	7,117	315	6,802	-342	-27
Option 2	3,761	110	2,956	6,827	315	6,512	-632	-317
Option 3	3,953	59	2,716	6,728	315	6,413	-731	-416
Option 4	3,720	107	2,972	6,799	315	6,484	-660	-345
Option 5	3,421	107	2,936	6,464	315	6,150	-994	-680

Summary - High range disposal costs

Garden Waste @ 25%

Current Option No.	Collection costs £k	Bin costs £k	Disposal costs £k	Total cost £k	Subs. £k	Net cost £k
Baseline	4,181	0	3,326	7,507	0	7,507
Option 1	4,367	0	3,107	7,474	787	6,688
Option 2	3,761	110	3,427	7,298	787	6,511
Option 3	3,953	59	3,067	7,079	787	6,292
Option 4	3,874	107	3,322	7,303	787	6,516
Option 5	3,575	107	3,245	6,927	787	6,140

Movement from Baseline (Net) £k	Movement from Baseline (Gross) £k
0	0
-819	-32
-996	-209
-1,214	-427
-990	-203
-1,367	-580

Garden Waste @ 20%

Current Option No.	Collection costs £k	Bin costs £k	Disposal costs £k	Total cost £k	Subs. £k	Net cost £k
Baseline	4,181	0	3,326	7,507	0	7,507
Option 1	4,367	0	3,103	7,470	630	6,840
Option 2	3,761	110	3,422	7,293	630	6,663
Option 3	3,953	59	3,062	7,074	630	6,445
Option 4	3,874	107	3,317	7,298	630	6,669
Option 5	3,575	107	3,240	6,922	630	6,292

Movement from Baseline (Net) £k	Movement from Baseline (Gross) £k
0	0
-667	-37
-843	-214
-1,062	-432
-838	-208
-1,215	-585

Garden Waste @ 10%

Current Option No.	Collection costs £k	Bin costs £k	Disposal costs £k	Total cost £k	Subs. £k	Net cost £k
Baseline	4,181	0	3,326	7,507	0	7,507
Option 1	4,367	0	3,093	7,460	315	7,145
Option 2	3,761	110	3,412	7,283	315	6,968
Option 3	3,953	59	3,052	7,064	315	6,750
Option 4	3,720	107	3,307	7,134	315	6,820
Option 5	3,421	107	3,230	6,758	315	6,443

Movement from Baseline (Net) £k	Movement from Baseline (Gross) £k
0	0
-362	-47
-538	-224
-757	-442
-687	-372
-1,064	-749