

## Executive

# Waste management in London - Key challenges

Item no.

7

Report by: Jorgina Cuixart Job title: Principal Policy and Project Officer -

Transport & Environment

Date: 26 November 2013

Contact Officer: Jorgina Cuixart

**Telephone:** 020 7934 9829 **Email:** jorgina.cuixart@londoncouncils.gov.uk

**Summary:** This report provides an initial overview of waste management

arrangements in London and reports seven challenges derived from early and indicative findings of London Councils' research into opportunities to increase quality and effectiveness. The research has been conducted in the context of an annual bill for waste collection and disposal in London of £490m, making it one of the largest areas of local authority expenditure after social care and education, and the anticipated funding gap reported to Executive in October 2013 of as much as £3.4bn for London local

government by 2019-20.

Recommendation: The Executive is asked to:

1. Note the report and provide broad guidance on the direction for further officer work in the period up to the summer of 2014.

## Waste management in London – key challenges

#### Introduction

- Each year, London generates 20m tonnes per annum (tpa) of solid waste. London authorities (waste collection and disposal authorities) are responsible for approximately 20% of the waste generated. The remaining 80% is handled by the construction, demolition and excavation sector (48%) and by the commercial and industrial sector (32%)<sup>1</sup>.
- 2. This 20% of municipal waste accounts for 3.8m tpa. Household waste makes up 79% (3m tpa) of municipal waste and includes recycling and refuse waste collected from flats and houses, street litter, bulky household waste and waste delivered to the local authority reuse and recycling centres. The remaining 21% (0.78m tpa) comes from small and medium-sized enterprises (SMEs), with whom boroughs have waste collection agreements in place<sup>2</sup>.

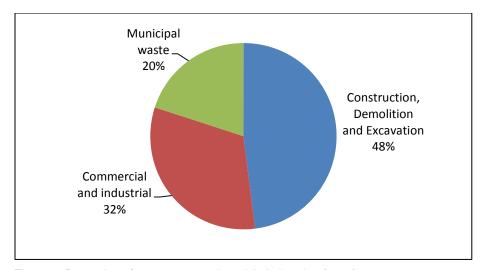


Figure 1. Proportion of waste streams by origin in London (2008)

#### **London municipal waste arrangements**

- 3. London's profile of municipal waste management is made up of:
  - Four statutory Joint Waste Disposal Authorities (JWDAs) where the boroughs within a JWDA area act as Waste Collection Authorities (WCAs):

<sup>&</sup>lt;sup>1</sup> Mayor's Municipal Waste Management Strategy, 2011.

<sup>&</sup>lt;sup>2</sup> Ibid.

- NLWA North London Waste Authority (Barnet, Enfield, Haringey, Camden, Islington, Hackney and Waltham Forest);
- ELWA East London Waste Authority (Barking and Dagenham, Havering, Redbridge and Newham);
- WLWA West London Waste Authority (Brent, Hillingdon, Harrow, Ealing, Hounslow and Richmond); and
- WRWA Western Riverside Waste Authority (Kensington and Chelsea, Hammersmith and Fulham, Lambeth and Wandsworth).
- Twelve unitary authorities (Bexley, Bromley, Lewisham, Greenwich, Southwark, Tower Hamlets, Croydon, Sutton, Merton, Kingston, Westminster, City of London), which act as Waste Collection Authorities (WCAs) and Waste Disposal Authorities (WDAs).
- Of these twelve boroughs, four (Croydon, Sutton, Merton and Kingston-upon-Thames) operate a voluntary partnership, the South London Waste
   Partnership, to jointly procure waste treatment and disposal contracts for municipal waste.



4. Figure 2: Waste governance configurations in London, LWARB, July 2013

#### Key stakeholders and networks in the waste sector

5. The table below provides an overview of the key agencies and organisations involved in waste management at national and regional level:

Role	National	Regional
Regulation and legislation,	Defra     DCLG	GLA / Mayor of London     London Councils
including EU	Environment Agency	
Support and advice	WRAP - Waste and     Resources Action     Programme     iESE - Improvement and     Efficiency South East     Local Partnerships and LGA     Local Government     Association	LWARB - London Waste and Recycling Board
Networks	<ul> <li>LARAC - Local Authority Recycling Advisory Committee</li> <li>NAWDO - National Association of Waste Disposal Officers</li> <li>ESA - Environmental Services Association</li> </ul>	<ul> <li>RTAB - London Regional Technical Advisory Body for Waste</li> <li>ALCO - Association of London Cleansing Officers</li> <li>LROG - London Recycling Officers Group</li> <li>LEDNET - London Environmental Directors Network</li> </ul>
Third Sector	Furniture Re-use network	<ul><li>LCRN - London Community Resource Network</li><li>London Re-Use Network</li></ul>

#### The London Waste and Recycling Board (LWARB)

6. The London Waste and Recycling Board (LWARB) was established under the Greater London Authority Act 2007 with the aim of promoting and encouraging the production of less waste; an increase in the proportion that is reused or recycled; and the use of methods of collection, treatment and disposal of waste that are more beneficial to the environment. In doing so, LWARB is required to act in accordance with the Mayor of London's Municipal Waste Management Strategy (2011) and in general conformity with the London Plan.

- London local government through London Councils provides a majority of nominees to the LWARB Board including four councillor nominations and two independent professional nominations.
- 8. With £22.5m of funding available, the LWARB business plan 2013-2015 focuses on two principal areas:
  - Tailored infrastructure investment (£19m): operating on a commercial basis
    this aims to support waste infrastructure projects that meet the strategic
    requirements of LWARB (geographically and technologically) where funding
    is not available from the private sector.
  - Waste efficiencies programme (£3.5m): this identifies opportunities for waste authorities to deliver significant savings via efficiencies reviews; service sharing / partnership working; joint procurement assistance; communications and best practice; and the waste management services framework. LWARB funded the Recycle for London campaign and the Flats recycling programme.
- Having set out the background and context to waste in London, the following sections describe seven challenges and under each challenge guidance is sought from the Executive on which elements may require further work.

#### Challenge 1 - More population will lead to rising costs of waste management

- 10. With a population of 8.2m and a forecast to reach 10m by 2031<sup>3</sup>, London's demographic pressures are increasing the demand for housing and consequently for the collection, treatment and disposal of household waste.
- 11. The annual bill for waste collection and disposal in London is £490m. Added to the £220m that London boroughs spend each year in street cleansing, the cost of waste

<sup>&</sup>lt;sup>3</sup> Census 2011.

management is the third biggest area of spend for London boroughs, after social care and education<sup>4</sup>.

- 12. London Councils has recently updated its modelling on the long term financial prospects for London local government which suggests a funding gap of as much as £3.4 billion (31 per cent) by 2019-20. Therefore, better waste management is likely to become part of the solution to addressing this funding gap in the coming years.
- 13. The table below provides the breakdown of costs for waste management in London:

Key spending areas in municipal waste	2011/12
management services	costs/(revenues) £m5*
Waste minimisation initiatives	1
Household waste collection	156
Trade waste collection	(-14)
Recycling reprocessing	89
Waste treatment and disposal	258
Waste management - TOTAL	490
Other environment services – Street cleansing	220

<sup>\*</sup> The cost analysis is still on-going so figures are not final.

- 14. Improvements made by the grocery sector and the impact of the recession have contributed to a decrease in the amount of household waste generated through new supply models, reduced consumption, and less unnecessary disposal. However, population growth is expected to lead to more waste, especially in those areas with anticipated housing growth such as East London.
- 15. Rising costs for waste management services affect all London local authorities.
  Options for protecting frontline services whilst keeping costs down will include the following:
  - Continuing to improve services to reduce the amount of waste sent to landfill (most expensive option).
  - Finding new business models for income generation out of trade waste collections and the selling of recycled material.

\_

<sup>&</sup>lt;sup>4</sup> Based on DCLG Revenue Outturn 2011/12 and additional data provided by London boroughs.

<sup>&</sup>lt;sup>5</sup> Ibid.

- Identifying opportunities to achieve organisational economies at sub-regional and pan-London levels.
- 16. <u>Potential areas for further work:</u> The Executive may wish that options are developed to address those issues mentioned in paragraph 13.

#### Challenge 2 – London's lower recycling rates and landfill diversion

- 17. London has the lowest household recycling rate amongst English regions (34% compared to the 43% national average<sup>6</sup>). This affects national policy, reducing the UK's ability to meet the EU targets of 50% recycling/re-use/composting by 2020.
- 18. The central cause of low performance stems from London's urban geography. On one hand, the housing stock with a high percentage of high rise properties and flats, especially in inner London, adds complexity to recycling. At the same time, London has less green waste which contributes to a higher recycling rate in other English regions.
- 19. However, it is important to acknowledge that overall London produces 11.2% less household waste compared to England's average and over 15% less than the Eastern region which is the highest performing region for recycling<sup>7</sup>.
- 20. 31% of all municipal waste in London is sent to landfill which is the least favourable and most costly option for the treatment of waste. This percentage is slightly better than the average for England (37.45%)<sup>8</sup>. Compared to England's core cities, Birmingham and Sheffield send much less municipal waste to landfill (4.9% and 13.9% respectively)<sup>9</sup>. However, their percentage of waste incinerated is much higher.

<sup>&</sup>lt;sup>6</sup> Defra ENV18 - Local authority collected waste: annual results tables (2011/12)

<sup>7</sup> Ibid.

<sup>8</sup> Ibid. 6

<sup>9</sup> Ibid. 6

Core cities <sup>10</sup>	% recycling	% sent to landfill	% sent to incineration	% other treatment
Bristol	43	38	13	6
Greater Manchester	42	50	7	1
Liverpool (Merseyside)	39	59	0	2
Leeds	36	62	2	0
Nottingham	32	12	56	0
London	30	31	36	3
Newcastle	28	50	14	8
Sheffield	28	14	58	0
Birmingham	24	5	71	0

- 21. In 2000, London used to send 72% of its municipal waste to landfill. By 2011/12, this percentage had gone down to 30%<sup>11</sup>. Whilst this is a major improvement, London still lags behind other European cities in Germany, Austria and the Nordic countries which have nearly phased out landfilling of municipal waste.
- 22. In the last decade, London and the UK achieved a significant increase in municipal waste recycling rates, however improving recycling rates is getting harder year after year and estimates from the last three years show that improvements in recycling rates are slowing down, as shown in the following graph:

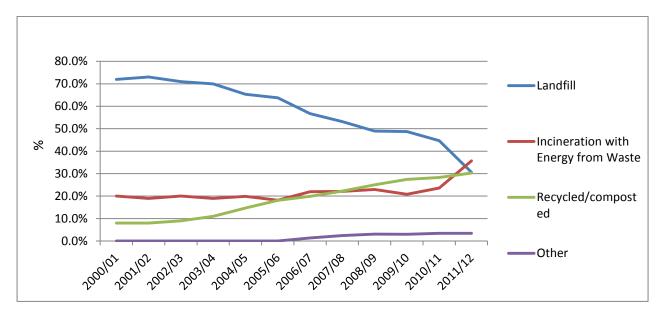


Figure 3. Management of municipal waste in London (2000 – 2012).

<sup>11</sup> Ibid. 6

<sup>&</sup>lt;sup>10</sup> Ibid. 6

- 23. Campaigns aimed at improving recycling provision and changing residents' habits are necessary to keep recycling levels up. Similarly, recycling provision to new developments requires strong planning enforcement by boroughs to ensure appropriate design and facilities. In the long run, such measures help reduce waste management costs for local authorities.
- 24. Defra has already announced that activities on waste management for 2014/15 will be limited and focused on the essentials. The Government will however, continue to support local authorities through WRAP, although with a 40% cut it is unlikely that WRAP will be able to implement major initiatives or campaigns targeted at household waste.
- 25. LWARB has been supporting recycling projects such as Recycle for London, Flats Recycling programme and the current Driving Up Performance Fund. However, LWARB's grant from government is finishing in 2015. The post-2015 strategy will be agreed in 2014
- 26. <u>Potential areas for further work:</u> The Executive may wish options to be developed for financing recycling initiatives which ultimately helps reduce landfill and treatment costs.

#### Challenge 3 - Varied waste collection systems

- 27. Waste collection arrangements vary across London, resulting in different service and cost models for Londoners<sup>12</sup>:
  - Schemes: 21 boroughs (22 for flats) offer co-mingled collections of dry recycling, six boroughs (five for flats) offer two-stream and six offer multistream<sup>13</sup>.

<sup>13</sup> Scheme types description (WRAP local authority portal glossary):

• Co-mingled - materials are all collected in one compartment on the same vehicle and require sorting at a materials recycling facility (MRF).

<sup>&</sup>lt;sup>12</sup> London Waste and Recycling Portal, 2011/12 data.

<sup>•</sup> Two-stream - materials are collected as two material streams, typically fibres and containers, at least one of which requires sorting at a MRF.

- Frequency of collections:
  - 15 boroughs offer weekly collections;
  - Four boroughs offer weekly collections with some services more than weekly;
  - Three boroughs offer weekly collections except flats dry recycling which is fortnightly;
  - Three boroughs offer kerbside collections fortnightly and flats weekly;
  - Two boroughs offer collections more than weekly;
  - Two boroughs offer dry recycling fortnightly and residual waste weekly;
  - And the remaining four offer other combinations.
- Organic/garden waste collections: 23 out of the 33 London authorities offer organic waste collections to kerbside properties with gardens. Three boroughs offer this service to all properties.
- Food collections: 11 boroughs offer separate food collections to their kerbside properties and two more are trialling it. Nine boroughs offer separate food waste collections in flats.
- Bulky waste: All authorities offer a bulky waste collection service. Charges and schemes vary across London with only a few boroughs offering free collections.
- 28. In addition, the materials included in what are, in principle, the same dry recycling schemes sometimes differ and the containers vary in colour and shape. The following table shows the differences in materials and container types in three boroughs with the same dry recycling scheme:

Multi-stream – recycled materials are separated by householder or on collection at the kerbside into multiple material streams. Streams may include a selected mix of a few materials, typically cans and plastics, which are then separated using basic sorting facilities at the operating depot or sold to reprocessors as a mixed commodity

London borough	Materials included	Container type
Lewisham (weekly co- mingled)	<ul> <li>Plastic bottles, pots, tubs and trays</li> <li>Plastic bags and film</li> <li>Food and beverage cartons</li> <li>Glass bottles and jars (no lids)</li> <li>Clean paper, cardboard and shredded paper</li> <li>Tins, cans, aerosols</li> <li>Aluminium foil</li> <li>Textiles</li> </ul>	Green wheelie bin or box and green bank for flats
Kensington and Chelsea (more than weekly co-mingled)	<ul> <li>Plastic bottles, pots, tubs and trays</li> <li>Food and beverage cartons</li> <li>Glass bottles and jars (no lids)</li> <li>Clean paper and cardboard</li> <li>Tins, cans and aerosols</li> </ul> Textiles, mixed plastics (cling film, carrier	Clear bags for street level properties and orange/black
Tower Hamlets	bags), shredded paper and aluminium foil are not included.  O Plastic bottles, pots, tubs and trays	mixed recycling bank for flats
(weekly co- mingled)	<ul> <li>Food and beverage cartons</li> <li>Glass bottles and jars</li> <li>Tins, cans and aerosols</li> <li>Clean mixed paper and cardboard</li> </ul>	
	Textiles, carrier bags and aluminium foil are not included.	Pink bags and purple wheelie bins for street level properties and purple banks for flats

- 29. Currently, 12 boroughs manage most of their collection in-house; 11 boroughs have contracts with Veolia services and the remainder liaise with other private contractors (Sita, Enterprise, Serco, Biff and Kier)<sup>14</sup>. Three boroughs (Barnet, Hackney and Islington) have recently decided to bring the service back in-house either entirely or partially.
- 30. Household waste collection services cost London boroughs £156m a year. The wide spectrum of collection arrangements across London suggests there may be opportunities to improve satisfaction and efficiency through more uniformity; especially given London's relatively mobile population resulting in Londoners needing to adapt to new service rules when moving home. These could include greater standardisation of colours associated with each waste stream, receptacles, frequency or types of material collected. Such standardisation could also deliver

<sup>14</sup> LWARB London Waste Map – Data on collection contracts (last update August 2013).

savings by offering reprocessing companies a more consistent recycled mix from where to extract valuable materials.

- 31. Over the last three years and as a result of the Spending Review 2010, London boroughs have delivered significant budget savings in waste collection services. Examples of actions to achieve savings include: changing collection rounds, introducing alternative weekly collections and staff reductions. Opportunities also exist to achieve efficiencies through economies of scale, for example, LWARB's Flats Recycling Programme, delivered a joint procurement programme for boroughs purchasing similar equipment (reusable bags, bins, kitchen caddies, liners and food waste bin housing units) delivering collective savings of £200,000<sup>15</sup>.
- 32. Whilst these are good examples of cost efficiencies, there are opportunities for waste authorities to achieve significant savings by working together, through shared services or joint collection contracts. Waste authorities could also look at ancillary services which can offer London wide / sub-regional services for better value. These could include services like clinical waste collection, bulky waste (including re-use) or maybe even graffiti or flypost removal services which also have high costs associated with them.
- 33. <u>Potential areas for further work:</u> The Executive may wish to see further work to scope the opportunities for standardisation in waste collection services and reduce costs.

#### Challenge 4 - Trade waste collections and the opportunity for income generation

- 34. In 2011/12, trade waste collections in London generated a profit of £14m. However, this profit is not equally spread <sup>16</sup>:
  - Six boroughs are securing £1-4m income per year for the collection of trade waste and the selling of recycled material;
  - 11 boroughs are securing income of less than £500,000;
  - Nine boroughs are reporting a net cost between £4000 and £1.6m;
  - Seven boroughs are reporting no income or cost.

<sup>&</sup>lt;sup>15</sup> LWARB Flats Recycling Programme Evaluation Report (August 2013)

<sup>16</sup> Ibid.4

35. The following table shows data on collection of trade waste from some small retailers and SMEs by London local authorities in 2011/12<sup>17</sup>:

No. boroughs offering trade waste collection service	32
No. boroughs offering trade recycling collection service	24
Number of businesses served (six out of the 32 boroughs do not	55,090
report how many businesses they serve)	
Number of businesses served with recycling collections (10 out of	19,403
the 24 boroughs offering recycling collections do not report how	
many businesses they serve).	

- 36. With 806,000 private sector businesses in London at the start of 2012<sup>18</sup>, local authorities collect trade waste from 6.8% of businesses (55,090) in the capital.
- 37. The rest of London's businesses arrange collection services with private contractors. Some boroughs (Haringey, Westminster) are able to identify 30 or more private companies operating in their borough but they do not hold any statistics on how much waste they collect. Boroughs are often concerned about the impact that numerous private contractors operating in a relatively small area can have on traffic congestion, noise and air pollution. This can be the case in many high streets in London and areas with a high concentration of businesses.
- 38. Only a few boroughs seem to be securing income from trade waste collections. More could be done to share successful business models in trade waste collections across London, so that most London boroughs benefit from this source of income generation and consequently help their businesses to recycle more.
- 39. <u>Potential areas for further work:</u> The Executive may want consideration to be given to the transferability of successful business models for trade waste collections so that they could become a secured source of income for boroughs.

#### Challenge 5 – Rising costs for waste treatment and disposal

\_

<sup>&</sup>lt;sup>17</sup> lbid.12

<sup>&</sup>lt;sup>18</sup> BIS Business population estimates for the UK and Region, 2012.

40. Waste treatment and disposal cost London authorities £258m a year. Approximately 40% of London's municipal waste is bulked up for treatment or landfill outside London<sup>19</sup>. This leads to a loss of economic value of recovered materials for recycling and energy generation. Part of it is treated in the UK but the quantity of waste the UK exports has increased significantly in recent years. Plastics and paper are shipped to China where there is a strong demand for these materials, and refuse-derived fuel is exported to European Energy from Waste (EfW) facilities facing overcapacity and struggling for feedstock.

#### Landfill costs and alternative waste infrastructure

- 41. In 2011/12, London authorities spent £62.5m on landfill tax. Adding the cost of gate fees (a levy charged upon a given quantity of waste received at a waste facility), the cost for landfilling rises to £86.9m per year<sup>20</sup>. The landfill tax was introduced in 1996 and has been escalating at a rate of £8 per tonne each year making alternative technologies more competitive. Next year, this tax will reach a rate of £80 per tonne. The Government has not made clear yet if the landfill tax rate will continue to increase by £8 a year or will be frozen at £80 per tonne.
- 42. During the landfill tax's lifespan the amount of London's waste sent to landfill has fallen from 73% in 2000/01 to the current 30.6% in 2011/12<sup>21</sup>. This implies a positive impact of the tax. However, there are still ample variations across London with five disposal authorities (unitary and/or joint waste disposal authorities) sending more than 50% of their waste to landfill<sup>22</sup>.
- 43. According to the LGA, the revenue from the landfill tax has become a windfall for the Treasury at the expense of local taxpayers<sup>23</sup>. LGA projections show that the equivalent of each household in the country will be paying the Treasury £30 per year in landfill tax from 2014/15, instead of being rewarded for having reduced the amount of waste going to landfill. The LGA is advocating a freeze in the landfill tax levy at its

<sup>&</sup>lt;sup>19</sup> Mayor's Municipal Waste Management Strategy, 2011.

<sup>&</sup>lt;sup>20</sup> WRAP Gate Fees report 2013, calculations are made using the median for non-hazardous gate fee.

<sup>&</sup>lt;sup>21</sup> Ibid.6

<sup>&</sup>lt;sup>22</sup> Ibid.6

<sup>&</sup>lt;sup>23</sup> Wealth from Waste – The LGA local waste review (June 2013).

2014/15 level in recognition that there is no evidence that further increases would have an effect on recycling trends<sup>24</sup>.

- 44. Landfill capacity for London, located in and outside the capital, is forecast to expire by 2025<sup>25</sup>. LWARB and the GLA have identified that additional capacity is required in the following types of alternative treatment to divert away from landfill:
  - Mechanical biological treatment (MBT): A generic term for mechanical sorting / separation technologies for dry recyclables such as glass and metals, used in conjunction with biological treatment processes, such as composting.
  - Anaerobic digestion (AD): A breakdown of organic materials in the absence of oxygen to produce a methane rich gas called biogas.
  - Refuse Derived Fuel (RDF): A fuel produced from combustible waste (paper, plastics and other combustible fractions) that can be stored and transported, or used directly on site to produce heat and/or power.
  - Thermal treatment: Waste management processes involving medium and high temperatures to recover energy from the waste. Primarily pyrolysis and gasification based processes, excludes incineration.
  - Material Recovery Facility (MRF): Dedicated facility for the sorting / separation of recyclable materials.
- 45. Currently, East London has a high concentration of waste reprocessing facilities, for example, eight out of the nine material recovery facilities in London are located in East London<sup>26</sup>. Therefore focus for future infrastructure investment needs to be directed at other parts of London.
- 46. The London Finance Commission made the case for more financial and fiscal control for London in order to support the capital's continued economic growth and help London boroughs to deliver the social and physical infrastructure that is required. For example, the Commission discusses the devolution of landfill duty to Scotland. Arguably, London, with a larger population, could lobby for a similar devolution settlement.

<sup>25</sup> Ibid.1

<sup>&</sup>lt;sup>24</sup> Ibid.

<sup>&</sup>lt;sup>26</sup> Municipal MRF locations, WRAP

47. <u>Potential areas for further work:</u> In the context of financial and wider devolution, the Executive may want to discuss whether further work should be undertaken on the likelihood of devolving landfill tax to local authorities so that it can be re-invested in waste treatment infrastructure helping to address London's capacity gap.

#### Incinerators – Energy from Waste (EfW) facilities

- 48. London sends 35.7% of its municipal waste to incineration EfW<sup>27</sup>. This percentage is relatively low, compared to other cities in the UK such as Birmingham (71%) and Sheffield (58%)<sup>28</sup> and other EU countries such as Denmark (54%) or Sweden (51%)<sup>29</sup>.
- 49. EfW facilities serving London include:
  - SELCHP Energy Recovery Facility (South East London Combined Heat and Power) in Lewisham operated by a Public Private Partnership with Veolia, Lewisham and Greenwich councils, among other partners.
  - Edmonton facility in Enfield, operated by LondonWaste Ltd (owned by North London Waste Authority).
  - Belvedere facility in Bexley, operated by Cory Environmental.
  - Waste to Energy Lakeside in Colnbrook near Slough, operated by Viridor.
- 50. In August 2013, the Mayor of London backed the decision of Sutton Council to grant planning permission for the firm Viridor to build a new EfW facility in Beddington Lane. The project is a joint partnership venture by the voluntary South London Waste Partnership (Sutton, Croydon, Merton, and Kingston upon Thames). The project still needs final clearance from Government before it can go ahead.
- 51. This sector faces important challenges though, not least the opposition of the general public. Communicating the role waste plays in local energy generation and heat use is a pre-condition for wider public acceptance. Schemes such as the SELCHP district heating network, being launched on 29 November, may convey the benefits of EfW

<sup>28</sup> Ibid.6

<sup>&</sup>lt;sup>27</sup> Ibid.6

<sup>&</sup>lt;sup>29</sup> Eurostat municipal waste data (2011)

facilities, for example, the existing gas boilers on the five estates in Rotherhithe will be switched off resulting in a reduction of around 8,000 tonnes of carbon dioxide emissions per annum. The pioneering scheme presents a viable alternative to traditional gas fired boilers and provides sustainable, secure heating for the Southwark homes it serves and aims to deliver long term energy cost savings to residents.

- 52. Of equal importance is the need to make the correct strategic decisions and provide the right mix of treatment infrastructure, avoiding future overcapacity. London could benefit from a higher degree of coordination on waste infrastructure to achieve the optimal mix of treatment and reprocessing sites.
- 53. <u>Potential areas for further work:</u> the Executive may want to consider whether further work should be undertaken to investigate the need for a pan-London perspective on infrastructure investment which could help to minimise investment needs and increase utilisation rates.

### Material Recovery Facilities (MRFs)

- 54. MRFs are designed to separate co-mingled recyclables into their individual material streams and prepare them for sale in the commodity markets. The market for recycled material is quite volatile so councils need to be careful in building income into the base budget.
- 55. MRFs also present a complex cost/benefit relationship for local authorities in the form of gate fees. A MRF gate fee is a fee paid either by a local authority to a MRF operator for processing its dry recyclables, or a fee paid to a local authority by a MRF operator for the dry recyclables. Again arrangements differ between different local authorities depending on the nature of their contract.
- 56. Latest figures from WRAP<sup>30</sup> indicate a marked decline in the amount that MRFs pay for local authority dry recyclables. However, the gate fees vary enormously with some councils receiving up to £40 per tonne of recycled material and other councils

<sup>&</sup>lt;sup>30</sup> Ibid.20

- paying up to £82 per tonne. Data on gate fees is often commercially sensitive but anecdotal evidence indicates a similar price variation in London.
- 57. Contamination of recycled material continues to be a problem for councils as it decreases the quality of the material collected, undermining its environmental and economic benefits. In 2011/12, an average of 2.4% of material sent for recycling in London was rejected, either at collection, during sorting or reprocessing. In some boroughs the percentage of recycled material rejected reaches 8-12%<sup>31</sup>.
- 58. Future prices for recycled material may also be affected by uncertainty regarding the implementation of the Waste (England and Wales) (Amendment) Regulations 2012, which are transposed from the EU's revised Waste Framework Directive. This legislation, which was subject to Judicial Review, requires councils to introduce separate collection of paper, plastic, metals and glass by 1 January 2015 when 'technically, environmentally and economically practicable (TEEP) and necessary to meet the appropriate quality standards for the relevant recycling sectors'. Defra is due to publish guidance on TEEP later this year.
- 59. According to the LGA, local authorities presently obtain 28% (approx.) of the total financial value of materials they collect. The LGA has calculated that if quality were reflected and contamination was reduced by half, coupled with local authorities receiving an increased share (by also assuming part of the risk), then this would yield an additional £1bn by 2019/20<sup>32</sup>.
- 60. Further work to fully understand the nature of the market for recycled materials in London could enable boroughs to negotiate better contracts and receive a greater share for the reprocessing of material they collect.
- 61. <u>Potential areas for further work:</u> The Executive may want to consider whether further, more detailed research on the market for recycled materials in London should be undertaken with the ultimate aim of reducing gate fees and getting more value for recycled materials.

\_

<sup>31</sup> Ibid.6

<sup>&</sup>lt;sup>32</sup> Ibid.23

#### **Challenge 6 - Preventing food waste**

- 62. Reducing or preventing the amount of waste produced is the most cost-effective and environmentally beneficial measure. Yet despite this argument, in 2011/12 only 0.2% (£1m) of London's £490m spent on municipal waste management was allocated to waste prevention<sup>33</sup>.
- 63. It can be argued that local authorities have little leverage in getting their residents to produce less waste and that businesses, in particular the grocery sector, are the only ones who can effectively reduce waste through product design, less packaging or the promotion of re-usable bags. However, the impact of WRAP's Love Food Hate Waste campaign (Oct 2012-Mar 2013)<sup>34</sup> aimed at tackling food waste in households has demonstrated the potential for attitude and habit change:
  - In London, an estimated 890,000 tonnes of food is thrown away each year, of which 540,000 tonnes is avoidable. The cost to London boroughs of reprocessing/disposing of this food waste is estimated at over £50m pa. generating the equivalent of 2.1m tonnes of CO2e.
  - In West London, the pan-London campaign Love Food Hate Waste helped reduce avoidable food waste by 14%, from 2.6kg per household per week pre-campaign to 2.2kg post-campaign. This resulted in major savings for residents by not wasting the food and drink they had already purchased and for councils by reducing treatment and disposal costs.
  - The reduction in avoidable food waste would save the boroughs of West London £559,000 per annum in disposal costs (including gate fees and landfill tax). The costs associated with delivering the campaign were around £170,000, which would meant that for every £1 invested, West London Boroughs saved up to £85.
- 64. The city of Cologne, in Germany, has run a similar education programme in schools 'Schad dröm' ('it's a pity') targeted at 14-17 year-olds<sup>35</sup>. This project is part of a wider anti-food waste movement in the country with supermarket chains starting to

Based on <u>DCLG Revenue Outturn 2011/12</u>.
 The impact of Love Food Hate Waste in West London case study, WRAP

<sup>&</sup>lt;sup>35</sup> Cologne's anti food waste campaign case study, Eurocities

- collaborate with food sharing platforms. In the UK, Tesco has taken the lead and has promised to improve processes and educate customers to cut waste<sup>36</sup>.
- 65. The success of the Love Food Hate Waste campaign relies on the fact that residents can easily identify with the problem of food waste, so they can appreciate the challenges and opportunities. If the results of this campaign were to be scaled up to all households in London for a year, it would reduce 24,400 tonnes of avoidable food waste, leading to £79m cost savings to residents and a cost saving of up to £7.3m to London boroughs from avoided disposal costs.
- 66. <u>Potential areas for further work:</u> Since messages for preventing food waste are the same everywhere, regardless of the type of collection scheme or housing stock, the Executive may want further work to be undertaken on the opportunities for boroughs to adopt a pan-London approach on food waste prevention.

#### Challenge 7 - Supporting re-use initiatives

- 67. Re-use initiatives are often the forgotten level in the waste hierarchy. Re-use is especially relevant for the management of bulky waste (furniture and electronic equipment) and textiles. The main benefits of re-use initiatives are:
  - Landfill diversion and avoided costs in waste disposal;
  - Provision of affordable white goods, furniture and electronic equipment to households in need;
  - Employment and training opportunities, primarily in the third sector.
- 68. Re-use initiatives are mainly delivered by third sector organisations, often supported local councils. For example, LWARB has invested £4.37m in the London Re-use Network (LRN) an integrated network of re-use and repair facilities which work together to deliver public and commercial re-use services<sup>37</sup>. By the end of year two (March 2013), LRN had already reported the creation of 60 full time jobs and more than 300 training, volunteering and work placements<sup>38</sup>. Currently, LRN fulfils

38 Ihid

<sup>&</sup>lt;sup>36</sup> <u>Food waste: Tesco reveals most bagged salad and half its bread is thrown out, The Guardian 21 October 2013</u>

<sup>&</sup>lt;sup>37</sup> LWARB Board - London Reuse Network Update (September 2013)

collection contracts for seven local authorities and 19 housing associations, and delivers supply contracts for 15 local authorities and 23 housing associations in London.

- 69. The LGA has recently set up a Re-use Commission with the aim of driving increased re-use of waste products in the UK. Chaired by Councillor Clyde Loakes of Waltham Forest, members of the Commission include re-use organisations (Furniture Re-use Network), the third sector (British Heart Foundation, British Retail Consortium) and government (Defra, WRAP). The Commission will report its findings in early 2014.
- 70. The social value of re-use initiative is not only on its potential for job creation (re-use and recycling creates 10 times more jobs than landfills) but also on its capacity to supply affordable products for those in need. Current re-use initiatives in London are still under development and third sector organisations simply do not have the resources to scale those up.
- 71. Some work could be done to assess the opportunities for greater scale delivery by connecting these initiatives with social services, housing associations and SME support schemes.
- 72. <u>Potential areas for further work:</u> The Executive may want further work to be undertaken to investigate the optimal role for London boroughs in supporting re-use initiatives in the capital leading to new jobs and skills development opportunities.

#### **Conclusions**

- 73. This report suggests that a range of specific areas may deserve further investigation to produce a suite of initiatives for improved service and cost effectiveness that could be adopted by London local government both individually and collectively. The Executive is asked to provide an indication of priorities for policy development from amongst the following:
  - Options developed for financing recycling initiatives which ultimately helps reducing landfill and treatment costs.
  - Further work is conducted to scope the opportunities for standardisation in waste collection services and reduce costs.

- The transferability of successful business models for trade waste collections is investigated so that they could become a secured source of income for boroughs.
- The likelihood of devolving landfill tax to local authorities is assessed so that
  the potential for re-investment in waste treatment infrastructure, helping to
  address London's capacity gap, is considered.
- The need for a pan-London perspective on infrastructure investment is investigated so that the potential to help to minimise investment needs and increase utilisation rates is considered.
- More detailed research on the market for recycled materials in London is undertaken with the ultimate aim of reducing gate fees and getting more value for recycled materials.
- Opportunities for boroughs to adopt a pan-London approach on food waste prevention are identified.
- The optimal role for London boroughs in supporting re-use initiatives in the capital leading to new jobs and skills development opportunities is investigated.
- 74. Officers would report in the early summer on more specific proposals in those areas the Executive wishes to be pursued. This would help position arguments in advance of the debate in the run up to wider public service and funding changes expected in the CSR 2015. These could also include organisational mechanisms that can help coordinate efforts across London authorities to tackle the challenges outlined in the report and suggest what role LWARB, as the only waste-specific pan-London organisation, could play in supporting these efforts.

#### Recommendations

The Executive is asked to:

 Note the report and provide broad guidance on the direction for further officer work in the period up to the summer of 2014.

#### **Financial Implications for London Councils**

There are no immediate financial implications for London Councils from this report.

## **Legal Implications for London Councils**

There are no immediate legal implications for London Councils from this report.

## **Equalities Implications for London Councils**

There are no significant equalities implications for London Councils from this report.