WEST LONDON WASTE AUTHORITY

Report of the Director and Chief Technical Adviser

Responding to Consultation: London Assembly’s Environment Committee Investigation into food waste management

SUMMARY
This report provides the Authority’s officer response to this London Assembly consultation.

RECOMMENDATION
The Authority is asked to:

1) Note the draft response to the London Assembly’s Environment Committee Investigation into food waste management submitted by the Director following consultation with the borough officers.

1. Introduction – It is important that the Authority takes an active role in influencing the development, at national and regional level, waste management policy and regulation. Therefore the Authority should take the opportunity to respond to all appropriate consultation requests.

2. London Assembly’s Environment Committee Investigation into food waste management
The London Assembly’s Environment Committee has launched an investigation into domestic food waste, how it is collected and processed. This investigation seeks to understand how to improve the management of food waste in London, and to identify mechanisms to reduce the quantity that goes to landfill to zero.

This investigation focuses on:

- Establishing baseline data for London’s present performance in dealing with food waste, and to map food reduction initiatives in London;
- Exploring, with relevant organisations, how the household food that does reach the waste stream can be collected and handled more effectively, particularly from flats;
- Identifying the preferred current and potential future options for London to process and recycle its household food waste, with a view to reducing to zero the amount that goes to landfill.

The deadline for written submissions is 13 June. Further information is available on:

- Call for views letter – food waste.pdf
- Scoping paper food waste public.pdf

3. Authority response – The Authority response, attached as Appendix One, was prepared in consultation with borough officers and submitted by the Director to meet the 13th June deadline. The response, which is in part based on the London Council’s draft response, deals mainly with
the arrangements for treatment and disposal of food waste and waste minimisation initiatives, but does reference some of the constituent borough’s collection activities.

4. **Financial Implications** – There are no direct financial implications arising from the consultations in this report.

5. **Joint Waste Management Strategy Implications** – Under Policy 1 of the Joint Waste Management Strategy the Authority and boroughs will seek to comply with national and regional strategies, policies and legislations, and it is therefore important that the Authority is pro-active in responding to consultations documents such as these help shape the national waste strategy.

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<tr>
<th>Background papers</th>
<th>None</th>
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<tr>
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West London Waste Authority officer response to London Assembly’s Environment Committee Investigation into food waste management

Please note that this is the officer level response of the Authority to this investigation. It will be considered by the elected members of the Authority at their next meeting on 27th June 2014. If you require any further information please contact the Director on jimbrennan@westlondonwaste.gov.uk

Questions

1. Establishing the baseline

1.1. Overview of domestic organic and food waste collections in London:

All of the West London Waste Authority’s constituent boroughs offer food waste collections to the majority of households in their areas. The method of collection varies with Ealing, Hounslow and Richmond collecting food waste only, whilst Brent, Harrow and Hillingdon co-mingle food waste with garden waste. The constituent boroughs arrange the collections based on the optimum methodology for their borough and the Authority put in place the required contracts to deal with the bulking, transfer and composting of both food waste streams.

1.2. How has food waste management changed in London over the past 5-10 years? How much has the industry grown?

The table below shows the date on which each constituent borough introduced its food waste collection to the majority of households. The roll out of food collections to flats followed later, and in some boroughs this is still on-going.

<table>
<thead>
<tr>
<th>Borough</th>
<th>Collection type</th>
<th>Date introduced</th>
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<tbody>
<tr>
<td>Brent</td>
<td>Co-mingled with garden waste</td>
<td>2005</td>
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<tr>
<td>Ealing</td>
<td>Food only</td>
<td>2007</td>
</tr>
<tr>
<td>Harrow</td>
<td>Co-mingled with garden waste</td>
<td>2004</td>
</tr>
<tr>
<td>Hillingdon</td>
<td>Co-mingled with garden waste</td>
<td>2013</td>
</tr>
<tr>
<td>Hounslow</td>
<td>Food only</td>
<td>2008</td>
</tr>
<tr>
<td>Richmond upon Thames</td>
<td>Food only</td>
<td>2005</td>
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1.3. Food waste reduction initiatives in London:

Love Food Hate Waste

The Love Food Hate Waste campaign (LFHW)\(^1\) was launched by Waste and Resource Action Programme (WRAP), the government’s waste support programme, in 2007. Its aim was to raise awareness on food waste prevention and give practical advice on how to reduce food waste and save some cash in the process.

Between October 2012 and March 2013, Recycle for London (RfL)\(^2\), a programme delivered in partnership between the Greater London Authority (GLA) and WRAP, and funded by the London Waste and Recycling Board (LWARB), delivered a pan-London LFHW campaign. The campaign included radio, digital and print

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\(^1\) [http://www.lovefoodhatewaste.com/](http://www.lovefoodhatewaste.com/)

\(^2\) [http://www.recycleforlondon.com/](http://www.recycleforlondon.com/)
advertising along with supporting PR activity. The campaign was supported at borough level by community engagement activities such as cookery classes and engagement through a network of volunteers.

The Authority and its boroughs were strong supporters of the RfL scheme which enabled an in-depth evaluation undertaken in West London proved that LFHW helped reducing avoidable food waste by 14%, from 2.6kg per household per week pre-campaign to 2.2kg post-campaign. The reduction in avoidable food waste would save the constituent boroughs £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, boroughs saved up to £85.

Based upon the success of this initiative the Authority’s constituent boroughs have agreed an additional £100,000 budget to increase Love Food Hate Waste activities in 2014/15. More information on the proposed activities can be found here http://democraticservices.hounslow.gov.uk/documents/s85570/Waste%20Prevention%20-%20progress%20in%202013-14%20and%20proposed%20action%20plan%20for%202014-15.pdf

2. Extending and improving food waste collection

2.1. What are the current barriers to managing domestic food waste effectively in London, particular with regard to blocks of flats on estates?

Since 2004 the WLWA boroughs have all introduced separate food and/or organic waste collections. The facilities and equipment are in place, however, in some cases, the take-up of food waste recycling services is very low amongst residents. This is partly due to public perception of food waste (smells, flies and vermin). Also, the misunderstanding of what happens to waste once it has been collected for recycling often leads to public ‘scepticism’ towards recycling, including food waste. WRAP is currently undertaking research which aims to understand the reasons why residents do not recycle correctly.

LWARB’s programmes aimed at boosting recycling such as the Flats Recycling Programme in 2010 or the Driving Up Performance Fund in 2013 prove that communications and education is crucial to increase performance. LWARB is currently conducting research on the key barriers to recycling and how communications can be better targeted to low performing areas. For food waste collections, the key lessons learnt from LWARB’s Flats Recycling Programme showed that:

- Provision of free liners and higher investment in communications can result in higher performing schemes.
- Delivering communal bins, caddies and liners at the same time as communications materials ensures that residents understand how to correctly participate in food waste schemes from the outset. Combining door to door canvassing with delivery of equipment and communication materials in particular seems to be a sensible approach.

Even though some of our boroughs have been collecting food waste for 10 years, evidence shows that separate food and organic waste collection are not yet regarded as the ‘usual practice’. Therefore, to increase the performance of domestic food waste collections, it is necessary that the same practices of food waste separation at home are also applied and mainstreamed elsewhere, whether it is at work, in schools and universities, in restaurants and hospitals or on the streets.

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3 Unpacking the Household: Exploring the dynamics of household recycling, Coca-Cola Enterprises, 2013
2.2. How do you plan or hope to introduce, extend or improve domestic food waste recycling? What specific barriers have you identified? What support (e.g. financial or technical) would you require to overcome these?

Many local authorities in London are facing difficulties in introducing or expanding separate organic/food waste collections due to budget constraints. Some of them are making use of the limited funding available at pan-London and national level to introduce or further expand domestic food waste recycling.

This is the case of the Flats Recycling Programme, funded by LWARB in 2010. This £5 million programme aimed to address the low recycling performance in flats by funding collection infrastructure and communications. Seven out of the 29 projects funded under this programme focused on introducing, expanding or improving food waste collections in flats, serving 78,490 households in London⁴.

Also, in 2012, the Department for Communities and Local Government (DCLG) set up a £250 million fund to support weekly collections of residual waste. This scheme was not specifically aimed at improving food waste collections, however, three of the Authority’s boroughs received funding that enabled either the provision of food waste collections (in the case of Hillingdon) or the extension of food waste collections to flats (in Brent and Ealing).

In their recent response to the EFRA Select Committee inquiry on waste management in England, London Councils has asked for the government to provide further support for separate organic waste collection services as a means to increase recycling and support alternative food waste reprocessing technologies such as anaerobic digestion and in-vessel composting.

2.3. Following LWARB’s flats recycling programme, how can those managing estates and large blocks of flat continue to introduce and improve food waste recycling? What other funding and guidance is still available now and how can boroughs and others access it?

2.4. Are there any national or international examples of good practice for managing domestic food waste in densely-built, urban environments from which London could draw lessons?

Earlier this year, the House of Lords EU Agriculture, Fisheries, Environment and Energy Sub-Committee conducted an inquiry into the EU’s contribution to food waste prevention. The report, ‘Counting the Cost of Food Waste: EU Food Waste Prevention⁵, published on 6 April 2014, includes a list of food waste initiatives and programmes across the EU. However, these examples focus on food waste prevention and do not make any references to densely-built urban environments.

A widely-recognised European best practice case study on waste management in urban areas is the Augustenborg Eco-City in Malmo (Sweden)⁶. This project aimed to regenerate a low-income residential area built in the 1950s. Improving waste management was part of an integrated project which addressed issues such as water management, eco-building, sustainable mobility and green areas. The City of Malmo installed 15 recycling houses with full recycling and composting facilities for the 1800 inhabitants of Augustenborg. Their recycling rate is now 70%, including food waste which is used for home composting and to generate biogas⁷.

⁴ The seven projects on food waste collection were in Bexley, Bromley, Croydon, Enfield, Hackney, Islington and Merton. Source: LWARB’s Flats Recycling Programme Evaluation Report, August 2013.
⁶ http://www.malmo.se/English/Sustainable-City-Development/Augustenborg-Eco-City/Waste-management.html
⁷ http://knowledge.allianz.com/environment/energy/?514/how-malmo-recycles-waste
2.5. How can the Mayor and local authorities use their investment and planning powers to promote better collection and handling of food waste?

In existing properties:
Retrospective changes to the existing waste infrastructure in flats can be difficult and costly, with changes to refuse chutes or the sacrifice of parking spaces to provide communal food bins. All of this requires the active support of the estate management company and preferably resident’s champions to ensure use greatest use of the new facilities.

In new residential areas:
With a forecast to reach 10 million people by 2031, London’s demographic pressures are increasing the demand for housing. To avoid future under-performance in recycling, it is crucial that new buildings are designed with the appropriate facilities for storing domestic waste, including food waste, both inside the flats/houses and in the adjacent areas. The buildings also need to ensure waste collection vehicles can easily access waste storage areas.

Therefore more consideration of this issue needs to be made when borough planning officers assess applications for new residential developments. This situation is likely to get worse if the Code for Sustainable for Sustainable Homes, the national standard for the sustainable design and construction of new homes, is dissolved, as proposed by the government in the Housing Standards Review consultation which took place in October 2013. A response from DCLG is expected this summer.

London Councils is currently investigating how to better integrate the needs for waste storage and collection in planning enforcement practices in the boroughs.

3. Processing food waste

3.1. What happens to the domestic food waste that you collect?
Since the time that the first constituent boroughs put in place food waste collection services the Authority has arranged for composting of the organic waste collected. These services have been re-tendered a number of times, most recently in 2013, with new contracts operational since April 2014. When procuring these contracts, the Authority does not specify the treatment type, but allows companies to bid back solutions against the types of waste (food only or co-mingled food and garden waste). The contracts are offered in 10,000 tonne per annum lots to allow maximum use of any spare capacity in local plants. The recent tendering was very successful with competitive bids being received for both food waste streams and separately collected garden waste. The market identified Anaerobic Digestion as the most cost effective treatment for separately collected food waste, and in vessel composting for co-mingled food and garden waste. The contractors and plants used by the Authority are set out below:

Food waste, Biogen - Westwood AD Plant, Bedford Road, Rushden, Northamptonshire, NN10 0SQ. approximately 12,000 tonnes per annum

https://www.gov.uk/government/consultations/housing-standards-review-consultation
Mixed food and green waste, **Countries Style Recycling Ltd - Ridham In-vessel Composting Facility**, Ridham Dock Road, Iwade, Sittingbourne, Kent, ME9 8SR (approx. 22,000tpa) and **West London Composting Ltd - High View Farm**, New Years Green Lane, Harefield, Middlesex UB9 6XL, (approx. 25,000tpa)

The contracts are for two years with a possible extension for a further two years. The co-mingled waste treated at West London Composting is direct delivered by the collecting boroughs, whilst the remainder is bulked at transfer stations and transported by the contractor to their plant for treatment. All plants used are either PAS compliant or in the process of achieving PAS certification.

The Authority charges the boroughs a blended cost which includes bulking, transport and treatment. The rates for 2014/5 are £26 per tonne for food only waste and £55 per tonne for co-mingled food and garden waste. These rates are a significant decrease for food only treatment, whilst the co-mingled waste treatment shows a slight increase compared to 2013/14 rates.

### 3.2. What are the benefits and difficulties of different ways of processing food waste, for example composting or anaerobic digestion, in an urban environment?

The Authority believes that the treatment technology should be market led, provided it meets the Authority's specification. However, in the future the Authority may offer longer term contracts and sites to try to encourage the development of sites in west London. It is presumed that it will be easier to secure planning consent for an AD plant in the Authority area than IVC on the basis that AD is more enclosed and less likely to cause odour nuisance. However, currently the Authority is not aware of any AD plants willing to treat co-mingled food and garden waste. A further challenge for in area plans is finding suitable outlets for the compost or digestate. The gate fee for the process will include for the transport of this digestate and compost to its point of use, however, as there should be less volume post treatment, an in area plant may still lead to cost savings.

### 3.3. In what ways is recycling food waste beneficial to London’s environment?

Food waste recycling helps to reduce CO2 emissions. The latest WRAP survey on household food and drink waste in the UK showed the following results:

- **Households in the UK** produced 7 million tonnes of food waste in 2012. When expressed per household, the total amount of food and drink waste is equivalent to 260 kg per household per year.
- **Two thirds** (4.7 million tonnes) of household food and drink waste was collected by local authorities. Of this, most was collected in kerbside ‘residual’ or general waste, although more than half a million tonnes (around 11% of that collected) was in targeted collections of food waste, meaning it could be treated to generate energy and useful digestate or compost.
- **Around a fifth** was disposed of via the sewer (1.6 million tonnes; the kitchen sink and other drains), with drinks and dairy products making up more than half of this. The remainder was either composted at home (0.51 million tonnes) or fed to animals (0.28 million tonnes).
- **Out of the 7 million tonnes of food waste produced**, 4.2 million tonnes (or 60% of the total) was considered to be avoidable. The greenhouse gas emissions associated with avoidable food and drink waste from UK homes accounted for approximately 17 million tonnes of CO2 equivalent. The carbon saving of preventing all avoidable food waste in 2012 would be equivalent to taking one in four cars off the road.

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Also, land is required to produce food and drink that is subsequently thrown away by UK households. For the first time, an estimate has been made of these land requirements: 19,000 square kilometres or an area about 91% the size of Wales.

3.4. What opportunities do you see for the waste management industry to expand or optimise its activities in London? What are the key factors involved (e.g. minimum amount of feedstock for processing)?

There is a need to make the correct strategic decisions at both national and subnational level to provide the right mix of treatment infrastructure and therefore avoid future overcapacity. Localism-based approaches to dealing with waste generate social and economic benefits (jobs, income, and energy recovery) to the local community which can lead to a sense of ownership and result in greater recycling. However, investment in waste infrastructure is significantly dependant on guaranteed input tonnages, and this will be difficult to achieve without a robust strategy.

The London Plan provides a list of ‘Opportunity and Intensification’ areas. Consideration needs to be given to waste management at the early stages of planning for new developments, including discussions with the waste management industry about where the additional waste will be processed and potential locations for new facilities.

3.5. How do savings in landfill tax relate to possible investment into recycling and composting? What is the role of gate fees in this respect?

At the moment, there is no direct link between any savings made in landfill tax and investments into recycling and composting. In the current financial climate, councils have to focus on finding efficiencies that enable them to secure front-line services. And whilst savings may be achieved by diverting less waste to landfill/incineration, these contribute to balance out the councils’ overstretched budgets, helping to achieve annual efficiencies’ targets.

The landfill tax was introduced in 1996 and has been escalating at a rate of £8 per tonne, making alternative technologies more competitive. In April 2014, the tax reached a limit of £80 per tonne. Earlier this year, the government confirmed that this tax would continue to rise in line with inflation, from April 2015 onwards.

The landfill tax was originally designed as a means of reducing amount being sent to landfill by using the revenue to reinvest in waste infrastructure. However, there is no clear evidence that this has been the case to date and landfill tax now appears to be a revenue raising mechanism for the treasury.

Whilst the amount of waste London boroughs send to landfill has substantially decreased, the cost of landfilling continues to rise as a result of the landfill tax and gate fees.

Food waste can be considered in two ways. Unavoidable food waste includes bones, peelings, etc. that are organic, but cannot be consumed and will require disposal. However, a significant proportion of food waste resulting from people buying too much, not understanding best before and use by dates is avoidable. If residents can be encouraged to change their behaviour by better shopping practices, making more meals from leftovers, use of home freezing, etc. these savings can be realised by the residents themselves rather than waste authorities. This would result in savings on landfill tax and reduce the need for investment in food composting facilities.