

London's Waste Strategy and Statistics

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Objectives

- History of Waste Management in London
- Strategic Planning for Waste in London
- Current perspectives
- Statistical background data
- Plastics

Problems with London's Waste – mid 20th Century

- 1950s and 1960s recognition that then current system not working
- London County Council (LCC) had no responsibility for waste
- Waste collection and disposal by small London boroughs and their equivalents in areas around London – Middlesex, Essex, Kent and Surrey
- LCC outgrown by population growth outside area, often planned by LCC
- Government Commission restructured Local Government for London 1963
- Did then same for rest of Great Britain in 1974
- Waste management split between London Boroughs and GLC –collection local and disposal London-wide
- Huge task to re-structure old waste disposal pattern and processes
- Initial plan developed in late 1960s

33 Waste Collection Authorities in London



1960s planning soon superseded

- Original Plan was to have a set of EfW facilities around Greater London
- The first was in North London, the Edmonton plant – 600,000tpa capacity
- Opened officially in 1970 but then became a “white elephant”
- Strategy changed to transport by rail to landfill sites in 1970s and 1980s
- Then concern that landfill “running out”
- Therefore in 1980s political recognition that recycling should be priority
- Emphasis on changing consumer behaviour by GLC and London Boroughs
- But recognition that huge amounts of residual and C&I wastes to be treated
- GLC then reverted to EfW in planning its strategy for residual waste treatment before its abolition in 1986

Waste planning for the 1980s and the 1990s

- From 1986 until 1999 there was no strategic London wide authority
- London Waste Regulation Authority formed at abolition of GLC in 1986 with overall waste planning responsibility for London but not disposal operations
- Were handed over to 4 statutory (SAs) and five voluntary Waste Disposal Authorities covering London (NLWA, WLWA, ELWA, WRWA were SAs)
- Recognition of role of recycling and composting but still need for residual waste treatment so EfW resurrected as an option and plans for SELCHP – but had to be built by Veolia supported by 2 of 3 boroughs in SE London Group (Greenwich and Lewisham) –LB Southwark opted out
- Elsewhere in London new facilities have been built but often GLC facilities are still operating more than 25 years later

Waste Authorities in London



New structure for Planning for Waste with GLA

- GLA formed in 1999 but with less political and therefore operational powers than former GLC due to opposition by LBs and has elected Mayor
- Mayor of London has strategic planning powers for municipal waste and overviews waste plans of Statutory Authorities and Voluntary Groups or individual LBs latest version of strategy was published in 2011
- Several plans and proposals but most focussed on revival of EfW to tackle residual MSW – eg SELCHP but most significant Belvedere, Bexley
- Fits precisely with the original waste planning strategy of GLC in 1960s and in the 1980s by the LWRA
- Therefore needs EfW in the West and the South of London but different options –such as use of Lakeside Plant, Colnbrook (outside GLA) and Beddington for South London Partnership
- In NLWA replacement of Edmonton turned down by previous government but now replacement being proposed by the NLWA

GLA plus Waste Authorities in London



Structure for Waste Management in Greater London

- London Mayor (Boris Johnson) sets out the overall strategy for London
- Has to be agreed by the GLA (Greater London Assembly)
- Collections remain with the 32 London Boroughs and City of London
- Then there are operational Waste Authorities – ELWA (4), NLWA (7), WLWA (6), Western Riverside WA (4) plus SLW Partnership (4) but others are independent LBs although sometimes linked for specific partnership initiatives
- Under Mayor from 2007 LWARB (London Waste and Recycling Board) using £140m government funding for whole of London (plus EU funding)
- LWARB provides funding for waste initiatives, which LBs have to bid for but money also provided for private sector initiatives

The Mayor's Municipal Waste Strategy

- Published November 2011, linked to Environmental Policy with 6 key targets:
 - Zero waste to landfill by 2025
 - Household waste reduced from 970kg per household to 790kg by 2031
 - Reuse/repair up from c.6,000 tonnes 2008 to 20,000 in 2013 and 50,000 in 2031
 - Recycle or compost >45% MSW by 2015, 50% by 2020 and 60% by 2031
 - Cut GHG emissions by 545,000 CO₂ eq. in 2015, 770,000 in 2020, and 1 million in 2031
 - “To generate as much energy as practicable from London’s organic and non-recycled waste in a way that is no more polluting in carbon terms than the energy source it is replacing”

London Borough responsibilities and financing for waste

- London Boroughs have standard responsibilities for collection of waste and street cleansing
- Most provide kerbside collection of dry recyclables and increasing number collect food waste
- All provide bulky waste collections, generally charged for
- Most have HWRCs (household waste recycling centres) free for use by residents but often **only** by the residents of the Borough
- Household hazardous waste is collected by City of London (definition)
- Finance is through Council Tax (based on property values in 1992!)
- Westminster pays £30 for processing each tonne of recyclable waste, and “£53 to process a tonne of rubbish” April 2013

Broad Brush Statistical Background

- Overall 15-20 million tpa of waste in London
- More than 10 million tpa is C&D handled by private sector
- Only 4 million tpa is MSW - treated and disposed by private sector
- MSW collected mainly by private sector but varies borough by borough
- Therefore 6 million tpa of C&I waste – mainly collected and treated by private sector
- Landfill tax now £82.60 (€120) from April 2015 has prompted more prevention, recycling, composting and some EfW
- Currently C&I being processed to rdf that is mainly exported

Some Statistical Detail

- In England (London) currently MSW split between:
 - Recycling, including organics - 42% (London 34%) but now plateaued
 - EfW -15% (London 40%) and will increase with outside London facilities
 - Landfill – 45% (London 30%)
- London increasingly divided in performance on recycling borough by borough with best >50% and worst <10% but often hidden through misleading information regarding deliveries to MRFs etc
- EfW plants in Edmonton (500,000+tpa), Lewisham (420,000) and Belvedere (670,000) plus also Lakeside plant at Colnebrook (410,000) just outside west London, by Heathrow airport, but receives only limited WLWA MSW
- Forward thinking resource managers want to ensure materials management and more circular economy solutions for municipal waste resources
- BA/Solenafuels jet fuel project – 500,000 residual waste to jet fuel

Closed Loop Recycling

- Until 2009 the UK exported all its PET and HDPE bottles to other countries, mainly in SE Asia
- Now UK has sufficient capacity to recycle all PET and HDPE bottles through 4 new plants (but still exports some due to free trade and higher revenues)
- Each plant has about 60,000 – 80,000 tpa capacity
- Closed Loop based in Dagenham, east London
- How had this transformation been achieved in such a short time?

The Closed Loop Short-term Success Story

- Recycles PET bottle and HDPE bottle flake
- very high quality so used to make new food grade bottles and containers
- **support from bottle makers and retailers plus some from RDA – M&S, especially –Plan A + therefore real Extended Producer Responsibility**
- 2 other plants with different technology now also processing plastic bottles, including Coca Cola support for Eco-Plastics plant in Yorkshire (PET)
- But 2015 ownership changing due to low prices for recycled PET and HDPE due to declining oil prices and therefore lower prices for virgin polymers

- Plastic film still mainly exported to SE Asia