Policy SI 8 Waste capacity and net waste self-sufficiency

A In order to manage London's waste sustainably:

1) the equivalent of 100 per cent of London's waste should be managed within London (i.e. net self-sufficiency) by 2026
2) existing waste management sites should be safeguarded (see Policy SI 9 Safeguarded waste sites)
3) the waste management capacity of existing sites should be optimised
4) new waste management sites should be provided where required
5) environmental, social and economic benefits from waste and secondary materials management should be created.

B Development Plans should:

1) plan for identified waste needs
2) identify how waste will be reduced, in line with the principles of the Circular Economy and how remaining quantums of waste will be managed
3) allocate sufficient sites, identify suitable areas, and identify waste management facilities to provide the capacity to manage the apportioned tonnages of waste, as set out in Table 9.2 – boroughs are encouraged to collaborate by pooling their apportionment requirements
4) identify the following as suitable locations to manage borough waste apportionments:
    a) existing waste and secondary material sites/land, particularly waste transfer facilities, with a view to maximising their capacity
    b) Strategic Industrial Locations and Locally Significant Industrial Sites
    c) safeguarded wharves with an existing or future potential for waste and secondary material management.

C Mayoral Development Corporations must cooperate with host boroughs to meet identified waste needs.

D Development proposals for materials and waste management sites are encouraged where they:

1) deliver a range of complementary waste management and secondary material processing facilities on a single site

2) support prolonged product life and secondary repair, refurbishment and remanufacture of materials and assets

3) contribute towards renewable energy generation, especially renewable gas technologies from organic/biomass waste, and/or

4) are linked to low emission combined heat and power and/or combined cooling heat and power (CHP is only acceptable where it will enable the delivery or extension of an area-wide heat network consistent with Policy SI 3 Energy infrastructure Part D1c)

E Developments proposals for new waste sites or to increase the capacity of existing sites should be evaluated against the following criteria:

1) the nature of the activity, its scale and location

2) effective implementation of the waste hierarchy and its contribution to London's circular economy

3) achieving a positive carbon outcome (i.e. re-using and recycling high carbon content materials) resulting in significant greenhouse gas savings – all facilities generating energy from waste will need to meet, or demonstrate that steps are in place to meet, a minimum performance of 400g of CO_2 equivalent per kilowatt hour of electricity produced

4) the impact on amenity in surrounding areas (including but not limited to noise, odours, air quality and visual impact) – where a site is likely to produce significant air quality, dust or noise impacts, it should be fully enclosed

5) the transport and environmental impacts of all vehicle movements related to the proposal – the use of renewable fuels from waste sources and the use of rail and waterway networks to transport waste should be supported.

F When planning for new waste sites or to increase the capacity at existing sites the following should be considered:

1) job creation and social value benefits, including skills, training and apprenticeship opportunities

2) local need

3) accessibility of services for local communities and businesses.

Table 9.1 - Forecast arisings of household, commercial and industrial waste by borough 2021-2041 (000's tonnes)

Borough	2021	2041
Barking & Dagenham	214	230
Barnet	315	340
Bexley	225	241
Brent	259	274
Bromley	249	267
Camden	360	374
City of London	230	238
Croydon	305	327
Ealing	291	306
Enfield	305	327
Greenwich	209	226
Hackney	183	195
Hammersmith & Fulham	183	190
Haringey	190	201
Harrow	188	205
Havering	229	249
Hillingdon	347	365
Hounslow	260	275
Islington	241	251
Kensington & Chelsea	201	210
Kingston	152	160
Lambeth	208	219
Lewisham	191	206
Merton	174	184
Newham	244	260
Redbridge	196	216
Richmond	179	190
Southwark	292	308
Sutton	161	172
Tower Hamlets	260	273
Waltham Forest	202	218
Wandsworth	251	264
City of Westminster	722	749
London total	**8,217**	**8,726**

To table of contents

Table 9.2 - Borough-level apportionments of household, commercial and industrial waste 2021-2041 (000's tonnes)

Borough	Apportionment *	2021	2041
Barking & Dagenham	6.1	505	537
Barnet	2.6	215	229
Bexley	5.6	457	485
Brent	5.0	412	437
Bromley	2.3	192	204
Camden	1.6	133	141
City of London	1.0	84	90
Croydon	3.1	252	268
Ealing	6.6	542	576
Enfield	4.3	356	379
Greenwich	4.1	338	359
Hackney	1.3	111	118
Hammersmith & Fulham	2.6	210	223
Haringey	2.3	192	203
Harrow	1.9	160	170
Havering	4.5	370	393
Hillingdon	5.1	423	449
Hounslow	5.0	407	432
Islington	1.2	101	108
Kensington & Chelsea	1.4	116	123
Kingston	2.3	187	199
Lambeth	1.7	143	152
Lewisham	2.2	184	195
Merton	2.9	238	253
Newham	4.7	383	407
Redbridge	1.8	151	160
Richmond	1.8	148	157
Southwark	1.8	150	159
Sutton	2.6	211	224
Tower Hamlets	2.4	195	207
Waltham Forest	2.4	199	211
Wandsworth	3.2	264	280
City of Westminster	2.3	188	200
London total	**100.0**	**8,217**	**8,726**

* Apportionment is per cent share of London's total waste to be managed by borough

To table of contents

Table 9.3 - Projected net exports of household, commercial and industrial waste from London (000's tonnes)

Type	2015	2021	2026	2041
London's arisings	8,100	8,216	8,299	8,726
London's exports	3,449	1,725	0	0

Note: 2015 is an actual figure (SLR May 2017), data for 2021, 2026 and 2041 are projections

9.8.1 In 2015, London managed 7.5mt of its own waste and exported 11.4mt of waste. London also imported 3.6mt of waste. This gives London a current waste **net self-sufficiency figure** of approximately 60 per cent. Around 5mt (49 per cent) of waste exported from London went to the East of England and 4.2mt (42 per cent) to the South East. The bulk of this waste is CD&E waste. Approximately 1.3mt of waste was exported overseas. The term net self-sufficiency is meant to apply to all waste streams, with the exception of excavation waste. The particular characteristics of this waste stream mean that it will be challenging for London to provide either the sites or the level of compensatory provision needed to apply net self-sufficiency to this waste stream.

9.8.2 In 2015, 2.9mt of the waste sent to the East of England went to landfill and 2.2mt went to landfill in the South East. Some 32 per cent of London's waste that was biodegradable or recyclable was sent to landfill. The Mayor is committed to **sending zero biodegradable or recyclable waste to landfill by 2026**.

9.8.3 Waste contracts do not recognise administrative boundaries and waste flows across borders. Therefore, sufficient sites should be identified within London to deal with the equivalent of 100 per cent of the waste apportioned to the boroughs as set out in Table 9.2. The Mayor will work with boroughs, the London Waste and Recycling Board, and the London and neighbouring Regional Technical Advisory Bodies to address **cross-boundary waste flow issues**. Examples of joint working include ongoing updates to the London Waste Map, sharing data derived from Circular Economy Statements, the monitoring of primary waste streams and progress to net self-sufficiency, supporting the Environment Agency's annual monitoring work, and collaboration on management solutions of waste arisings from London.

9.8.4 Waste is deemed to be managed in London if any of the following activities take place within London:

- waste is used for energy recovery

- the production of solid recovered fuel (SRF), or it is high-quality refuse-derived fuel (RDF) meeting the Defra RDF definition as a minimum[168] which is destined for energy recovery
- it is sorted or bulked for re-use (including repair and re-manufacture) or for recycling (including anaerobic digestion)
- It is reused or recycled (including anaerobic digestion).

9.8.5 Supporting the production of **SRF and high-quality RDF feedstock** will promote local energy generation and benefit Londoners, improving London's energy security, helping to achieve regional self-sufficiency and possibly reducing leakage of SRF and RDF overseas. London facilities should produce high-quality waste feedstock with very little recyclable content (i.e. plastics), supporting renewable energy generation.

9.8.6 Table 9.1 shows projected arisings for household, commercial and industrial waste for each borough. National policy guidance requires boroughs to have regard to the **waste apportionments** set out in the London Plan. The Plan's waste apportionment model defines the proportion of London's total household, commercial and industrial waste that each borough should plan for, and these apportionments are set out in Table 9.2. Part B3 requires boroughs to allocate sufficient land (sites and/or areas) and identify waste management facilities to provide the capacity to manage their apportioned tonnages of waste. Boroughs are encouraged to collaborate by pooling their apportionment requirements. Boroughs with a surplus of waste sites should offer to share these sites with those boroughs facing a shortfall in capacity before considering site release.

9.8.7 Boroughs should examine in detail **how capacity can be delivered at the local level** and demonstrate how this can be provided for through the allocation of sufficient sites and the identification of suitable areas in Development Plans to meet their apportionment, and should aim to meet their waste apportionment as a minimum. It may not always be possible for boroughs to meet their apportionment within their boundaries and in such circumstances boroughs will need to agree the transfer of apportioned waste. Where apportionments are pooled, boroughs must demonstrate how their joint apportionment targets will be met, for example through joint waste Development Plan Documents, joint evidence papers or bilateral agreements.

9.8.8 **Mayoral Development Corporations** (MDCs) must cooperate with host boroughs to meet identified waste needs; this includes boroughs'

168 See http://www.sita.co.uk/services-and-products/our-products/rdf-srf for an explanation of the differences between SRF and RDF.

apportionment requirements. This could be widened to cover boroughs in the relevant waste planning group where appropriate. In future iterations of the Plan full consideration will be given to apportioning waste needs to MDCs.

9.8.9 Waste planning authorities and groups should plan to meet the identified waste management needs of their local area and are encouraged to identify suitable **additional capacity for waste**, including those waste streams not apportioned by the London Plan, where practicable. This could include, waste transfer sites, new sites managing construction, demolition and excavation waste, or the reconfiguration and intensification of existing uses that increase management capacity.

9.8.10 Plans or agreements **safeguarding waste sites** should take a flexible approach. They should be regularly reviewed and updated to take account of development that may lead to the integration of waste sites or appropriate relocation of lost waste sites. Waste plans should be responsive to strategic opportunities across borough and joint waste planning boundaries for optimising capacity on existing waste sites, or that help to unlock investment in developing new waste sites. Where a waste site may be lost, compensatory capacity should first be explored within the borough. In cases where this can't be provided, and suitable capacity is found in another borough, the receiving borough or joint waste planning group is encouraged to take on the apportionment and include it as part of their Development Plan.

9.8.11 Land in Strategic Industrial Locations will provide the main opportunities for locating waste treatment facilities. Existing waste management sites should be clearly identified and safeguarded for waste use. Boroughs should also look to Locally Significant Industrial Sites and intensification of existing waste management sites. Large-scale redevelopment opportunities and redevelopment proposals should incorporate waste management facilities within them. The London Waste Map[169] shows the locations of London's permitted waste facilities and sites that may be suitable for waste facility location.

9.8.12 As noted above, waste flows across boundaries and London exported 3.4mt of household, commercial and industrial waste in 2015. To meet the Mayor's policy commitment of net self-sufficiency by 2026 there needs to be a reduction in exports or an increase in imports in the lead up to 2026. Table 9.3 is included to help neighbouring authorities plan for London's expected household, commercial and industrial waste exports.

169 London Waste Map, https://maps.london.gov.uk/webmaps/waste/

9.8.13 Tables 9.1, 9.2 and 9.3 only refer to household, commercial and industrial waste, not construction, demolition and excavation waste. As the **reliability of CD&E waste data is low**, apportionments for this waste stream are not set out. For a fuller discussion of the issues around CD&E waste data see paragraph 9.7.7 and the SLR consulting report (task 2) (May 2017).

9.8.14 To support the shift towards a low-carbon circular economy, all facilities generating energy from waste should meet, or demonstrate that they can meet in future, a measure of minimum greenhouse gas performance known as the **carbon intensity floor** (CIF). The CIF is set at 400g of CO_2 equivalent generated per kilowatt hour (kwh) of electricity generated. The GLA's free on-line ready reckoner tool can assist boroughs and applicants in measuring and determining performance against the CIF.[170] Achieving the CIF effectively rules out traditional mass burn incineration techniques generating electricity only. Instead, it supports techniques where both heat and power generated are used, and technologies are able to achieve high efficiencies, such as when linked with gas engines and hydrogen fuel cells. More information on how the CIF has been developed and how to meet it can be found in the London Environment Strategy.

9.8.15 Waste to energy facilities should be equipped with a **heat off-take** from the outset such that a future heat demand can be supplied without the need to modify the heat producing plant in any way or entail its unplanned shut-down. It should be demonstrated that capacity of the heat off-take meets the CIF at 100 per cent heat supply. In order to ensure it remains relevant, the CIF level will be kept under review.

9.8.16 Examples of the '**demonstrable steps**' required under Part E3 are:

- a commitment to source truly residual waste – waste with as little recyclable material as possible
- a commitment (via a Section 106 obligation) to deliver the necessary means for infrastructure to meet the minimum CO_2 standard, for example investment in the development of a heat distribution network to the site boundary, or technology modifications that improve plant efficiency
- an agreed timeframe (via a Section 106 agreement) as to when proposed measures will be delivered
- the establishment of a working group to progress the agreed steps and monitor and report performance to the consenting authority.

170 https://www.london.gov.uk/what-we-do/environment/waste-and-recycling/waste-policy

9.8.17 To assist in the delivery of 'demonstrable steps' the GLA can help to advise on **heat take-off opportunities** for waste to energy projects, particularly where these are linked to GLA supported energy masterplans.

9.8.18 In 2015 around 324,000 tonnes of **hazardous waste** was produced in London. Hazardous waste makes up a component of all waste streams and is included in the apportionments for household, commercial and industrial waste set out in Table 9.2. London sends small amounts of hazardous waste to landfill outside of London, approximately three per cent of the national total. The amount of such waste produced has continued to grow in the short and medium term. Without sustained action, there remains the risk of a major shortfall in our capacity to treat and dispose of hazardous waste safely. This could lead to storage problems, illegal disposal (including fly tipping) and rising public concern about health and environmental impacts. There is therefore a need to continue to identify hazardous waste capacity for London. The main requirement is for sites for regional facilities to be identified. Boroughs will need to work with neighbouring authorities to consider the necessary facilities when planning for their hazardous waste.

9.8.19 **Waste processing facilities** should be well designed. They should respect context, not be visually overbearing and should contribute to the local economy as a source of new products and new jobs. They should be developed and designed in consultation with local communities, taking account of health and safety within the facility, the site and adjoining neighbourhoods. Developments supporting circular economy outcomes such as re-use, repair and re-manufacture, will be encouraged. Where movement of waste is required, priority should be given to facilities for movement by river or rail. Opportunities for combined heat, power and cooling should be taken wherever possible. Although no further landfill proposals in London are identified or anticipated within the Plan period, if proposals do come forward for new or extended landfill capacity or for land-raising, boroughs should ensure that the resultant void-space has regard to the London Environment Strategy.

9.8.20 Following the Agent of Change principle, developments adjacent to waste management sites should be designed to **minimise the potential for disturbance and conflicts of use**. Developers should refer to the London Waste and Recycling Board's design guide for ensuring adequate and easily accessible storage space for high-rise developments, see Part E of Policy D6 Housing quality and standards.