# Greenhouse gas balances of residual waste management scenarios

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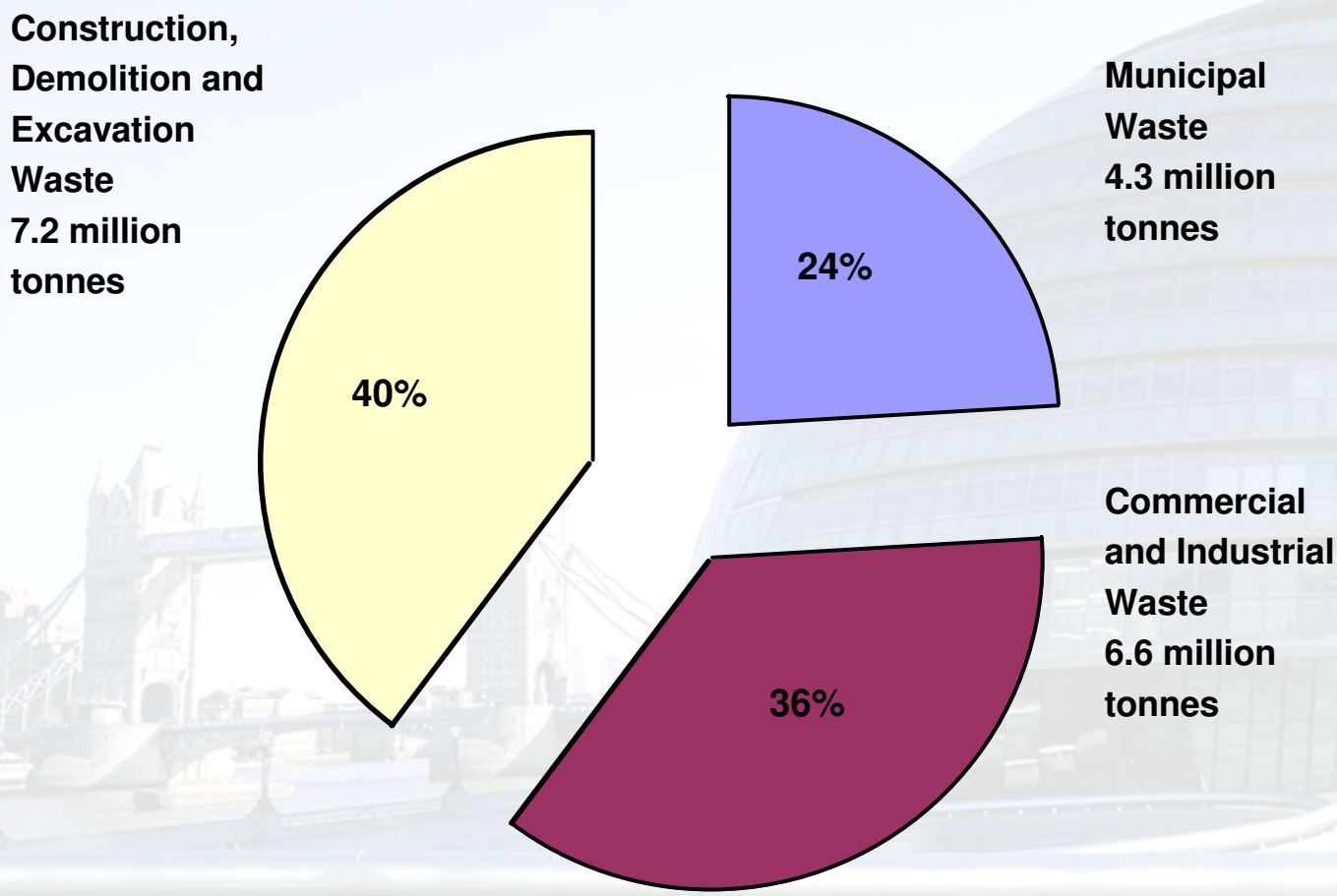
# Waste arisings

**Waste Produced in London**

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# Policy Context - MMWMS

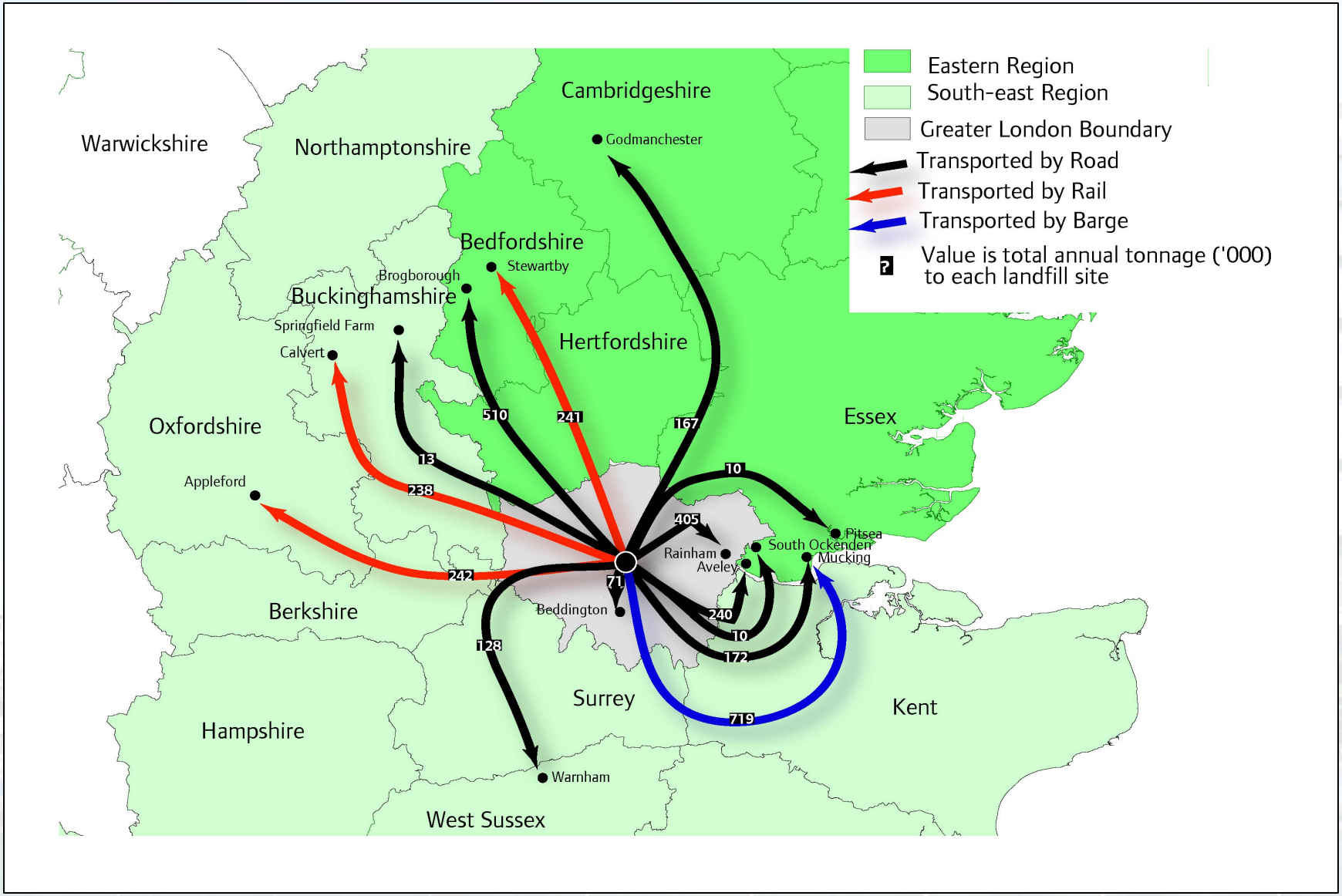

**Waste Management Decision Making:**

The Waste Hierarchy

Proximity

Self sufficiency

# Waste flows

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# London Plan Waste policies

## ethos…

- increase London's waste self-sufficiency
- address London's poor recycling performance
- tackle extra waste from pop and emp growth
- reduce dependence on landfill
- maximise material available for remanufacturing
- embrace new technology – energy and hydrogen
- expand London's green economy
- incorporate CHP "wherever possible"
- reduce transport impacts

# London waste targets

85% regional self-sufficiency by 2020 *London Plan 04*

45% municipal waste recycling/composting by 2015 *London Plan Draft Further Alterations 2006*

70% commercial/industrial waste recycling/composting by 2020 *London Plan Draft Further Alterations 2006*

95% re-use and Recycling of construction/demolition waste by 2020 *London Plan Waste and Minerals Alterations 2006*

Save 1.1 million tonnes of CO2 by 2025 from waste and biomass *Climate Change action plan 2007*

# Number and Type of new facilities

| Facility type | Through put per facility (tonnes per year) | Landtake per facility (ha) | Number of facilities | Total landtake (ha) |
|---|---|---|---|---|
| Materials reclamation facility (recycling) | 42,000 | 0.9 | 199 | 179 |
| Composting | 19,000 | 1.25 | 57 | 71 |
| Mechanical biological treatment | 125,000 | 1.75 | 16 | 28 |
| Anaerobic digestion | 15,000 | 1 | 25 | 25 |
| Gasification/pyrolysis | 114,000 | 2.25 | 11 | 25 |
| **Totals** | | | **308** | **328** |

# Preference for New Technologies

- Better C02 performance (higher efficiencies)
- Can be suited for community sized developments
- Lower emission of gasses and cleaner technologies
- Production of biogas or syngas offers flexible fuel source
- Use of bio/syn gas as a source for renewable hydrogen as a stationary or transport fuel
- Cost