

The Role of Waste in a Sustainable World City

Shirley Rodrigues
Head of Environment
Greater London Authority



Mayor's Vision for Waste in London

- By 2020, municipal waste should no longer compromise London's future as a sustainable city.
- need to
 - produce only the minimum amount of waste
 - manage waste better to minimise impacts
 - on the local and global environment
 - on London communities,
 - on our economy
 - on our health.

Policy Context - MMWMS



**Waste Management
Decision Making:
The Waste Hierarchy
Proximity**

London waste targets

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

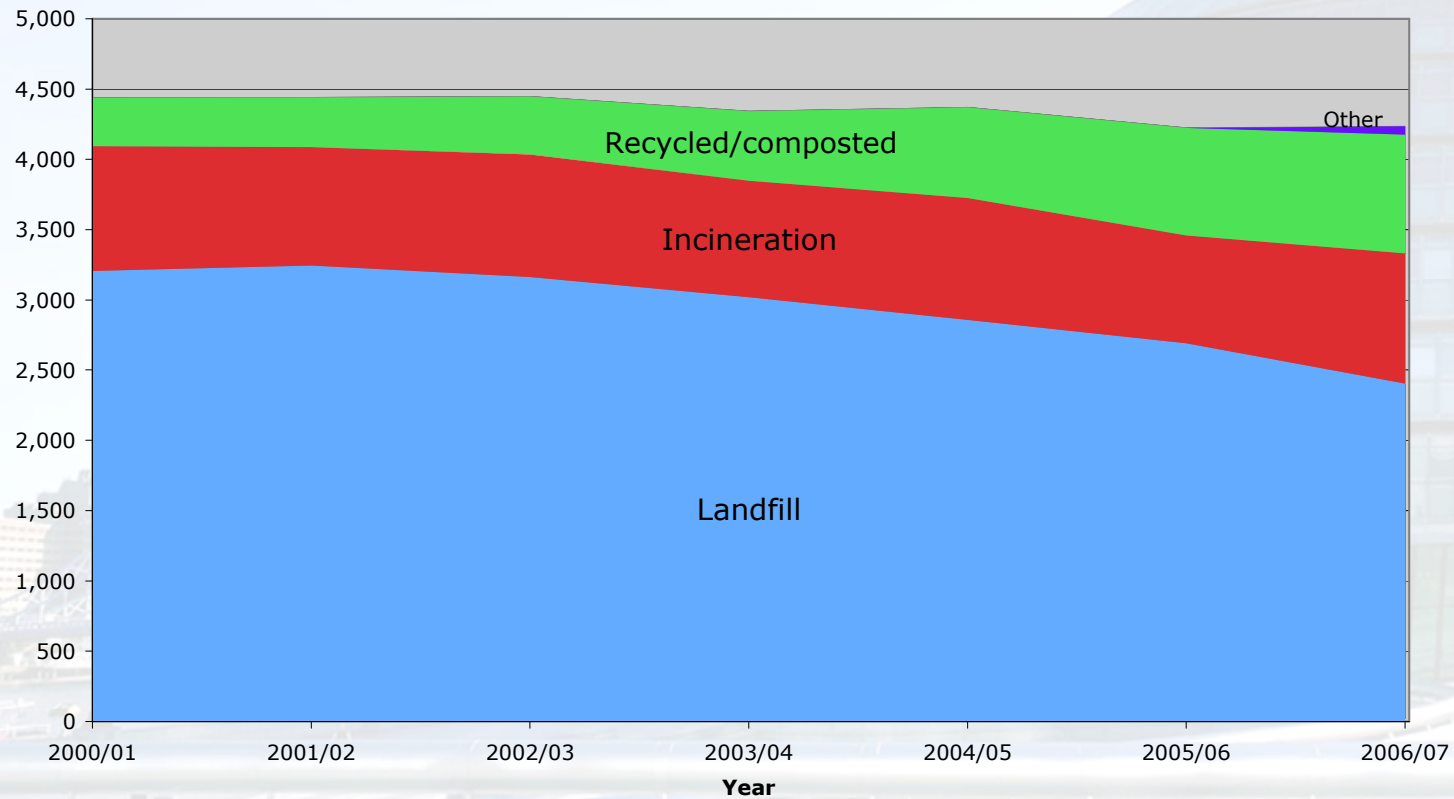
45% municipal waste recycling/composting by 2015
London Plan Draft Further Alterations 2006

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*

London's Municipal Waste Management

London's Municipal Waste Management

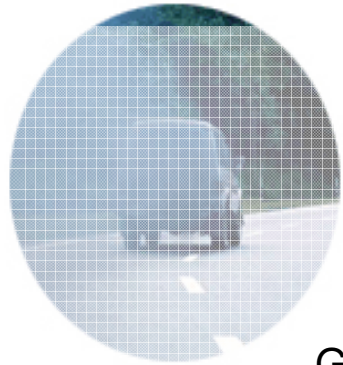


Climate Change – new factor



- Climate Change Action Plan published in February 2007
- Creates a single shared climate change agenda for London, including the GLA family
- Maximises carbon reduction by focusing on highest-impact initiatives
- Creates awareness of Mayor's priorities and of what he will deliver
- Includes actions by partner organisations and what Government action is required
- Focuses on mitigation (reducing CO₂ emissions)

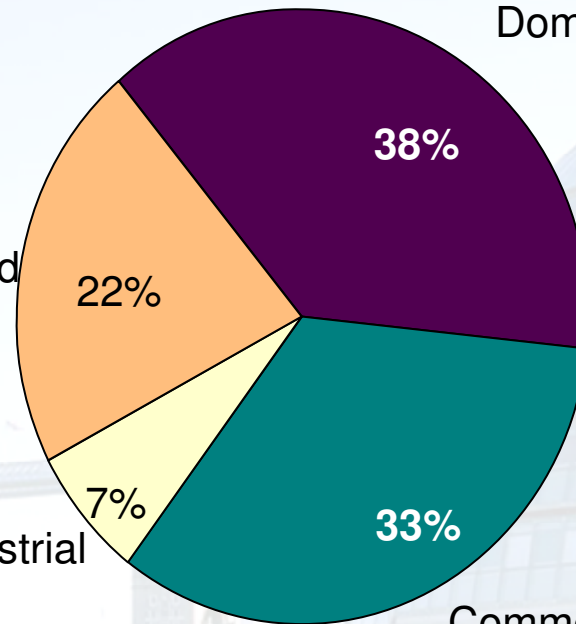
CO₂ emissions from London excluding aviation (2006)



Ground Based
Transport

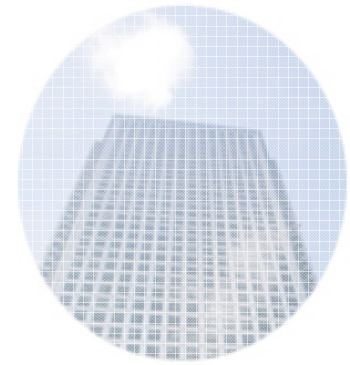
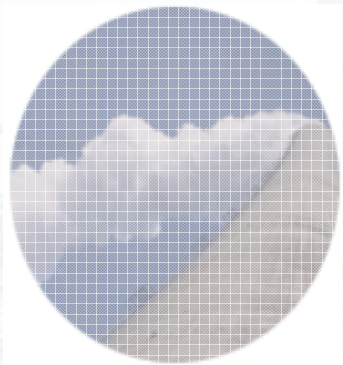


Domestic



Industrial

Commercial
and public
sector



44 mt CO₂

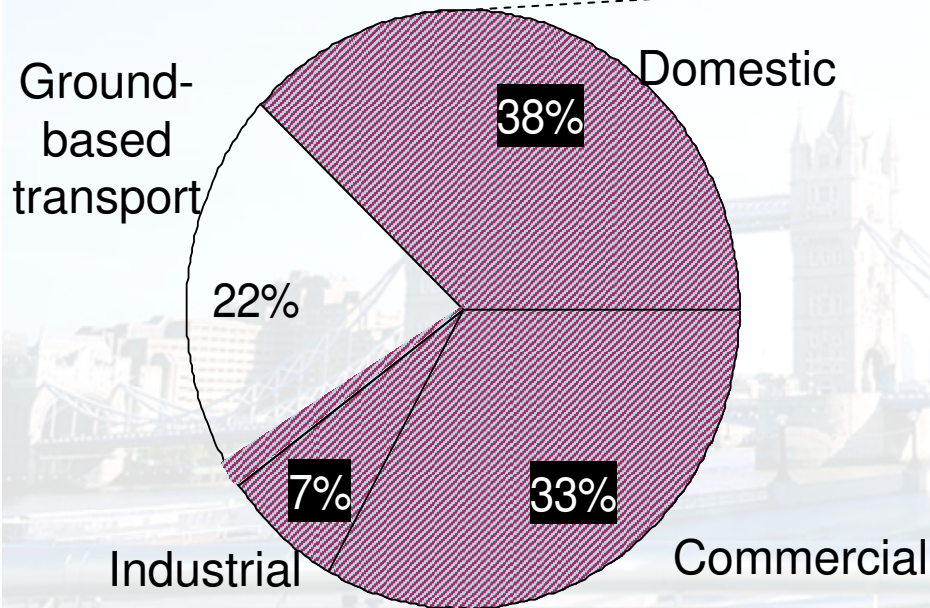
Climate Change Action Plan

- A Green Homes Programme
- A Green Organisations Programme
- A Green Energy Programme
- A Green Transport Programme

Where emissions come from: Energy supply

2006 emissions from all sectors,
excl. aviation

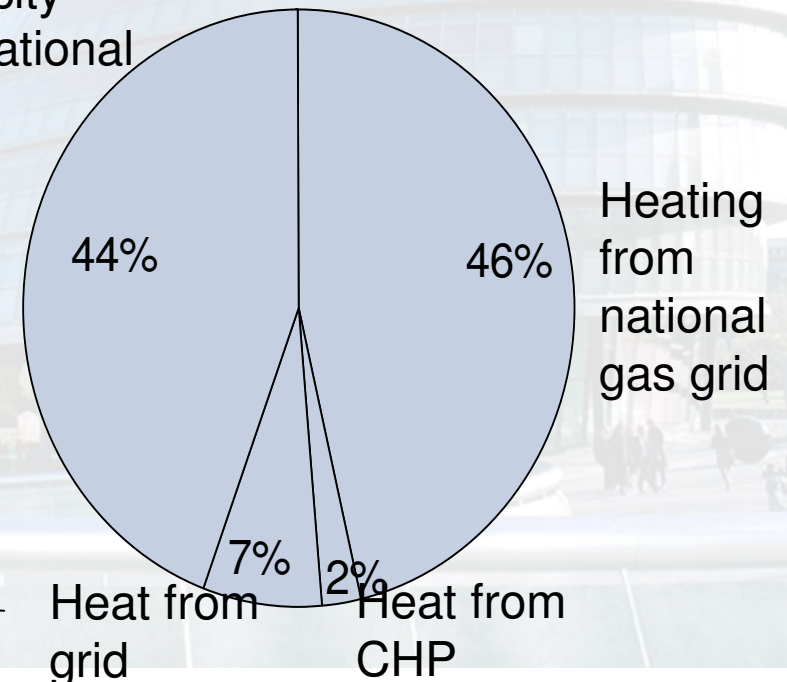
100% = 44.3 million tonnes CO₂



2006 emissions from energy supply

100% = 34.7 million tonnes CO₂

Electricity
from national
grid



Heat from
grid
electricity

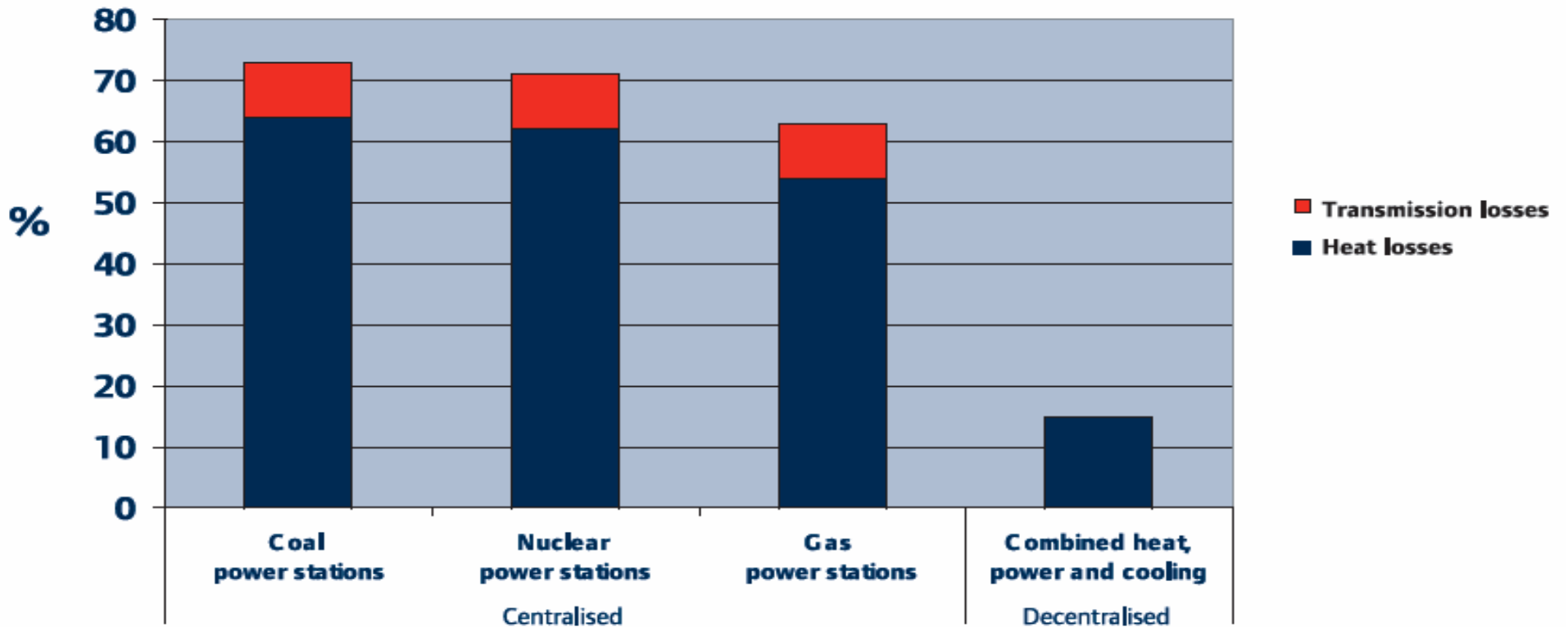
Heat from
CHP

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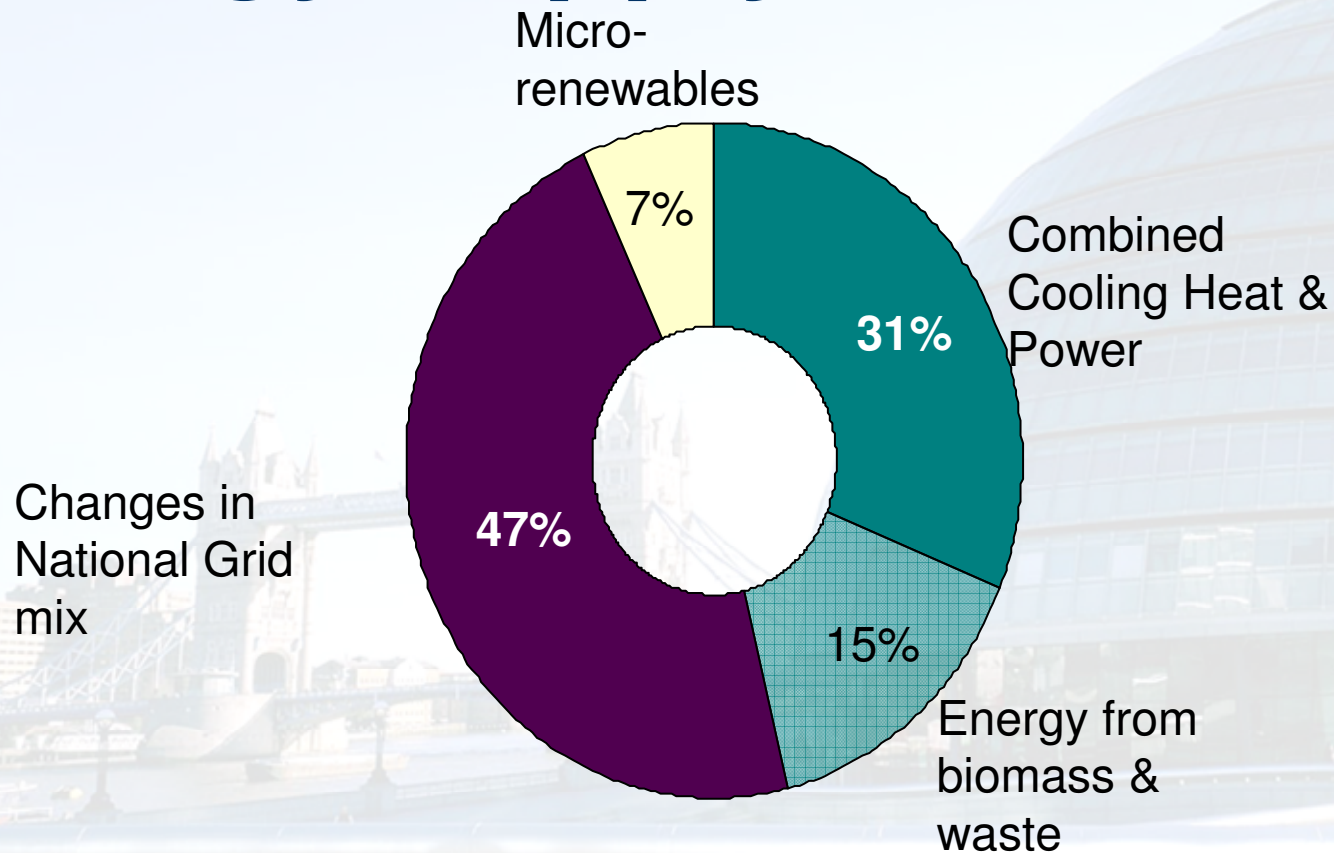
Why is de-centralised energy so important?

Promoting decentralised energy

Percentage of total energy loss from power generation



Sources of savings from energy supply



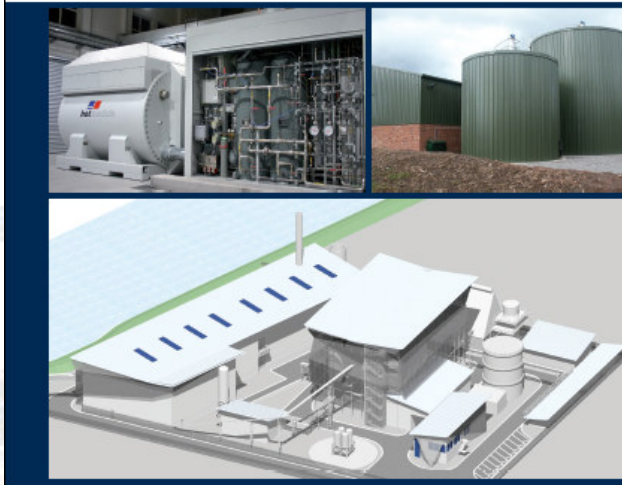
New opportunities - number and type of new facilities needed in London

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

Greenhouse Gas balances of Waste Management Scenarios

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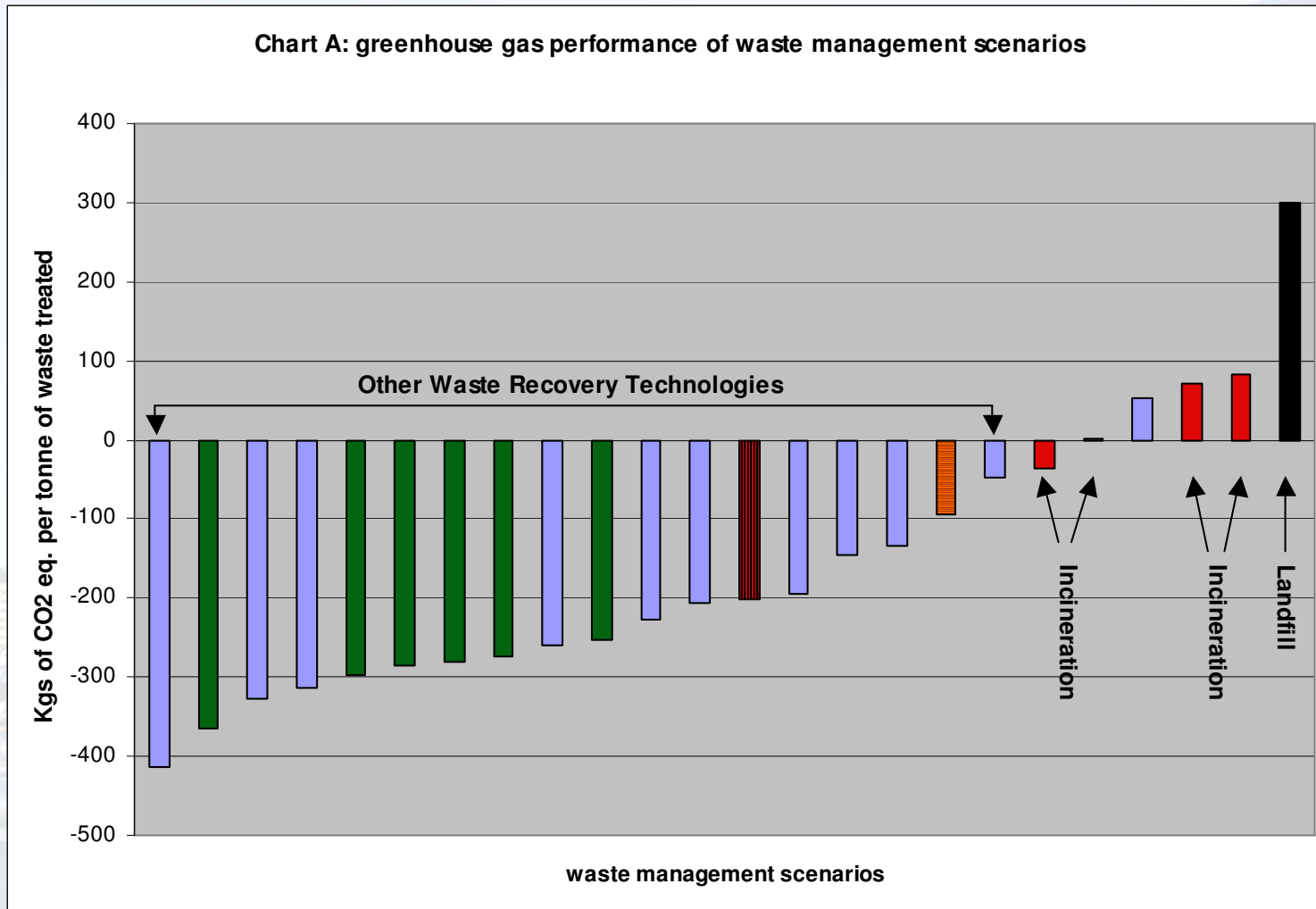
Greenhouse gas balances of waste management scenarios



January 2008

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Key findings



Conclusion

- need a new approach to sustainable waste management
- must weave in the climate change imperative to our approach.
- huge potential for carbon savings and minimising our ecological footprint
- otherwise no city, let alone London, can claim to be truly sustainable.

Further Information

Municipal Waste Management Strategy and Greenhouse Gas Study:

www.london.gov.uk/mayor/environment/waste/index.jsp

The London Plan:

www.london.gov.uk/mayor/planning/strategy.jsp

Climate Change Action Plan

www.london.gov.uk/mayor/environment/climate-change/ccap/index.jsp

London waste statistics:

www.capitalwastefacts.com

Recycle for London campaign:

www.recycleforlondon.com

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