

London's environmental challenges and the opportunity for London's Cleantech Cluster

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Greater London Authority
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Overview

Two parts:

- 1) The environmental context, the policy framework and environment programmes – Simon Wyke
- 2) The London Enterprise Panel and relevant programmes – Kevin Hoxtor

Cities – Global Economic Power Houses

Environmental Challenges

- Climate change mitigation
- Climate Change Adaptation
- Waste Management
- Air Quality
- Transport
- Water resources
- Pollution control
- These are but a few



- About 50% of world's population live in cities and expected to grow to 70% by 2050
- About 80% of global GDP
- About 66% of global energy demand and about 70% of the global greenhouse gases



London – A Sustainable Global City

A Strong and Consistent Policy Framework

- London Plan – Mayor's Spatial Development Strategy
- Climate Change Mitigation and Energy Strategy
- Adaptation Strategy
 - Other Environmental Strategies
- Economic Development Strategy
- Transport Strategy



DELIVERING LONDON'S ENERGY FUTURE

THE MAYOR'S CLIMATE CHANGE MITIGATION AND ENERGY STRATEGY
OCTOBER 2011

MAYOR OF LONDON

The Mayor's Carbon Dioxide Targets

Reduce CO₂ emissions on 1990 levels by.....

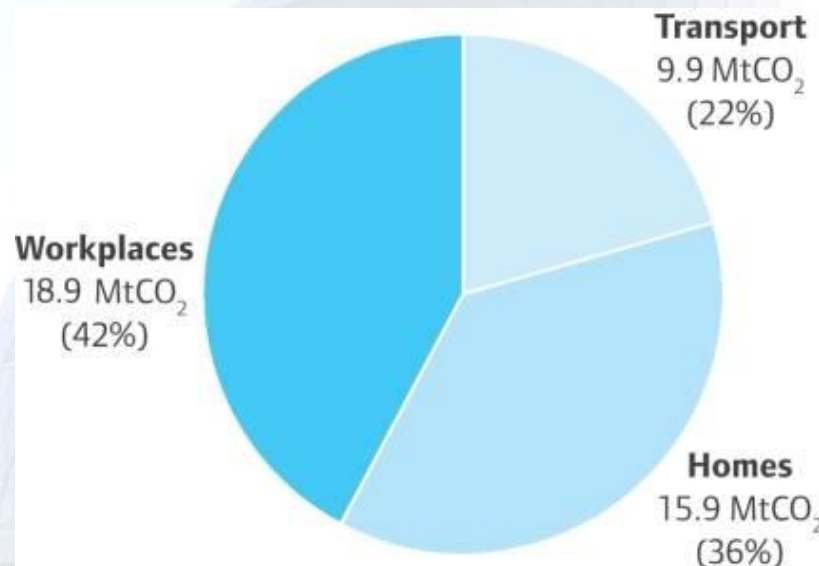
20% by 2015

38% by 2020

60% by 2025

80% by 2050

Sources of CO₂ emissions

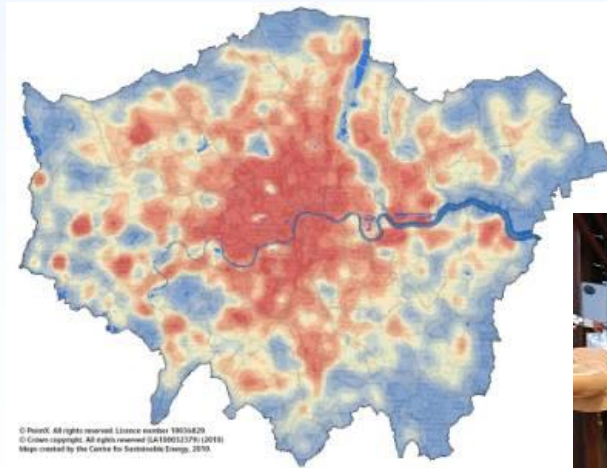


The Mayor's Climate Change Programmes

Energy Efficiency



Decentralised Energy



Transport



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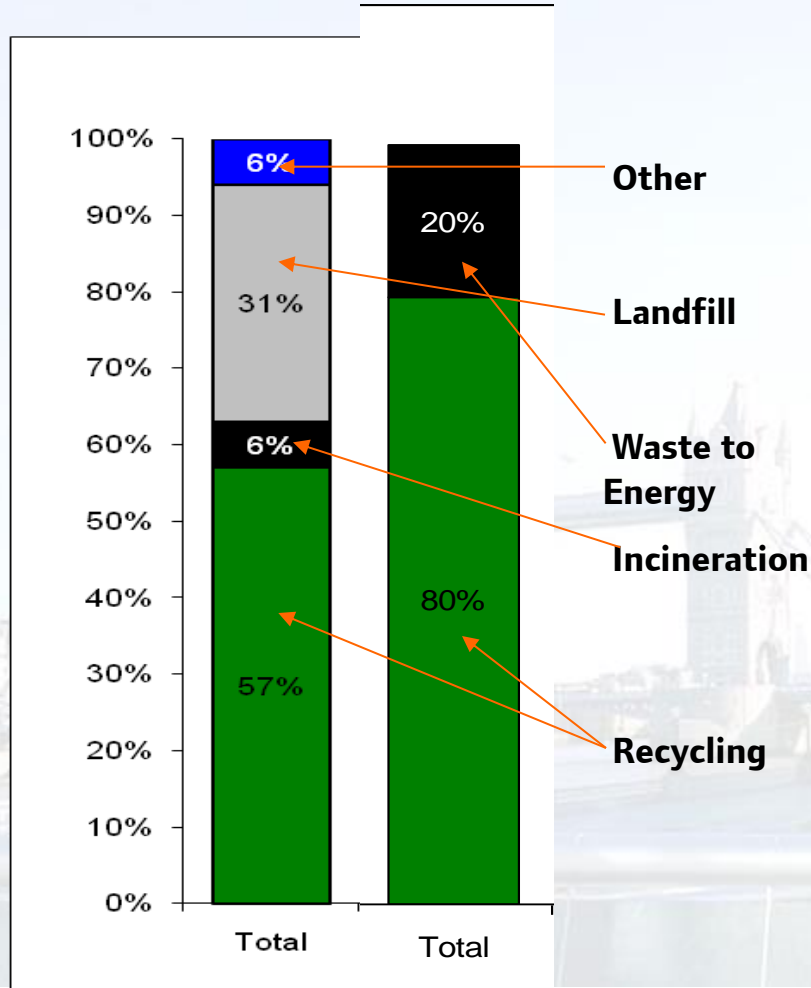
Adapting London to cope with the impacts of climate change



- London is vulnerable to weather related risks and climate change will increase these
- Main risks - flooding, drought and overheating
- Risk based approach - identify and manage their nature, extent and location
- Vision of a green roofed London – making the city more resilient

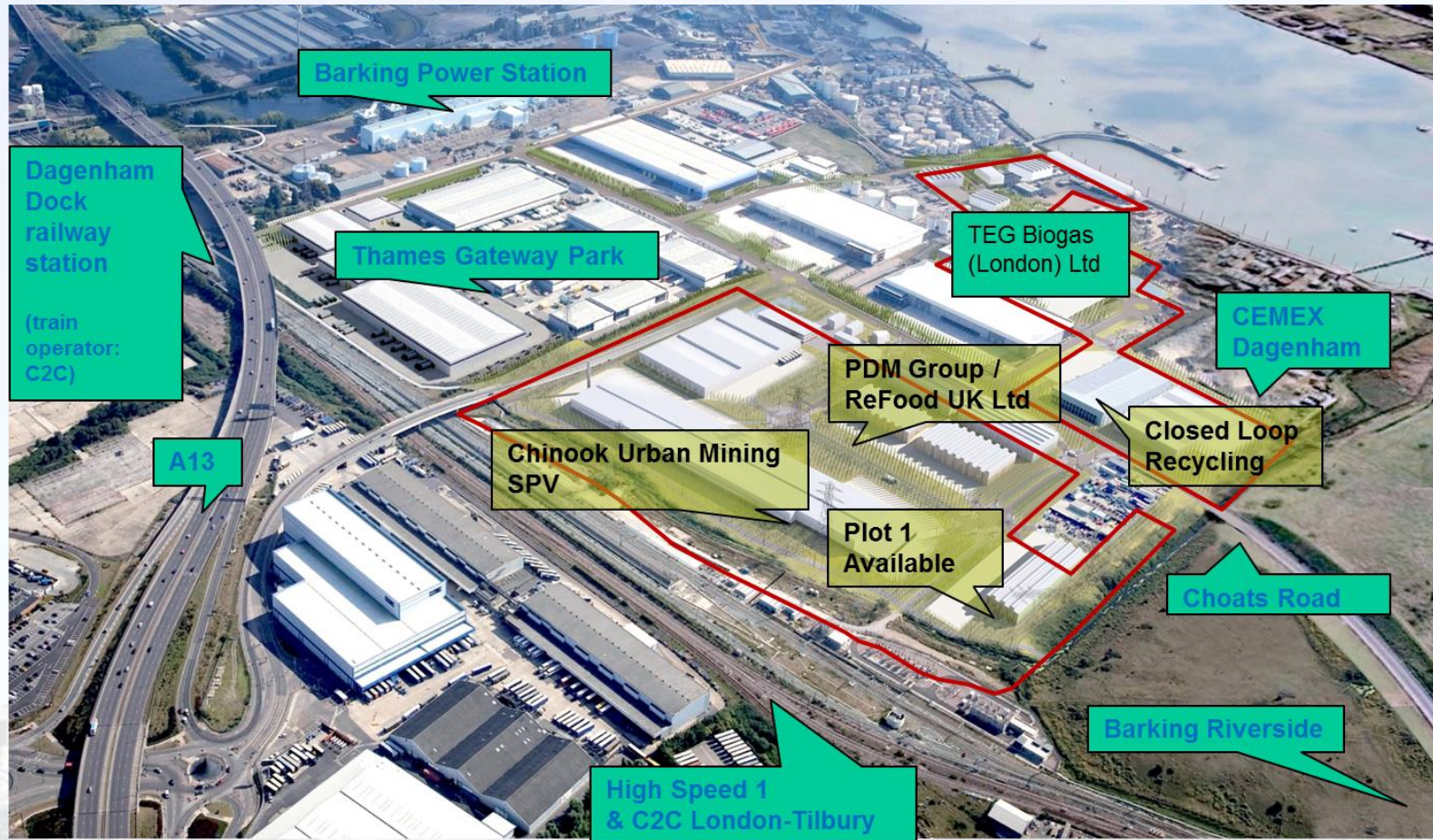
Managing Waste as a Valuable Resource

How waste is managed now and our target for 2031



- 20mt of waste each year
- Business waste - 16mt/pa
- After waste minimisation the remaining waste is a valuable resource or raw material
- Maximise its value by segregating into recyclable and non-recyclable waste
- Invest in waste management facilities:
 - Material Segregation
 - Processing and Reprocessing
 - Waste to Energy

London Sustainable Industries Park



This park provides 75,000 sqm with infrastructure to support BREEAM Excellent business space – the catalyst for cleantech growth in east London – Seize this opportunity. Website - <http://www.londonsip.com>

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Potential Market Opportunities

- **Energy Efficiency** – Insulation and phase change materials; intelligent meters and controls
- **Decentralised Energy** – Performance of energy generating technologies; ICT platforms and networks smart grids; and energy storage
- **Transport** – Low emission vehicles and fuels
- **Adaptation** – Flood and drainage technologies; green roofs; and permeable, flood resistant and reflective building materials
- **Waste** – Material segregation and processing; reprocessing and remanufacture; and waste to energy

The Transition to a Low Carbon, Resource Efficient Economy

There are two main components:

- 1) Delivering economic growth that is increasingly more carbon and resource efficient - **Demand**
- 2) Supplying goods and services to enable this carbon and resource efficient growth to happen - **Supply**

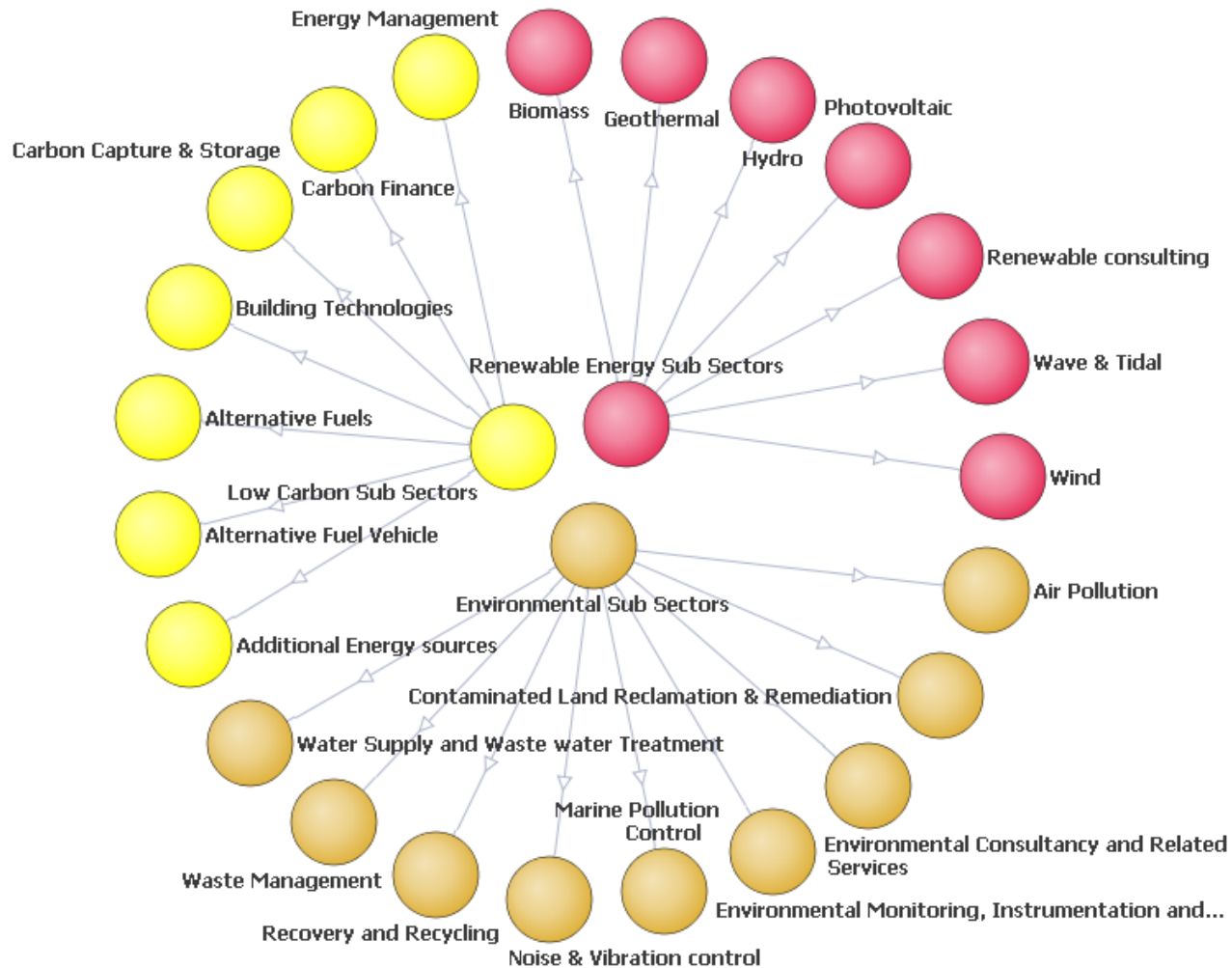
'Low Carbon and Environmental Goods and Services' – 2011/12

Global – sales of approximately £3.4 trillion

UK – sales of approximately £128 billion, over 51,000 companies and 935,000 employees and forecast sales growth of over 5% pa through to 2015/16

London – sales approximately £24.5 billion, over 9,200 companies and over 163,000 employees. Growth in sales for last 2 years over 5% and expected to continue to grow throughout decade by over 5% pa

Definition of the 'Low Carbon and Environmental Goods and Services' Sector



In Summary

- Real environmental challenges in cities
- Addressing them creates great market opportunities for those businesses with solutions, e.g. cleantech
- London has strong Policy Framework driving demand for sustainable physical and economic growth
- London's environmental programmes are also driving demand
- But what can we do to support London's businesses to capture a share of this market opportunity?



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