

Leading to a Greener London

Peter Daw

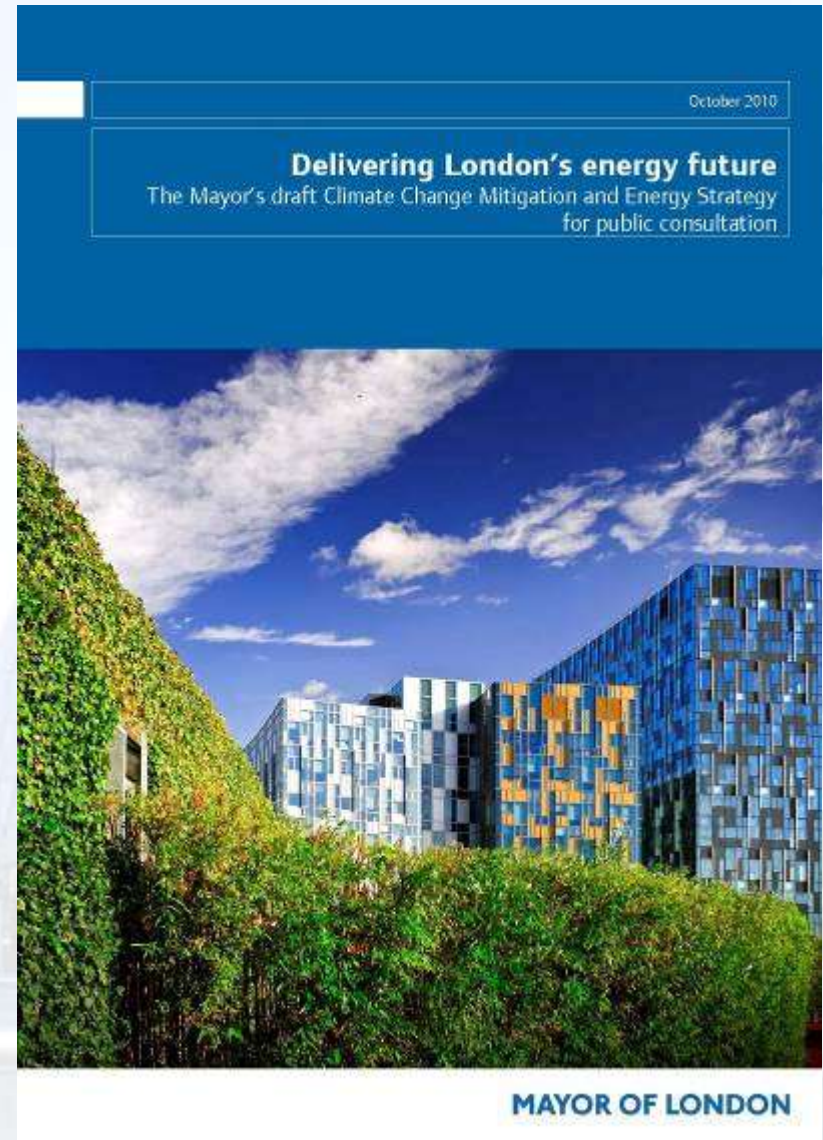
Climate Change Policy & Programmes Mgr

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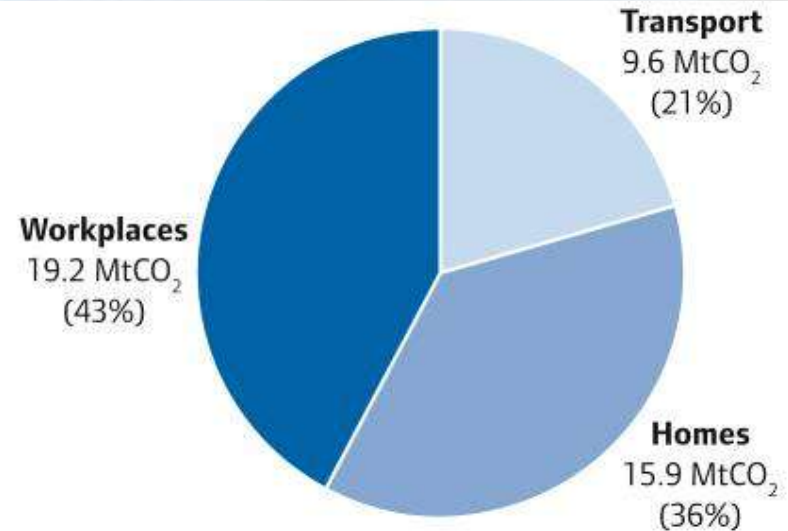
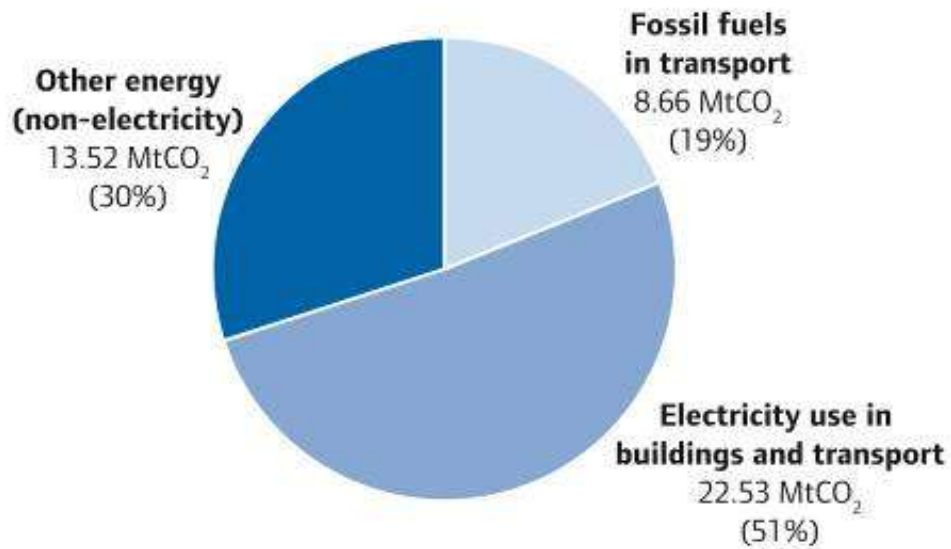
Overview

1. Summary of Mayor's approach to climate change and energy
2. London's climate change mitigation programmes



London's current CO₂ emissions

Total CO₂ emissions in London (2008) = 44.71 MtCO₂ per annum



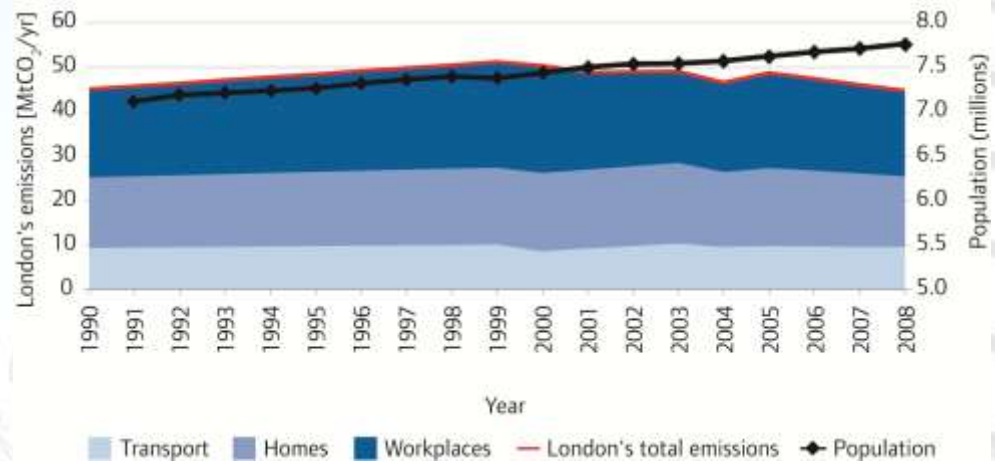
London's historical CO₂ emissions

Key historical drivers 1990 - 2000:

1. Growth of workplaces sector
 - steady growth in economic activity
2. Increase in population
 - increased CO₂ emissions in homes sector

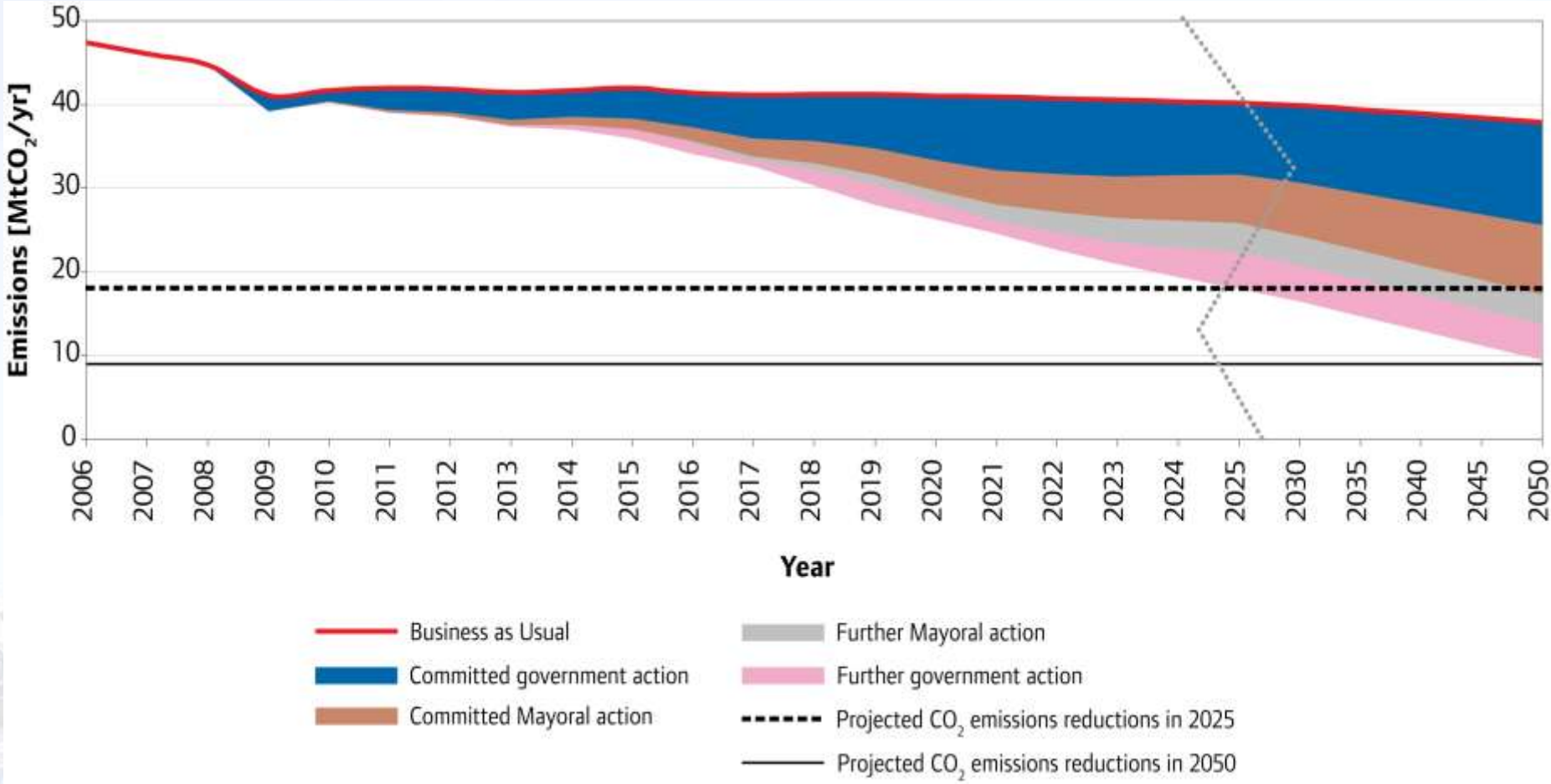
Key historical drivers 2000 - 2008:

1. Increase in London population of 10%
2. Decarbonisation of national grid energy supply (lower levels of coal use)
3. Growth of service sector over manufacturing



	1990	2008	% increase (1990-2008)
Homes	15.84	15.93	0.57%
Workplaces	19.74	19.17	-2.89%
Transport	9.52	9.61	0.95%
Total	45.1	44.71	-0.86%

Reducing London's CO₂ emissions



Objectives and targets

1. Mitigate climate change - Reduce London's CO₂ emissions by **60% of 1990 levels** by 2025
2. Secure a **low carbon energy supply** for London – Supply **25% of London's energy** from local sources by 2025
3. Maximise the **economic opportunities**
4. Meet, and where possible **exceed, national** climate change and energy objectives

	1990	2008	2015	2020	2025	2050
MtCO ₂ per year	45.01	44.71	36.13	28.12	17.69	9.01
% reduction on 1990 levels	n/a	n/a	20%	38%	60.7%	80%

Mayoral targets

CO₂ emissions in 2008 = 44.71 MtCO₂ per annum



Targets to reduce CO₂ emissions on 1990 levels
by.....

20% by 2015

38% by 2020

60% by 2025

80% by 2050

Approach

1. Sector by sector
2. Use public money to de-risk and attract private sector investment
3. Large scale programmes
4. Working with boroughs
5. Setting an example through the GLA group



Reducing emissions from London's homes

- 3.2 million homes in London by 2030 - 80% of existing stock still in use by 2050
- 70% of housing stock 'hard to treat'
- Disparate schemes and funding
- Higher delivery costs in London
- London's share of national retrofitting is low

Opportunities

- Savings of fuels bills
- New income streams



Reducing emissions from London's homes

RE:NEW

- Retrofit 200k homes with energy efficiency measures by 2012, 1.2 million by 2015
- All cavity walls and lofts insulated where practical by 2015
- A whole-house approach – free upfront
- Integrated with CERT and the Green Deal



RE:CONNECT

- 10 Low Carbon Zones
- Reducing CO₂ emissions by 20% by 2012



Reducing emissions from London's workplaces

RE:FIT

- Retrofitting public sector buildings
- Packages measures = shorter payback
- ESCo guarantees savings

The Green500

- Energy efficiency support and advice

The Better Buildings Partnership

- 14 of the largest commercial landlords
- Toolkits: e.g. Green Lease



Reducing emissions from London's new buildings

Draft replacement London Plan targets

Year	Improvement on 2006 Building Regulations*
2010 - 2013	44 per cent
2013 - 2016	55 per cent
2016 - 2031	Zero carbon

Residential

Year	Improvement on 2006 Building Regulations**
2010 - 2013	44 per cent
2013 - 2016	55 per cent
2016 - 2019	As per new building regulations requirements (expected in 2014)
2019 - 2031	Zero carbon

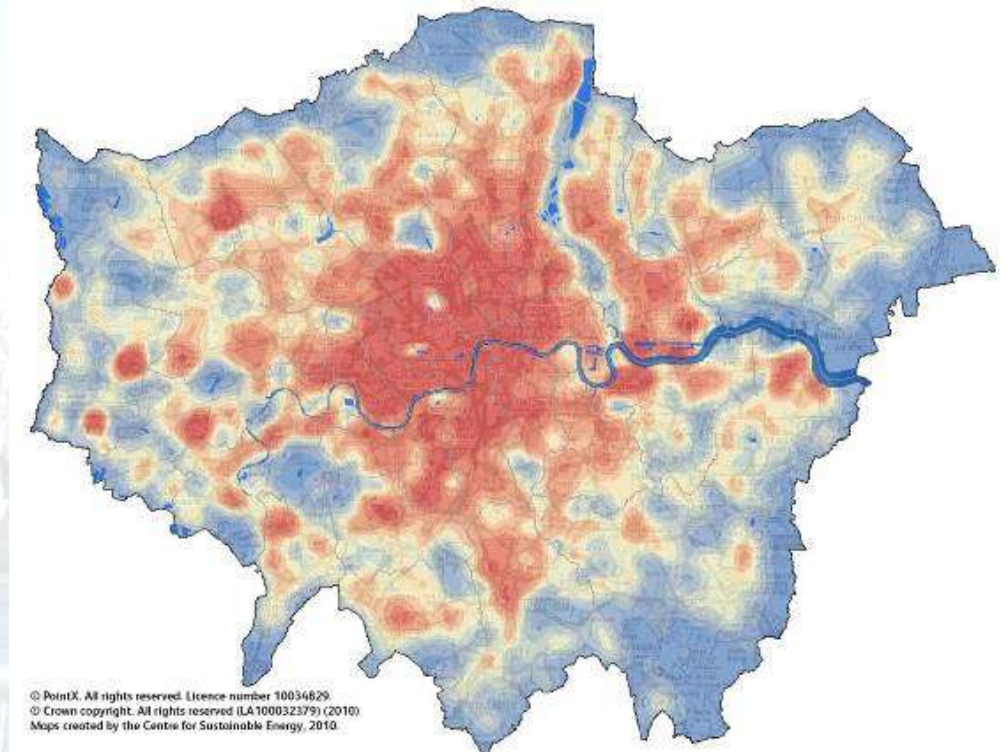
Non-residential



Reducing emissions from London's energy supply

Aim: **Supply 25% of London's energy from decentralised energy sources by 2025**

- London Heat Map
- Co-development of exemplar decentralised energy projects
- The Decentralised Energy Masterplanning Programme
- The London Plan



Moving towards zero emissions transport in London

Create a cycling revolution in London

- Central London cycle hire scheme
- Cycle Superhighways

Make walking count

- Improving the urban realm
- Improving on-street way-finding, and route planning facilities for pedestrians

Encourage the uptake of less polluting vehicles

- Aim of 100,000 electric vehicles on London's roads by 2020
- **Source London:** Launched May 2011 with 1300 new charge points in next 18 months

All new buses introduced to the London bus fleet low carbon by 2012



Financing the programmes

London Green Fund

- Independently managed Urban Development Funds – investing in energy efficiency, waste and decentralised energy
- £100m+ London Energy Efficiency Fund – managed by Amber Green Consortium
- www.leef.co.uk

Attracting national funding streams

- Feed in Tariff (FiT)
- Accessing future funding streams (e.g. Green Deal, Renewable Heat Incentive)



Challenges

- Unprecedented levels of funding
- National policy barriers still a challenge
- Much stronger emphasis on ‘creative partnerships’ and leverage
- “Valley of death”
- Pace continues to be huge issue



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