

# Leading to a Greener London

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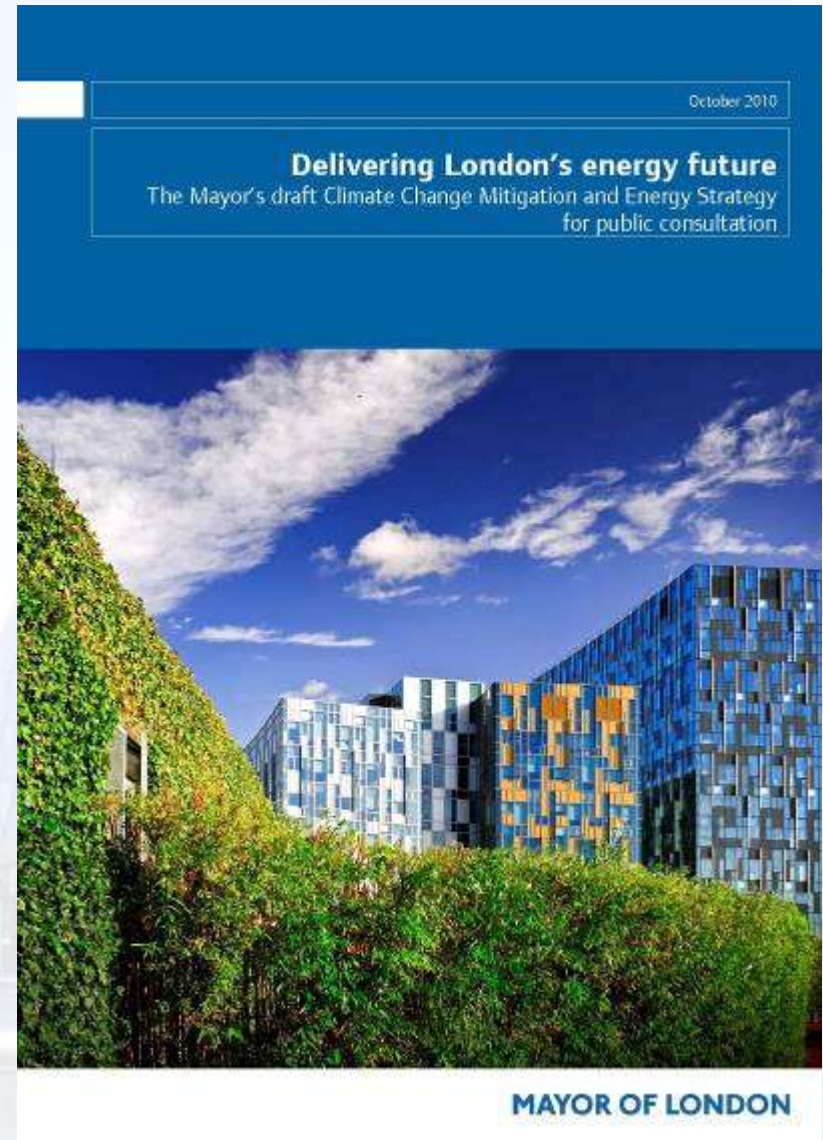
Climate Change Policy & Programmes Mgr

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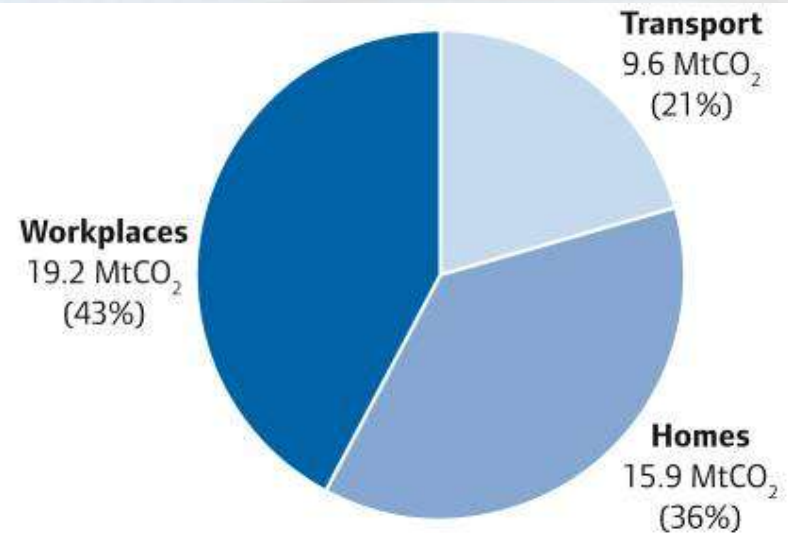
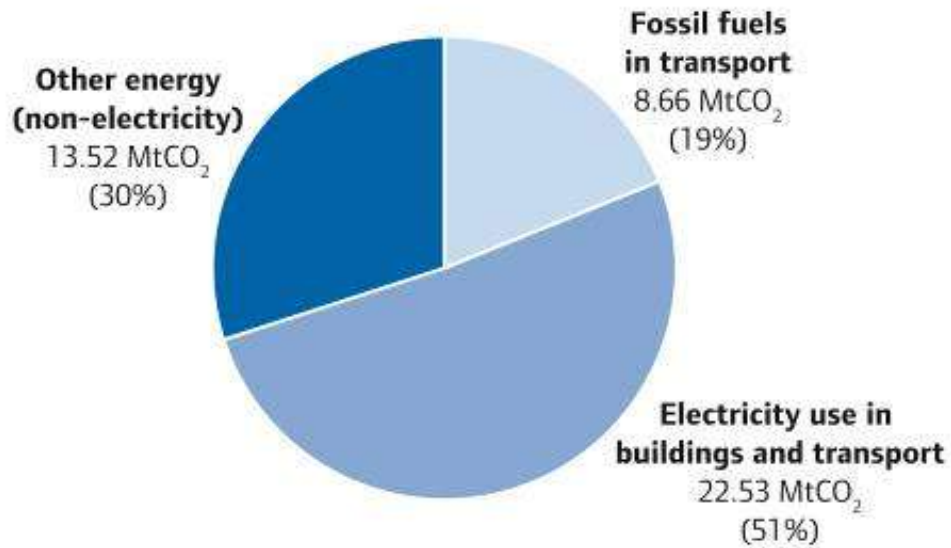
# Overview

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



# London's current CO<sub>2</sub> emissions

Total CO<sub>2</sub> emissions in London (2008) = 44.71 MtCO<sub>2</sub> per annum



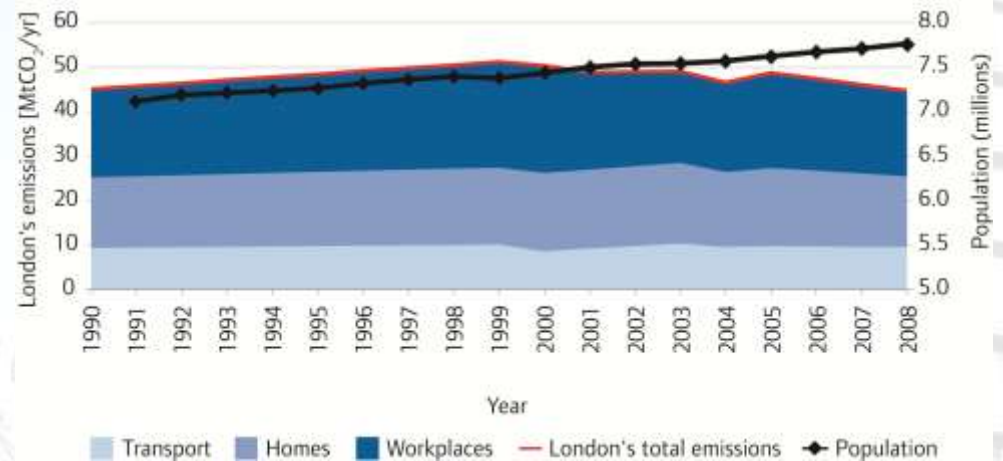
# London's historical CO<sub>2</sub> emissions

## Key historical drivers 1990 - 2000:

1. Growth of workplaces sector
  - steady growth in economic activity
2. Increase in population
  - increased CO<sub>2</sub> emissions in homes sector

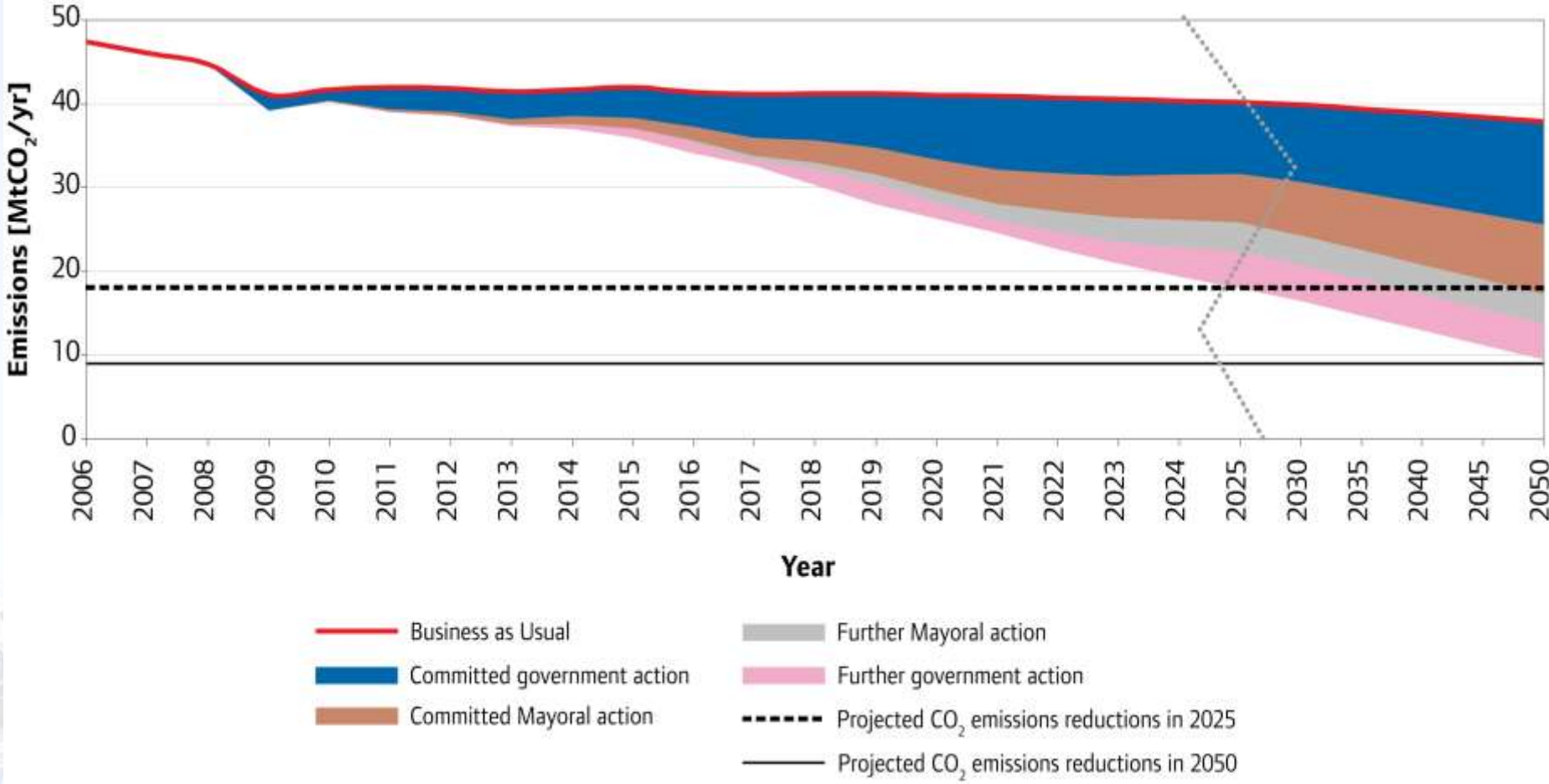
## Key historical drivers 2000 - 2008:

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%
<b>Total</b>	<b>45.1</b>	<b>44.71</b>	<b>-0.86%</b>

# Reducing London's CO<sub>2</sub> emissions



# Objectives and targets

1. Mitigate climate change - Reduce London's CO<sub>2</sub> 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 <sub>2</sub> 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

CO<sub>2</sub> emissions in 2008 = 44.71 MtCO<sub>2</sub> per annum



Targets to reduce CO<sub>2</sub> 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 CO<sub>2</sub> 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

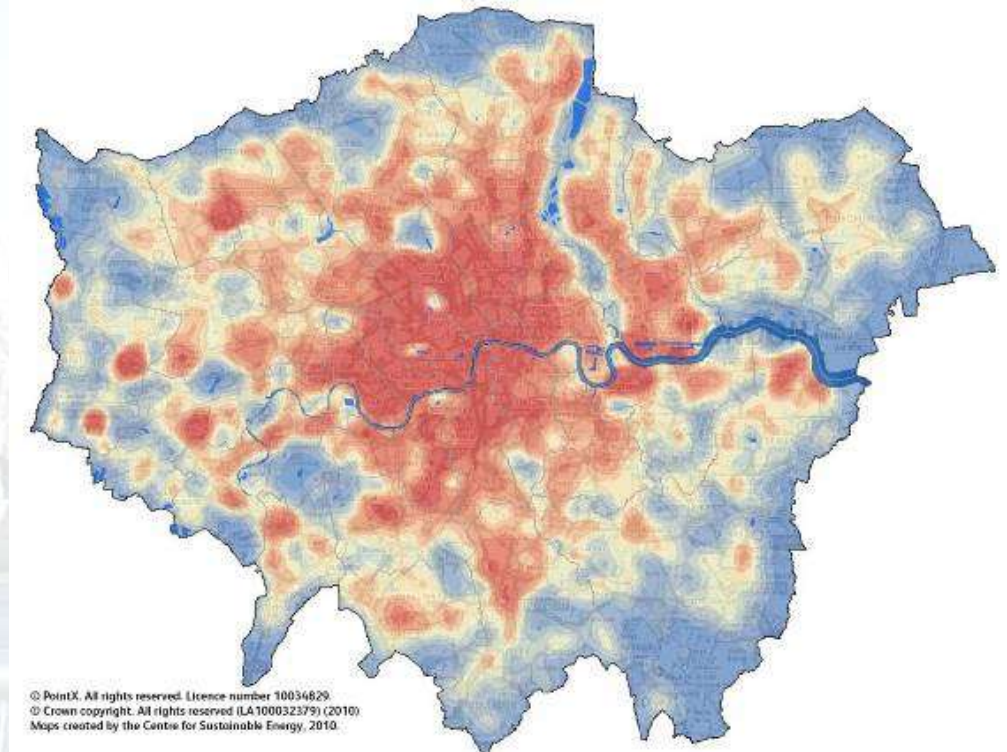
Non-residential



# 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](http://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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