

Leading to a Greener London

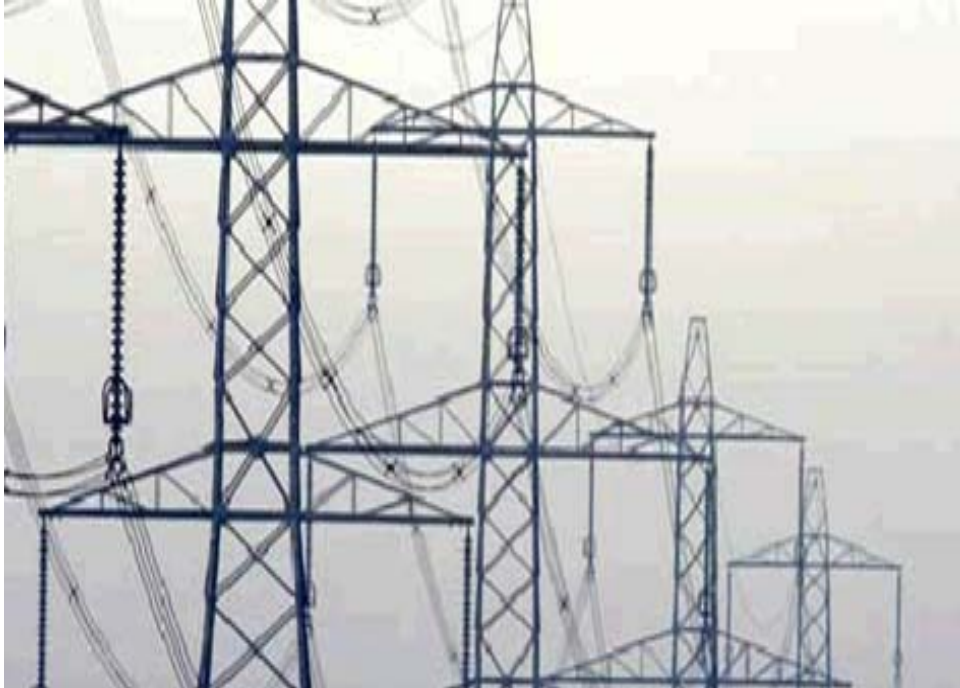
Isabel Dedring

Mayor's Environment Advisor

February 2010

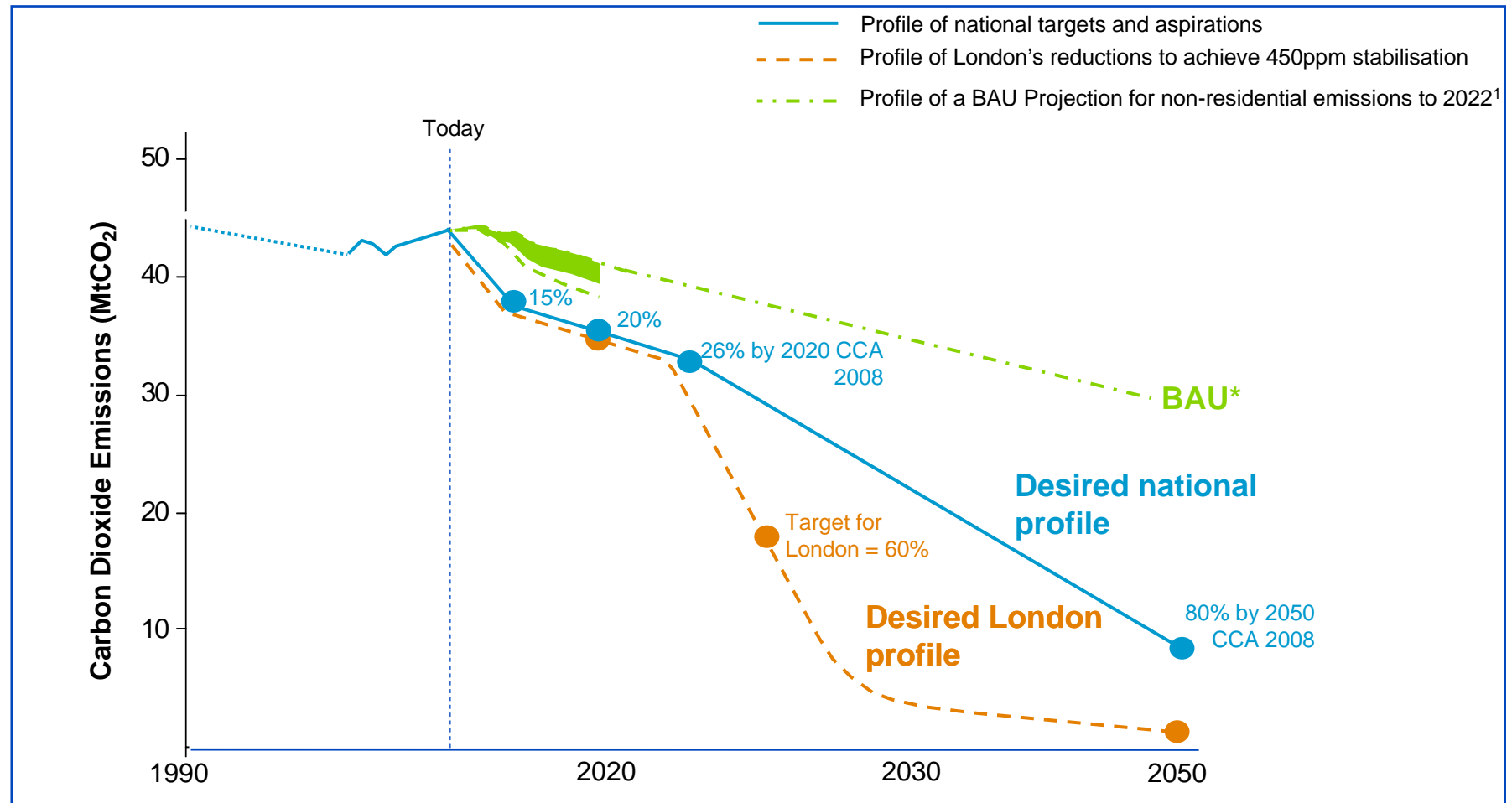








London's carbon budget



Other reasons

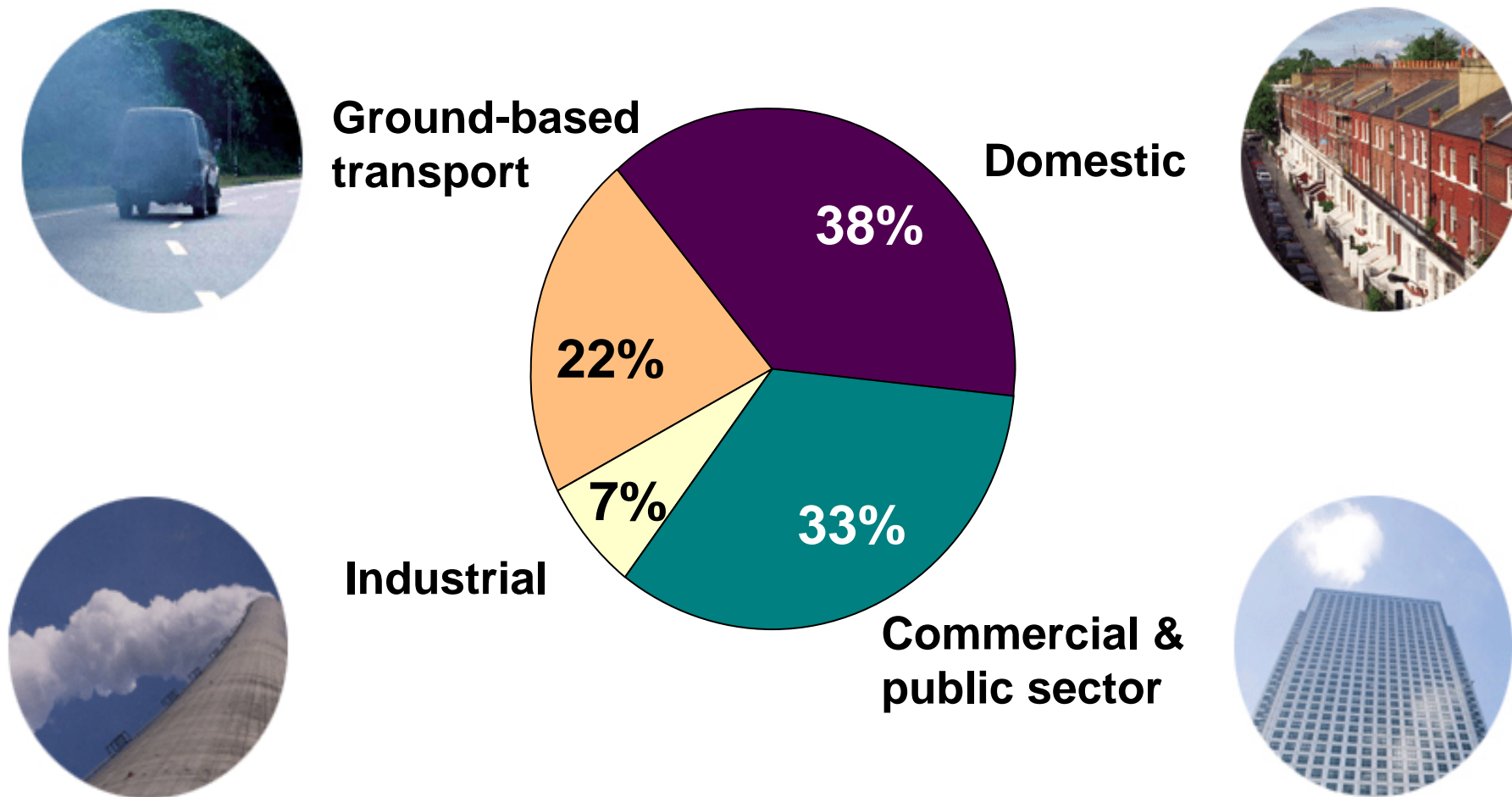
- Energy context
- Fuel poverty – 10% vs 25%
- Air pollution – 1/3 of NO₂
- Waste context – 20m (4m) tonnes, 50% landfilled
- Jobs – 10-15,000
- Economic growth – £3.7b GVA



London is

- Nearly 8m people
- Over 3m homes
- £12b energy bill each year
- 27m trips a day
- Over 2m registered cars
- Nearly 300,000 businesses

45 million tonnes of CO₂

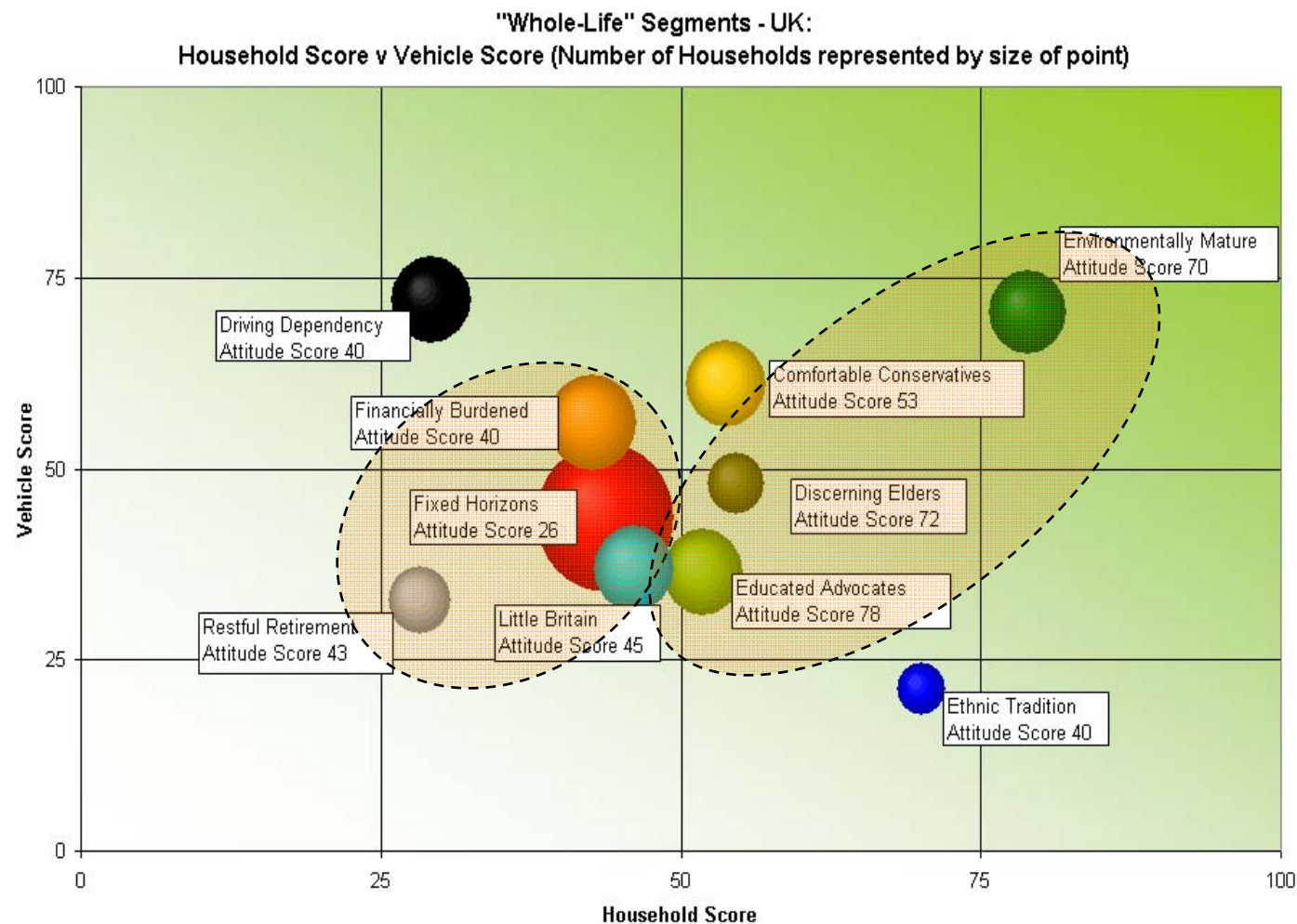


General approach

- Practical programmes that deliver
- At scale and pace
- Unprecedented level of resource from GLA (£100m over first 3 years)
- Hassle free
- Up front free
- “Stop overdosing on gloom”

Perception vs reality

Axes show 0 = least energy intensive, 100 = most energy intensive (Source: EST)





Potters Fields - Before



Potters Fields - After

Four ways Mayor and GLA can act

Decreasing influence of GLA group but increasing impact of interventions



Key programmes

**Building energy efficiency
(75% of today's emissions)**

**Low-carbon energy supply
(50% of the CO2 opportunity)**

**Moving towards zero-emission
transport**

Key programmes

**Building energy efficiency
(75% of today's emissions)**

1. Homes programme
2. Public sector buildings programme
3. Private sector engagement

**Low-carbon energy supply
(50% of the CO2 opportunity)**

4. Decentralised energy
5. 'Banning the word waste'

**Moving towards zero-emission
transport**

6. Supporting mode shift
7. Low-carbon vehicle technologies
8. Efficient transport operations

Homes

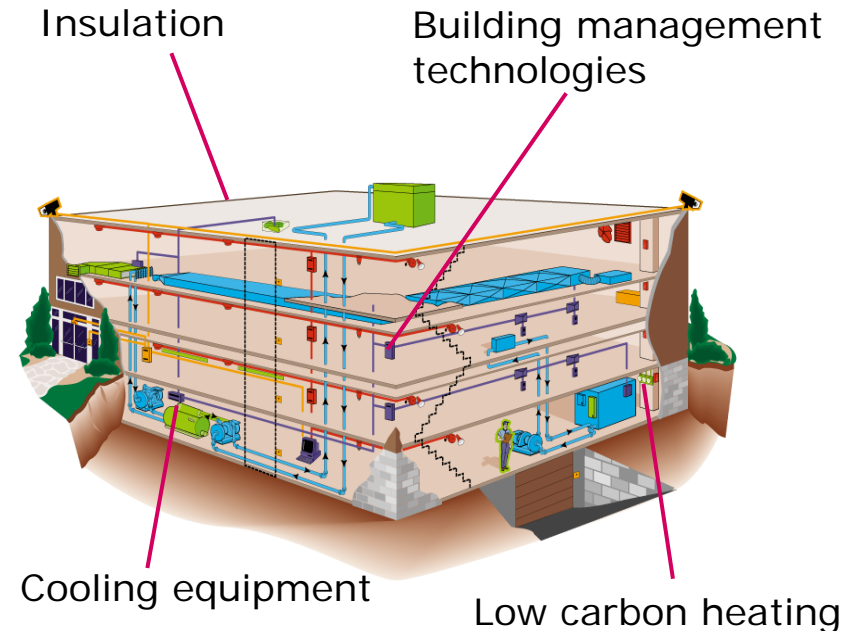
- Largest ever London homes retrofit programme
- Pilots completed, 10,000 home demonstration underway
- Will do 200,000 homes in next 12-18 months; target of 1.2m homes by 2015
- Just under 1 t CO₂/home saved (~10-20%)
- Area-based, door to door approach
- 'Man with van' installs '10 easy measures' and books in for loft and cavity if appropriate
- Covers water efficiency, smoke alarm, benefits check
- Joint with EST, London Councils

Building Energy Efficiency Programme

- ***A cost neutral means to reduce energy bills and carbon footprint of your buildings***

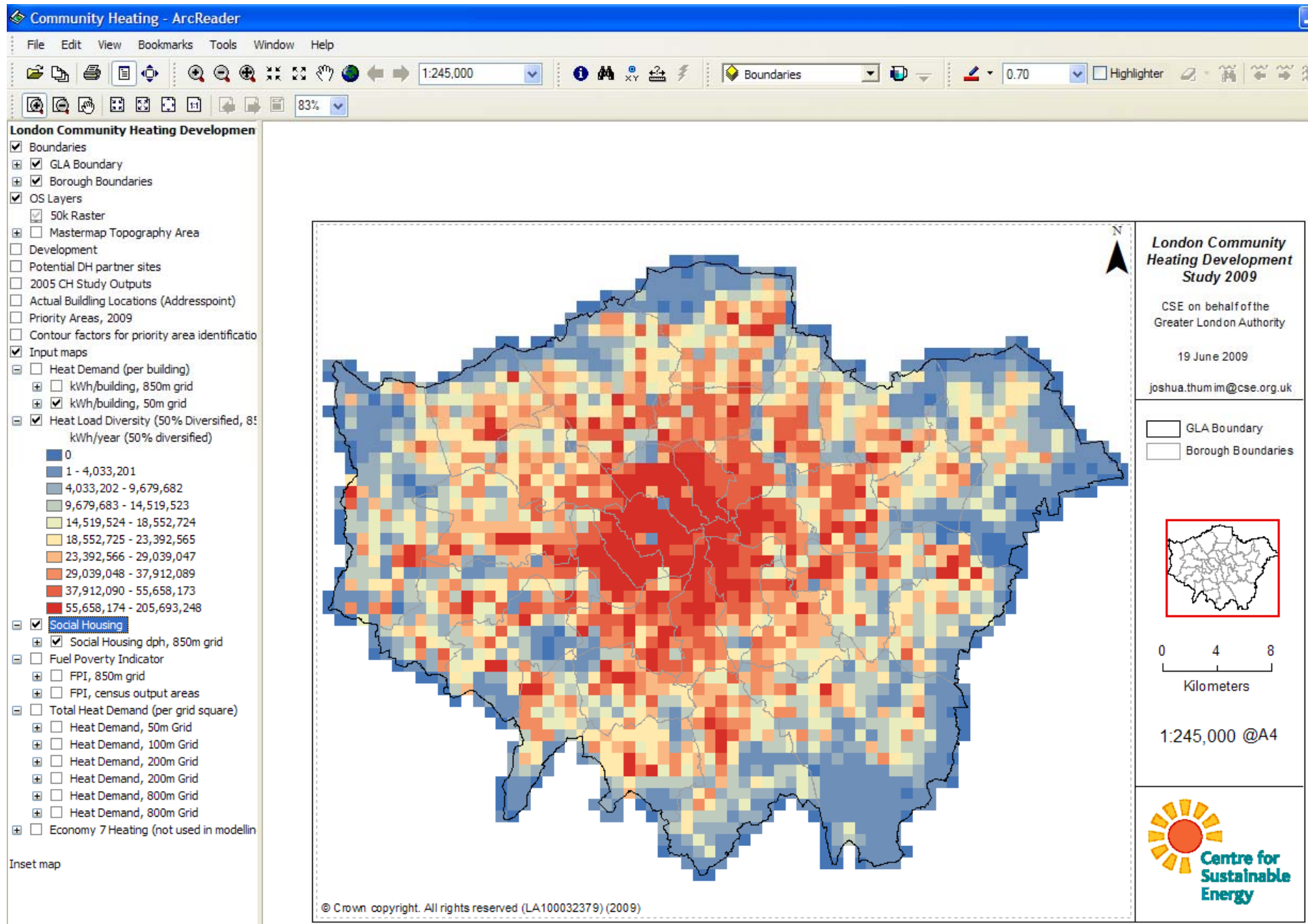
- **Energy service companies (ESCOs)** guarantee a set level of energy savings - therefore financial saving - over a period of years

- **This guarantees a future income stream** to fund investment in improvements

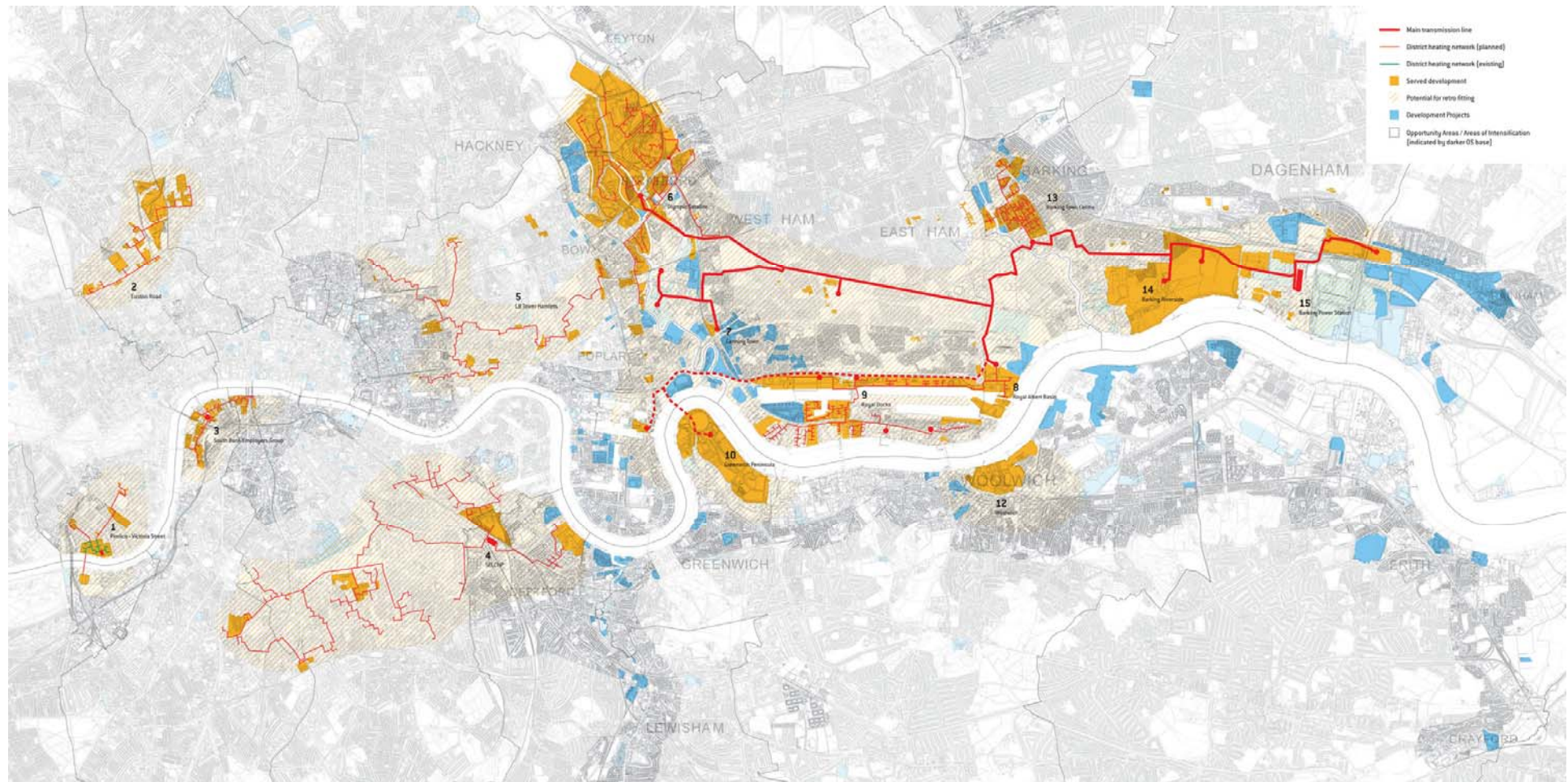


- ***If all municipal buildings, schools, universities and hospitals were retrofitted, could save 1m tonnes CO2 and represents 2% of London's CO2 emissions***





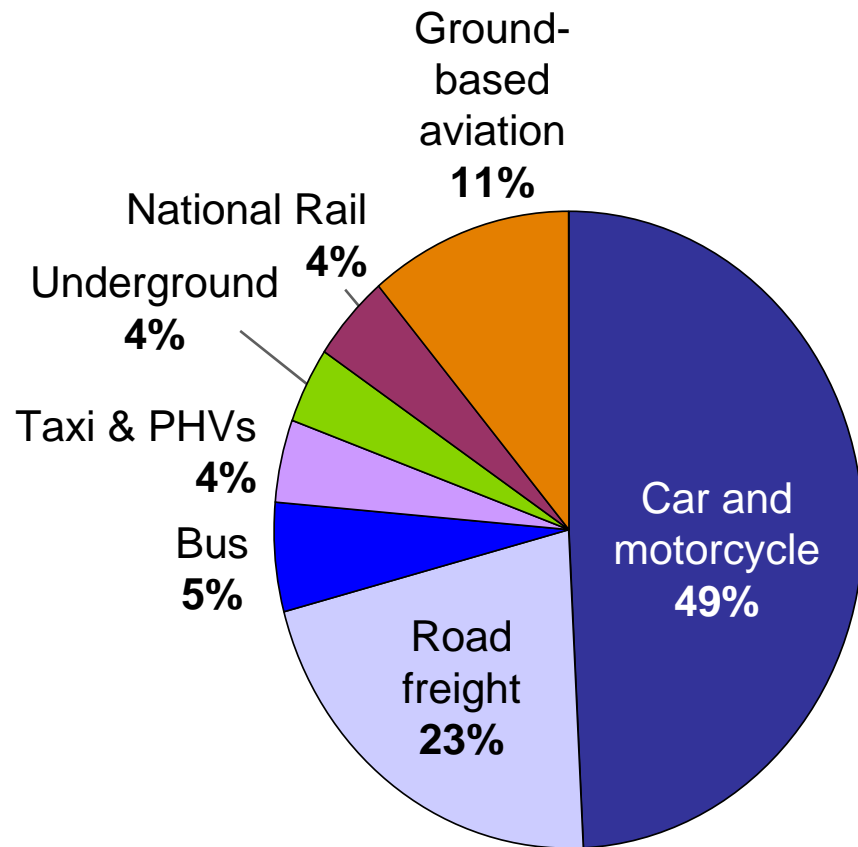
London Thames Gateway Heat Network



Waste as a resource

- 'Banning the word waste'
- Roughly £2b of London's £12b energy bill could be provided through energy recovery from waste
- London Waste and Recycling Board: £84m over 3 years
- Current performance poor
- Fragmentation and planning are big challenges
- Just issued Municipal Waste Strategy

London's transport emissions



Three quarters of emissions are from road transport

If everyone drove the most fuel efficient vehicle in their class, we would reduce car emissions by 1/3

Transport



- 'Cycling revolution'
- Hybrid buses
- LED traffic light conversion
- Underground green electricity procurement

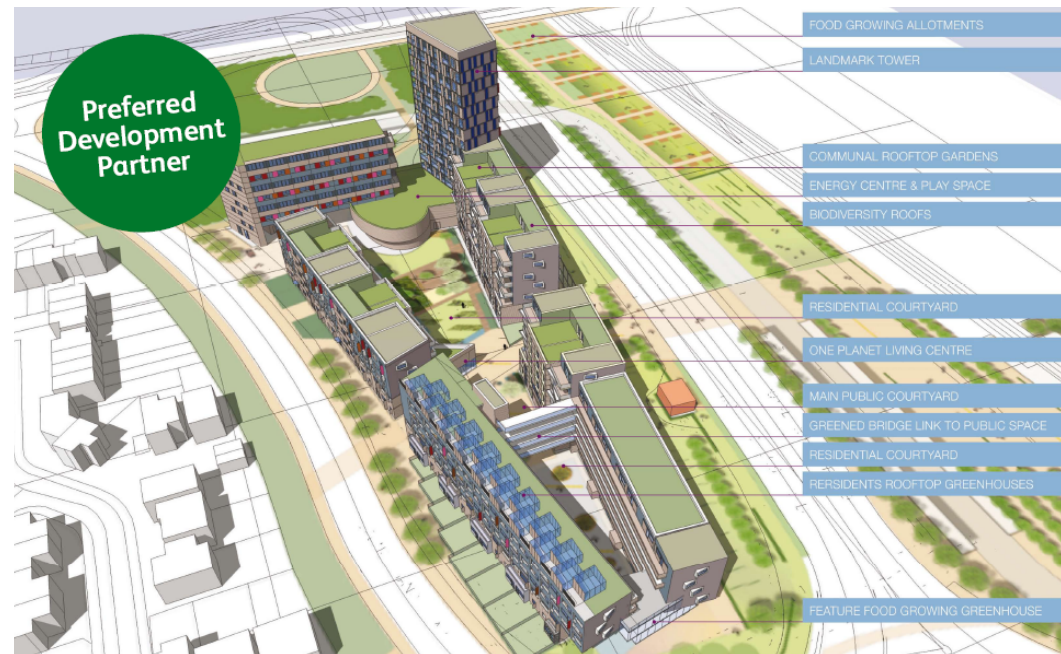
- 1,000 EV's in GLA own fleet
- £20m commitment to EV rollout, including pan-London brand and charging platform starting this year
- 100,000 EV's in London by 2020

Adaptation

- ‘100 years away’ issue?
- Linking it to London’s extreme weather experiences today
- Measures include
 - 10% target for Central London
 - Target of 2m new trees
 - Green Roof Fund
 - Neighbourhood Flood Plans



New Build

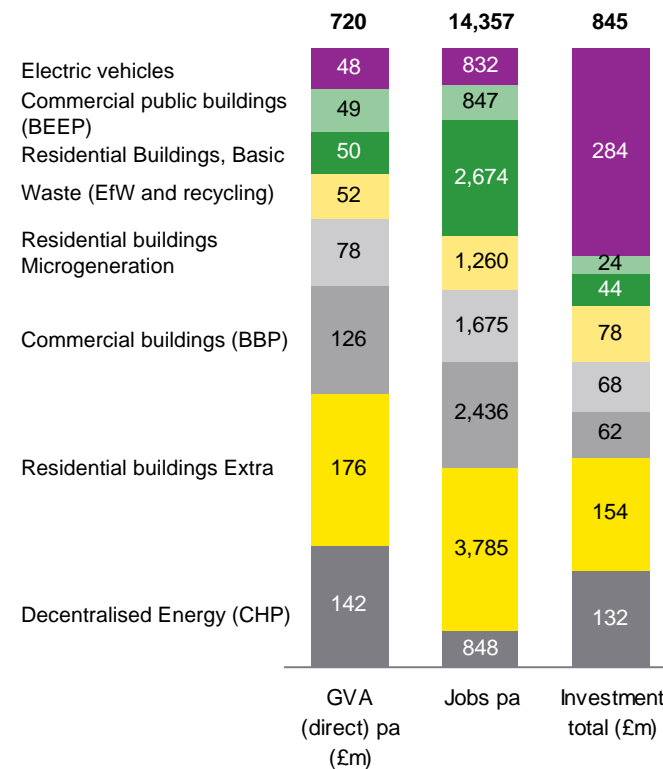


Zero carbon development



Low-carbon economy

- 10-15,000 jobs; £600-700m GVA pa; most jobs from retrofit
- London USP
 - financial & business services,
 - Academia
 - VC, cleantech activity
 - Scale
- Olympic opportunities including Green Enterprise District



How can we pay for this?

- Unprecedented levels of funding, and with much greater leverage already in place
- Pace, piecemeal approach and planning still huge issues
- ~£60b to 'retrofit London'
- Virtually all has commercial payback
- So has to be about leverage, not about lots more public money

An aerial night view of a city skyline, likely Chicago, featuring prominent skyscrapers like the Willis Tower and the Trump Tower. The city is illuminated with various lights, and the sky is a deep blue. The text is overlaid on a semi-transparent dark band across the middle of the image.

50 % of the world's population lives in cities

75% of the world's energy is consumed by cities

80% of the world's GHG are emitted by cities

www.london.gov.uk



MAYOR OF LONDON