

The New Urban Agenda

London's Environment and Development Strategies

Hamburg, December 2010



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Director, Design, Development and Environment
London Development Agency

By 2050 75% of the world's population will live in cities.



Cities are
thrilling, exciting,
creative, liberating,
cruel and inhuman



What kind of city do we want?



Successful cities
only need to solve
5 issues

1. Social Cohesion
2. Housing
3. Transport
4. Environmental impact
5. Quality of life

Paraisópolis Favela, São Paulo

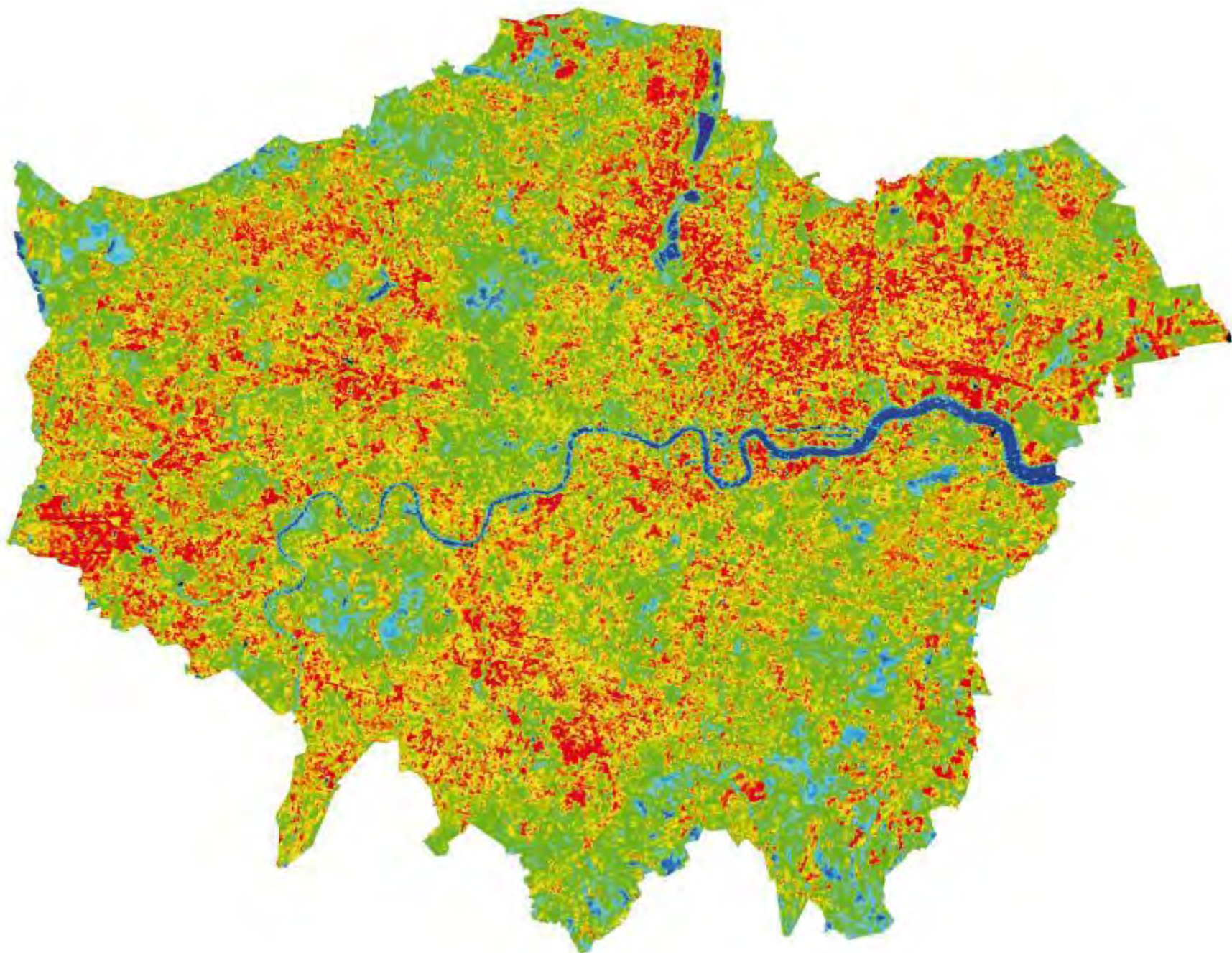


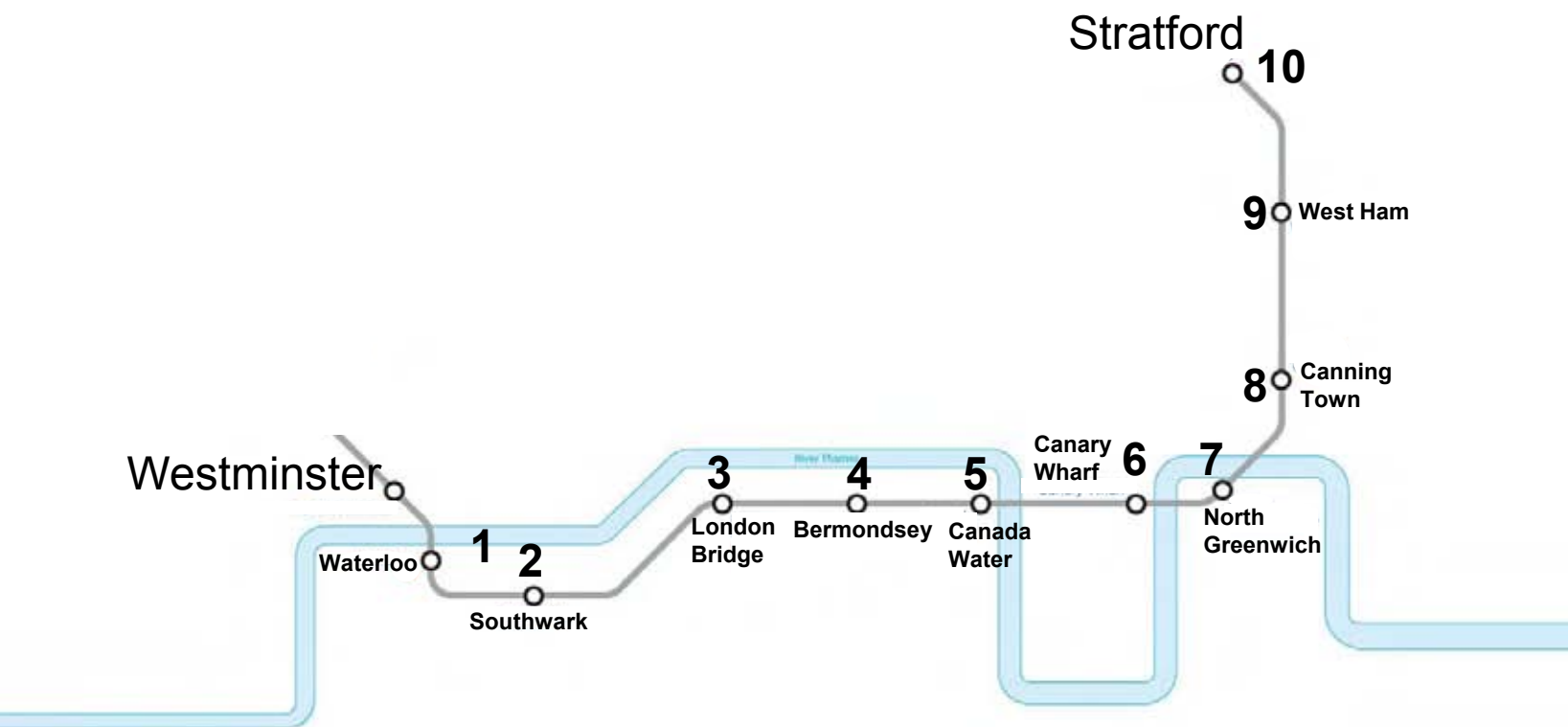




The future city of the past - post war rebuilt Birmingham 1960s







HEALTH INEQUALITY

London Development Agency

London: New Urban Agenda

Good
Housing

TOIN YRP

SMASH

TOIN YRP

HAZI







London Housing Design Guide

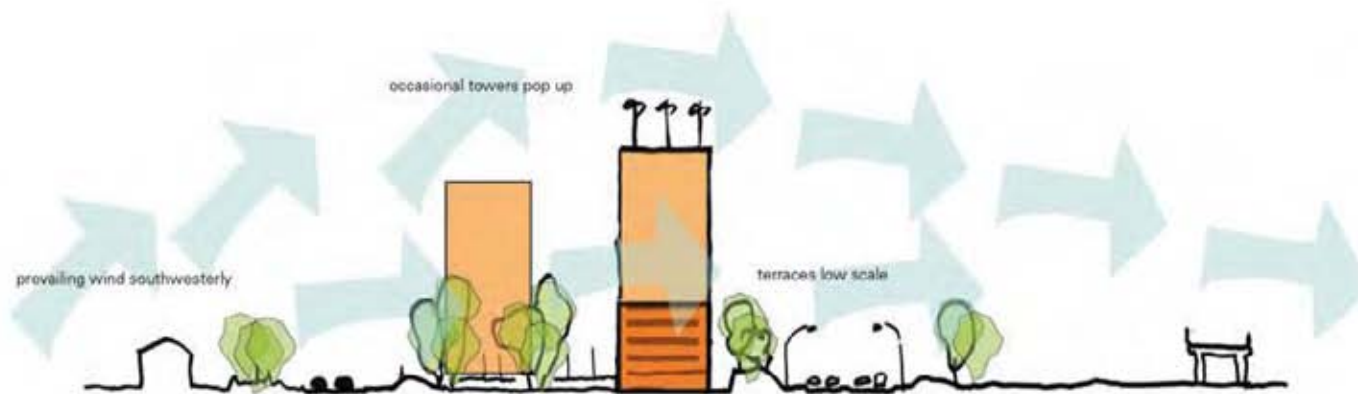
Draft for Consultation

MAYOR OF LONDON

Housing & LDA land







Quiet Revolution

Wind & Renewables

The strategy of towers punctuating the sky in an irregular fashion, therefore creating no grand barriers to the dominant south-westerly winds should be maintained. Consideration of the existing neighbouring scale of the Cyprus developments to the west should be included when designing with wind in mind. Strategic landscape moves on the site should prevent exposure to chilling north easterly winds.

The use of building integrated renewables is encouraged. Suggested facade integrated photovoltaics are illustrated.



Brown Roof



Integrated PV, Newham- Grassroots



Integrated PV, Bow Zed



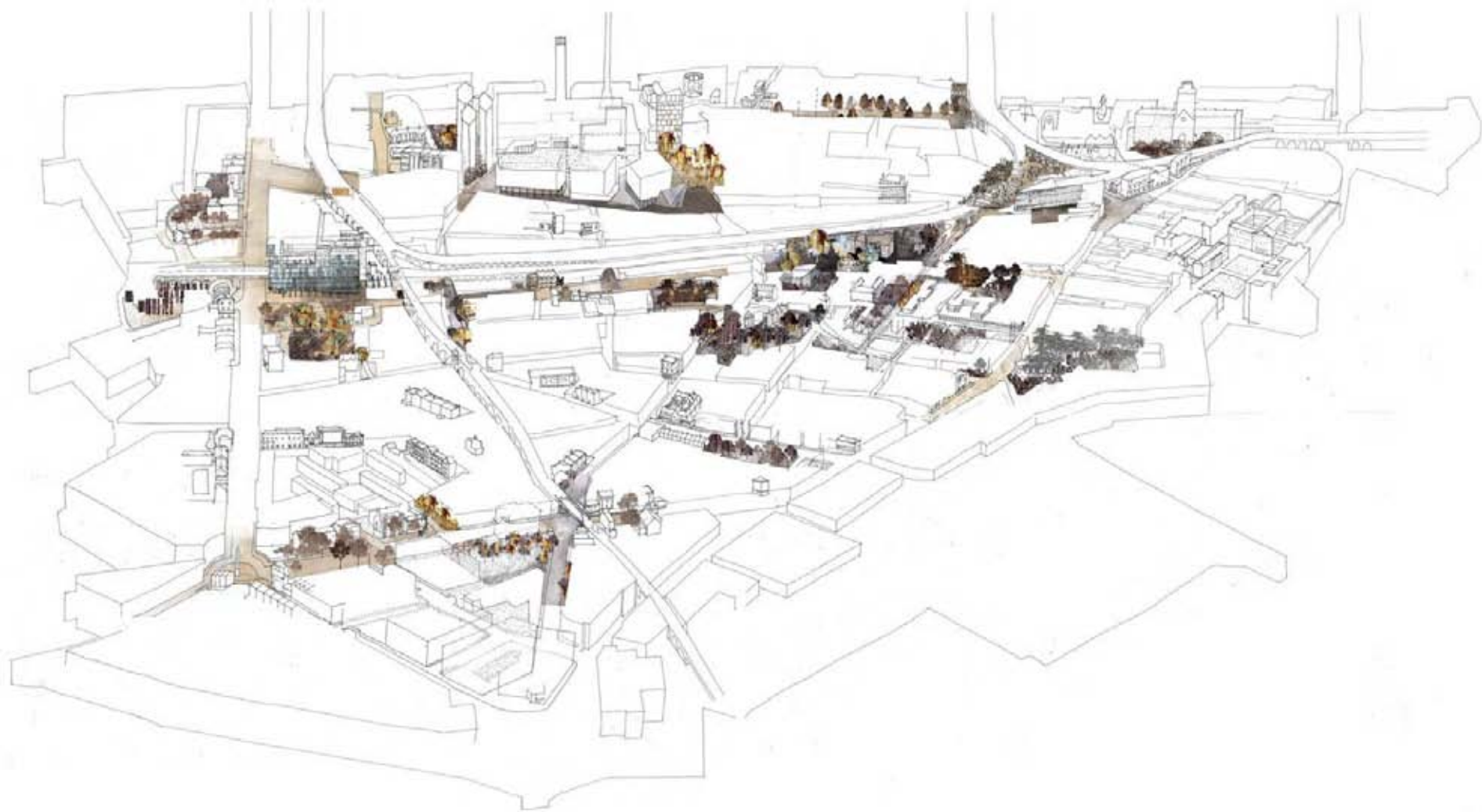
Integrated PV facade, Park Lane



Building Neighbourhoods









4 tate modern
playground



5 new uses within
viaducts



1 planted arch



2 flat iron square



3 redcross way

KEY

Projects



First forest



Projects already proposed



Potential project areas

----- urban interior

numbered images show illustrative
projects on pp28-48



Informal community engagement



new semi-mature plane trees

southwark bridge road

new surface, possibly of porphyry
setts and pre-cast slabs or stones
to reclaimed road surface


union street →

new semi-mature plane trees







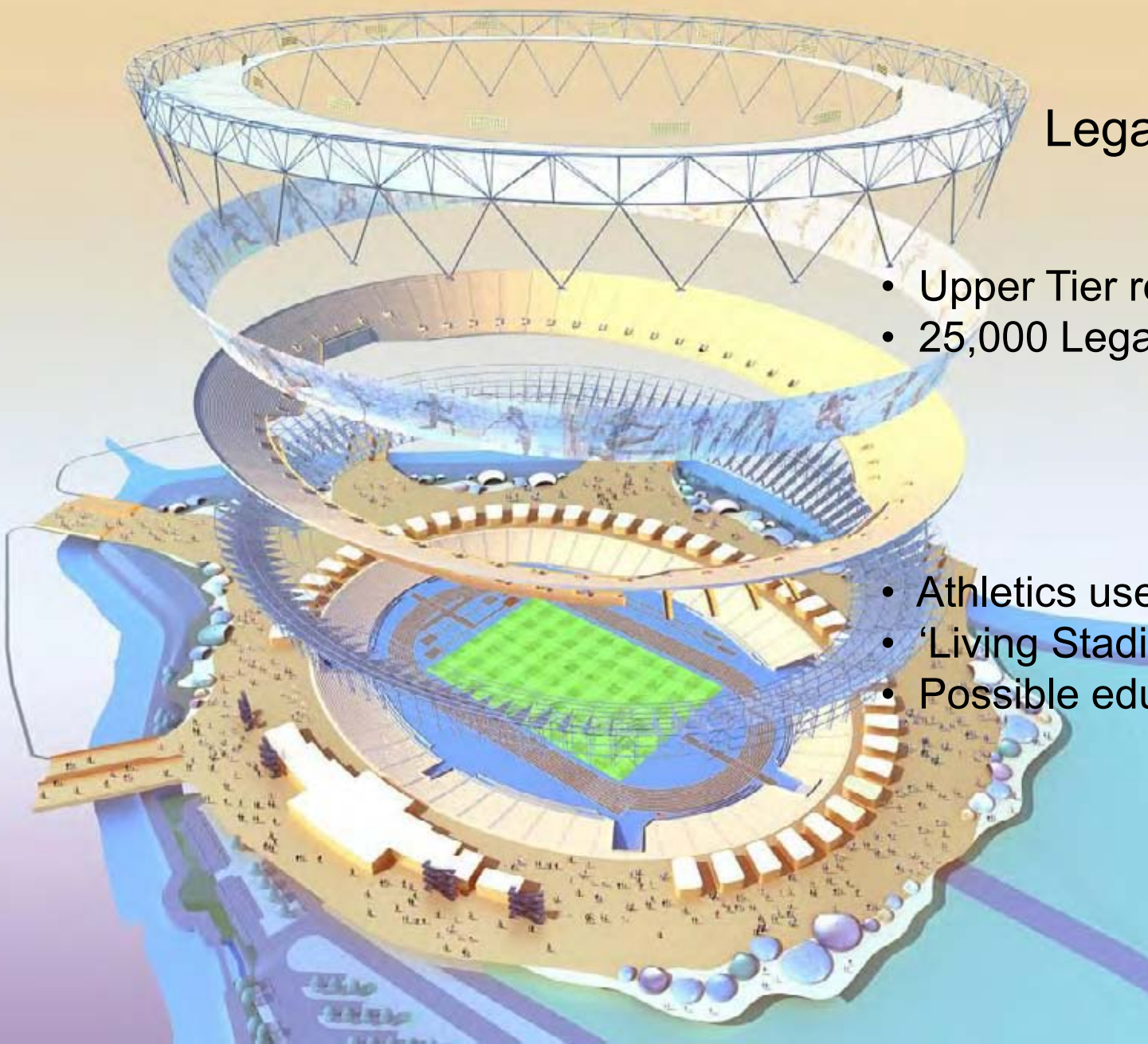


1. Olympic Stadium

- 80,000 capacity for Games
- Olympic Track & Field events
- Paralympic Track & Field events

‘Team Stadium’ consortium

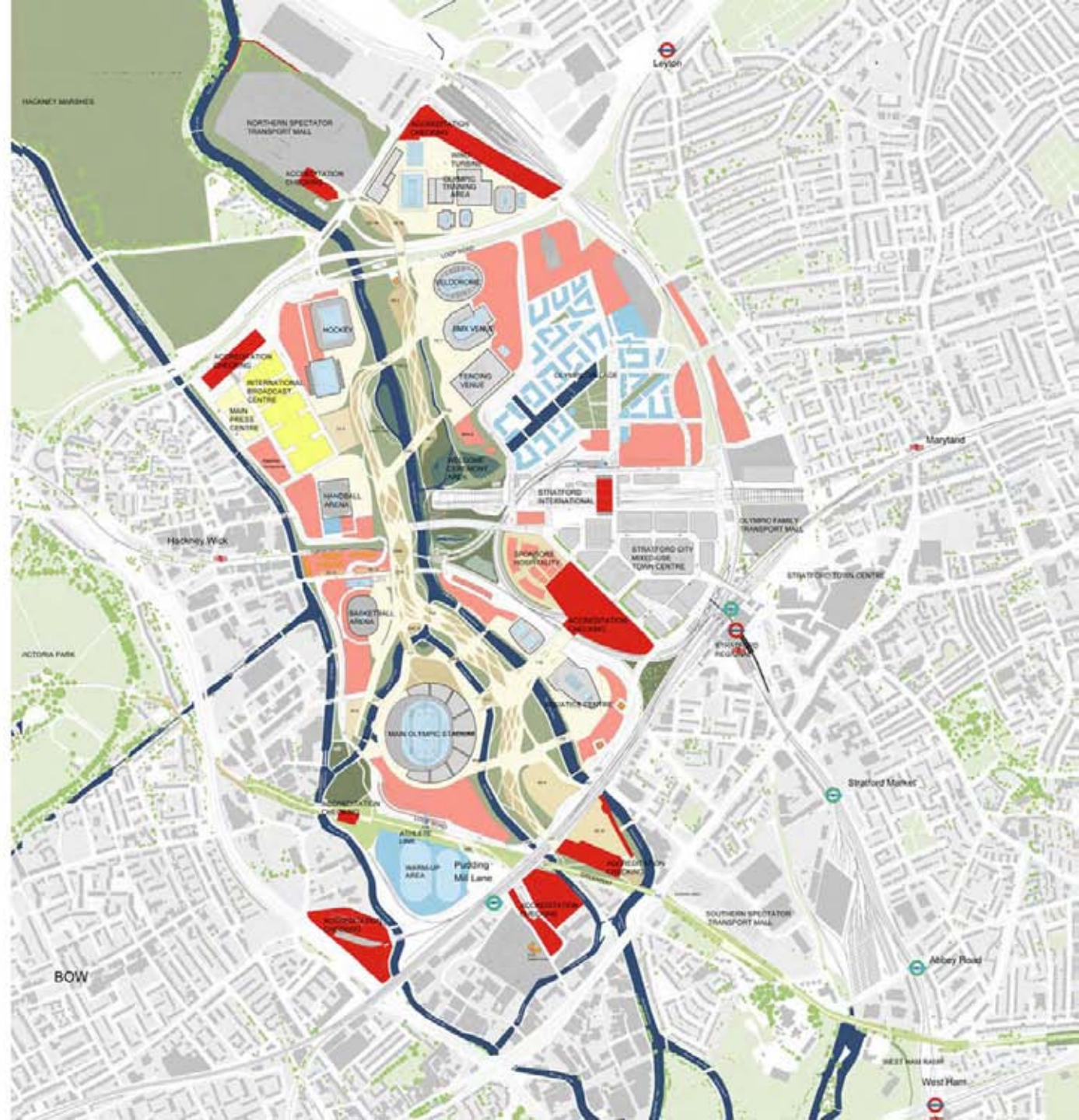
- Construction started May 2008
- Completion 2011



Legacy Stadium

- Upper Tier removed (55,000)
- 25,000 Legacy Capacity

- Athletics use in legacy
- 'Living Stadium'
- Possible education tenants



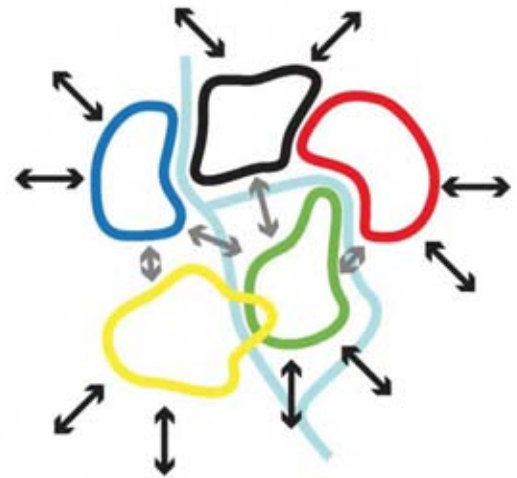
Olympics - 2012



Transition: 2012-14







The memory of the Games?

The need for targeted intervention



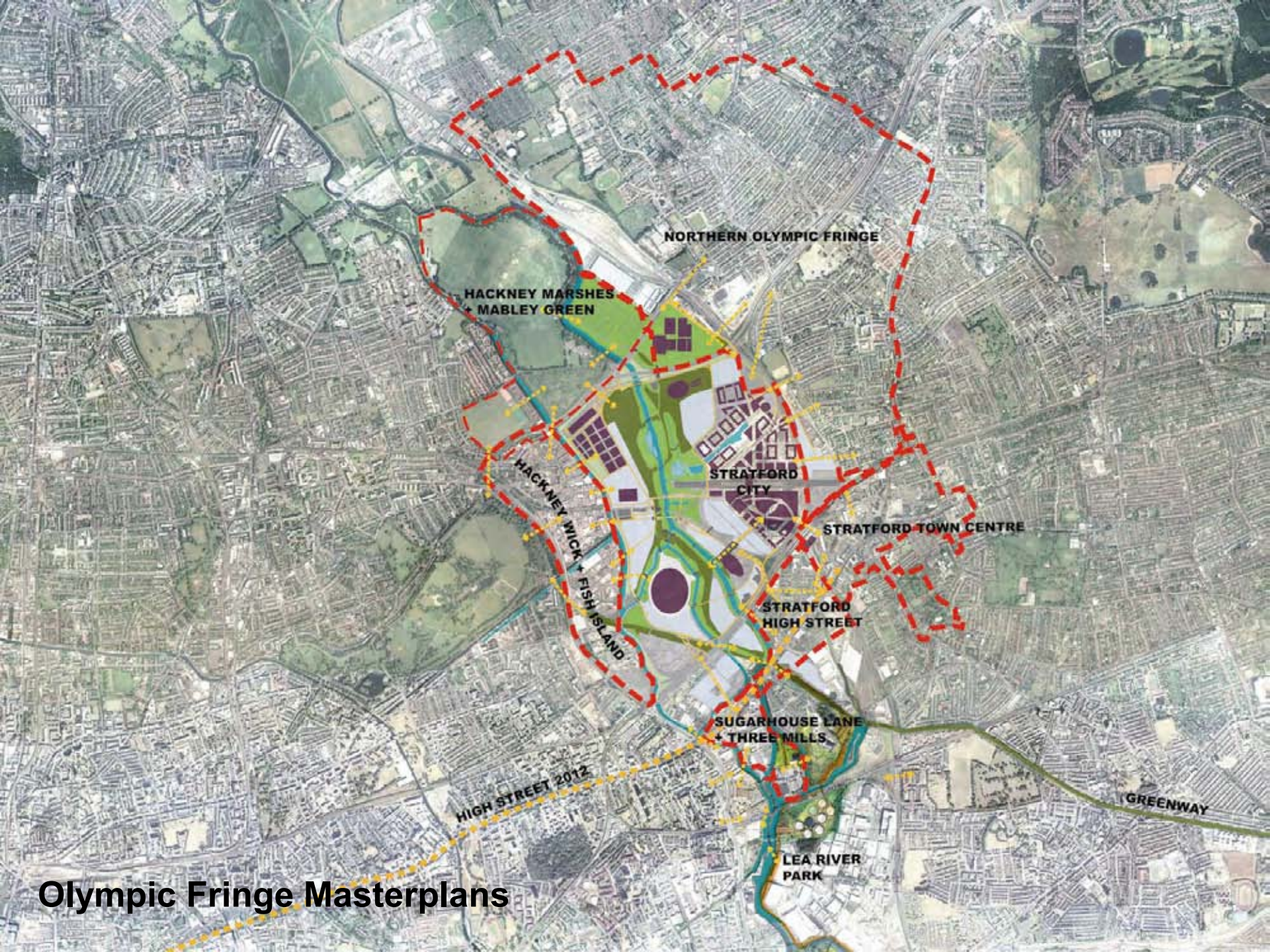
Canary Wharf: Cut off from the communities on its doorstep

Places and Spaces: London's Olympic Legacy



Eleanor Fawcett, Design for London

30 October 2008



NORTHERN OLYMPIC FRINGE

HACKNEY MARSHES
+ MABLEY GREEN

HACKNEY WICK
+ FISH ISLAND

STRATFORD
CITY

STRATFORD TOWN CENTRE

STRATFORD
HIGH STREET

SUGARHOUSE LANE
+ THREE MILLS

LEA RIVER
PARK

GREENWAY

HIGH STREET 2012

Olympic Fringe Masterplans



We estimate the Fringe areas could deliver approx 15,000 new homes and 10,000 jobs.

This is about the same number as the Olympic Legacy and Stratford City will deliver.

Overall there could be up to

70,000

new residents

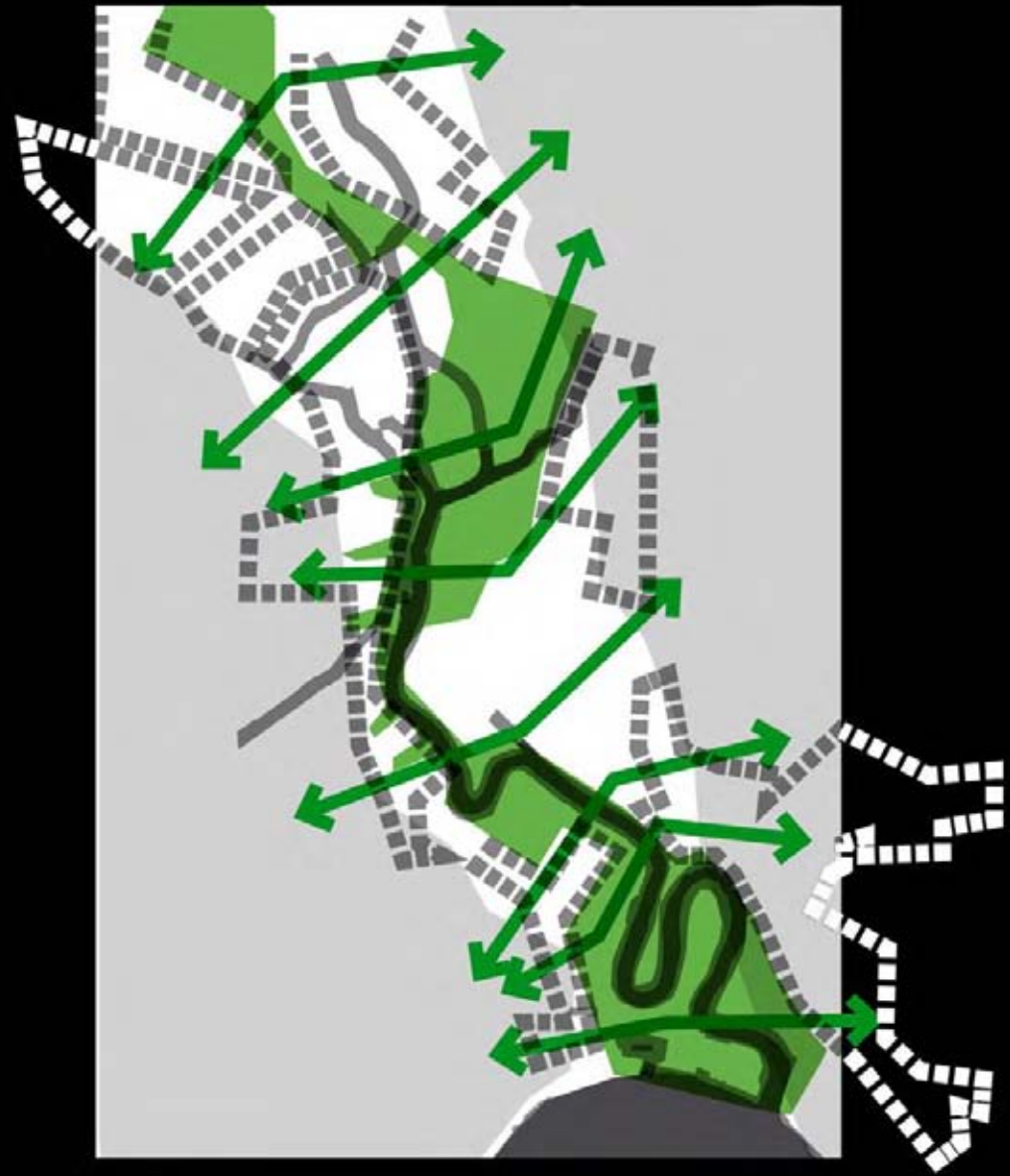
‘Olympic Fringe’



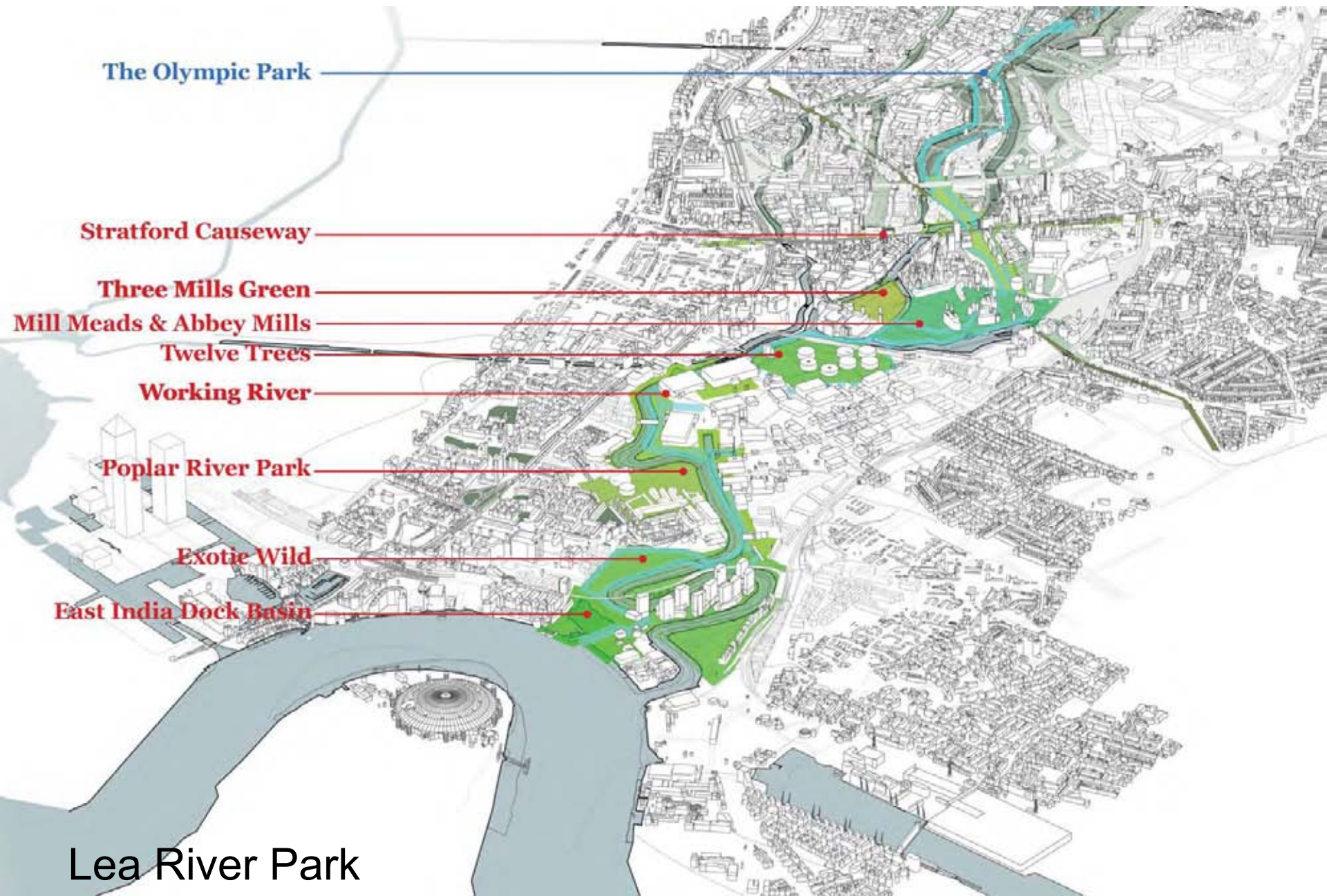
6 key themes from the LLVM OAPF



N-S recreational links



E-W community links



The Olympic Park

Stratford Causeway

Three Mills Green

Mill Meads & Abbey Mills

Twelve Trees

Working River

Poplar River Park

Exotic Wild

East India Dock Basin

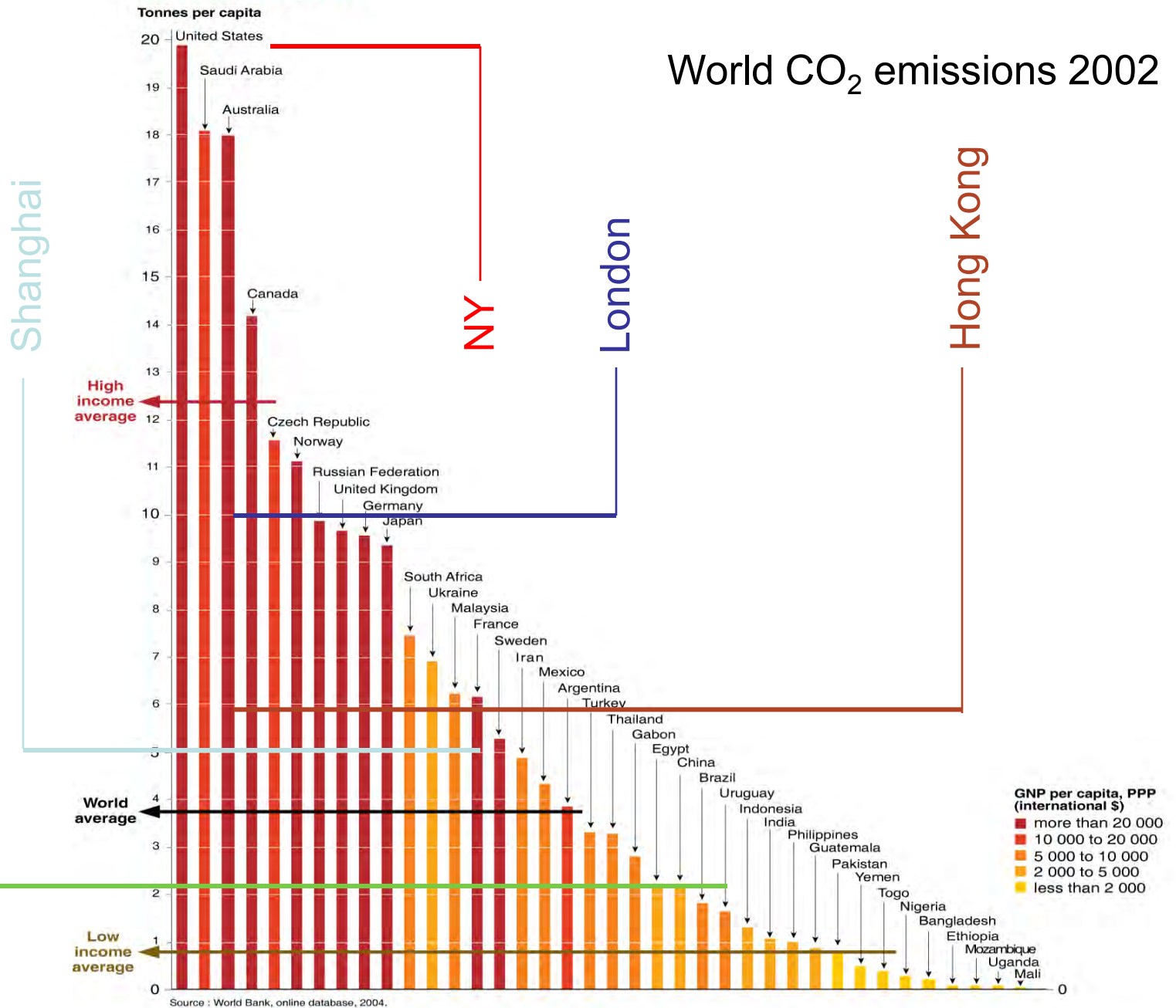
Lea River Park

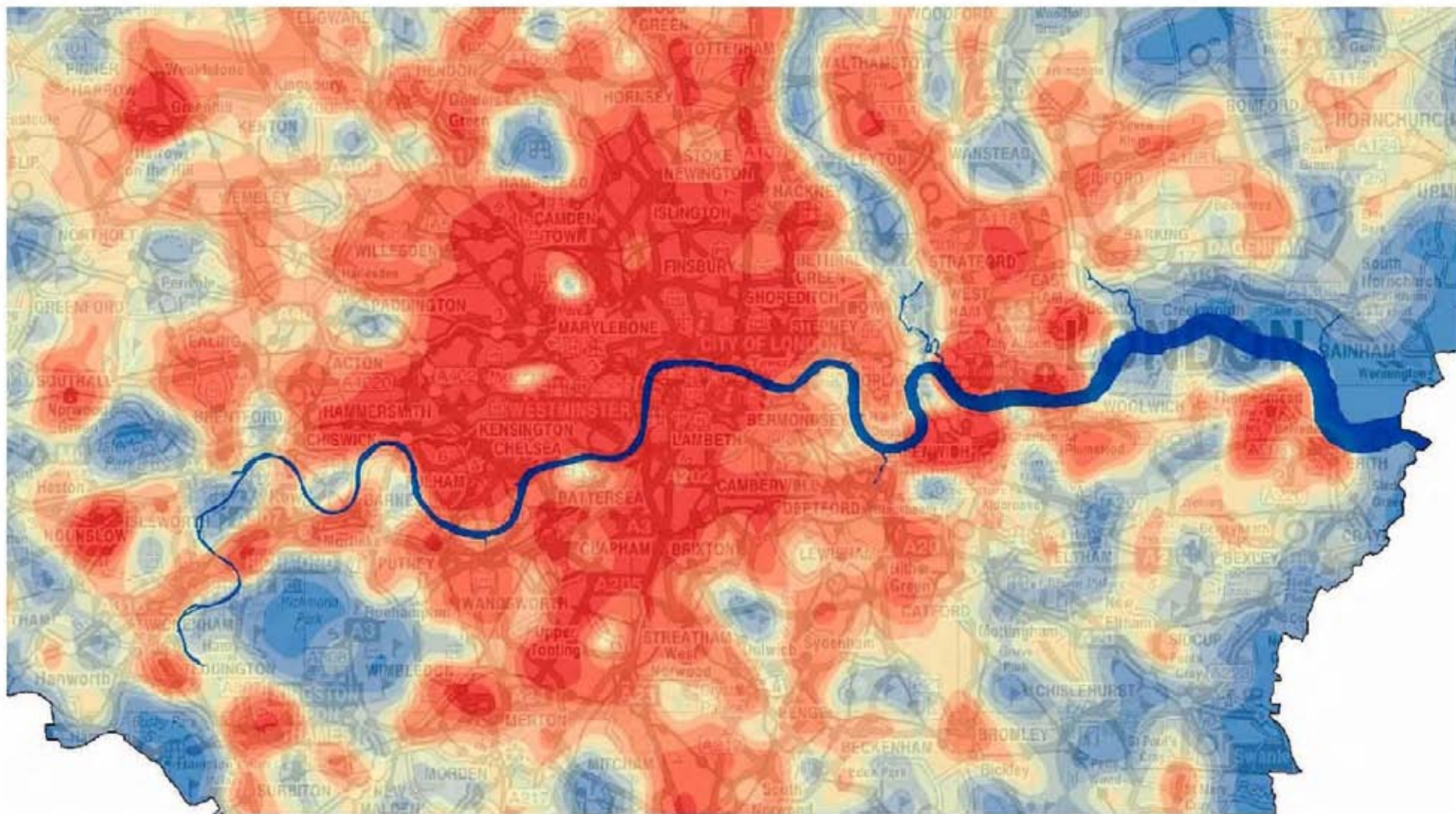


Environmental Responsibility

World CO₂ emissions 2002

where we have to be by 2050

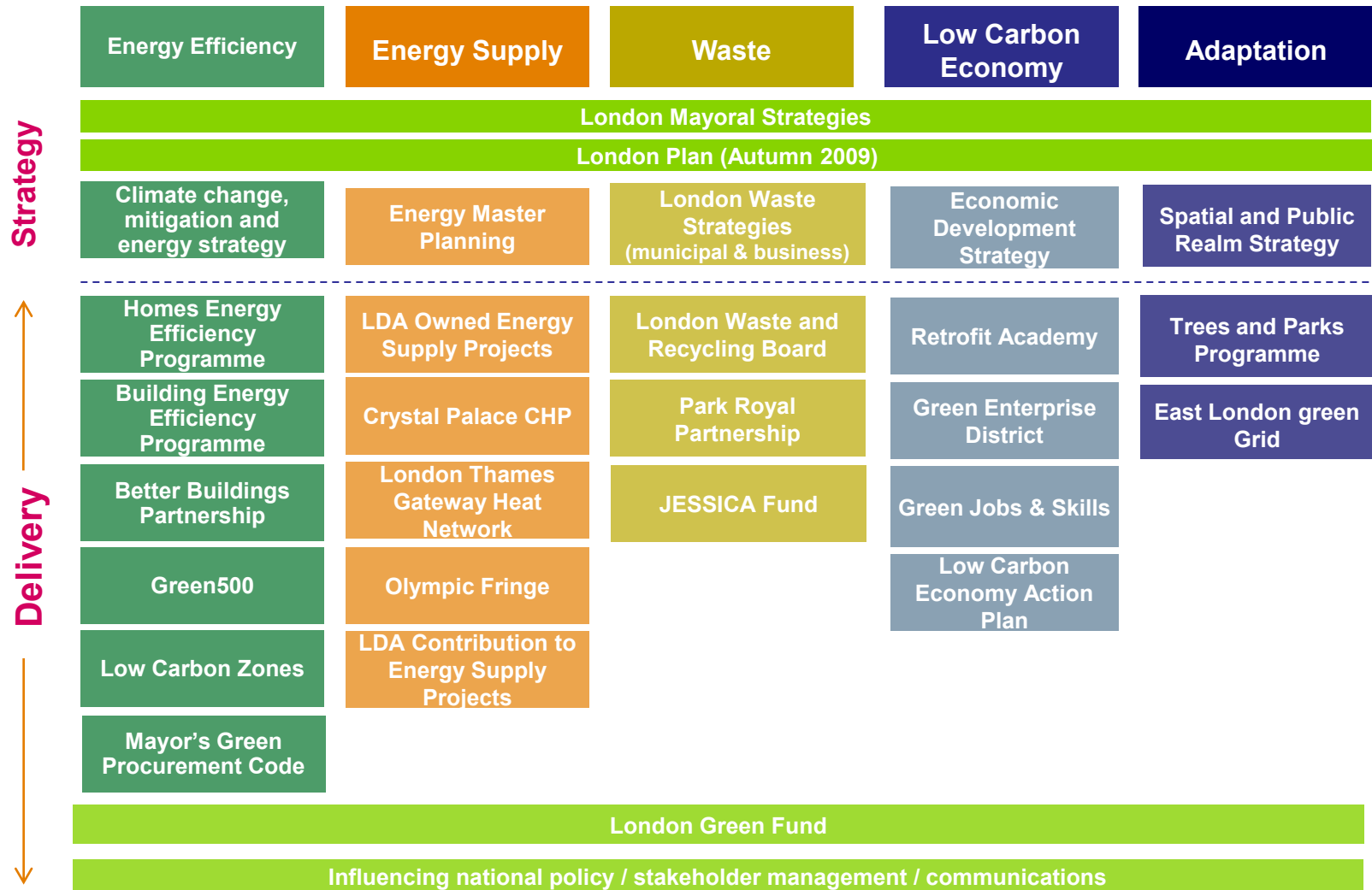




Mayor of London Target for CO₂ Emissions: reduce the capital's emissions by 60% from their 1990 levels by 2025

It is about
tons of CO₂
saved per
£ spent

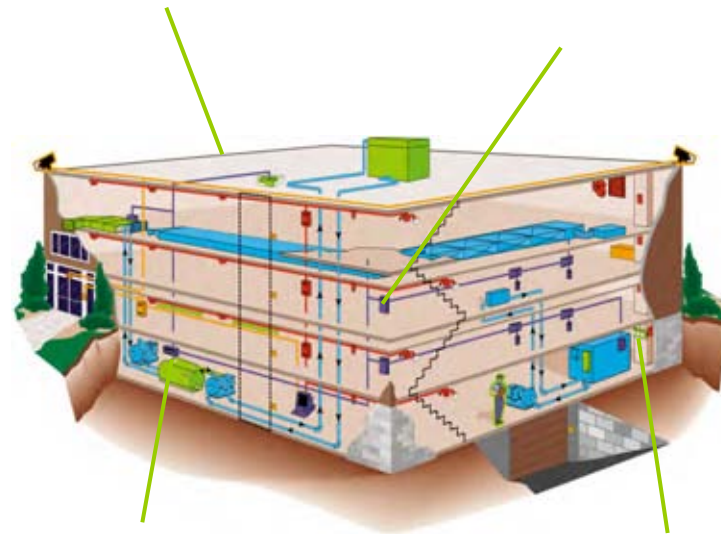
The Big Picture: LDA climate change programme



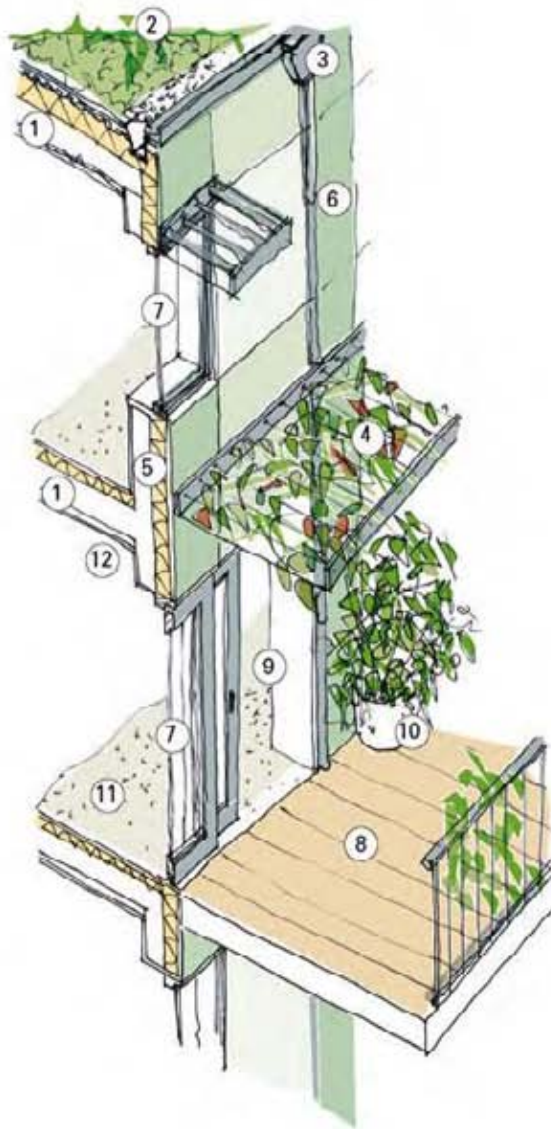
Building Energy Efficiency Programme

- **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



BUILDING PERFORMANCE REQUIREMENTS

note: to be read in conjunction with Arup specifications

- ① high thermal mass to structures- reduces heat demand
- ② extensive green roof to encourage bio-diversity & as a SUDS technique
note: minimum specification required is low-maintenance planted roof e.g. sedum or indigenous herbs & grasses roof with drainage layer
- ③ oversized drainage & rainwater collection
- ④ reclaimed materials used where possible
e.g. steel to shady canopy
- ⑤ super-insulation to envelope & separating units, separation particularly important if exposed thermal mass frame employed
U-value required for walls & roof = 0.11
- ⑥ leak-proof high performance cladding system
- ⑦ triple glazing to all doors & windows
U-Value required for external windows & doors = 1.2
- ⑧ FSC durable timber e.g. larch to windows, doors & terraces
- ⑨ optional passive ventilation with sealed mechanically ventilated building & heat recovery
- ⑩ linoleum/ cork or other durable natural flooring
- ⑪ planting provides shading, cooling, improves air quality & mitigates heat island effect
- ⑫ natural paints & finishes throughout internally



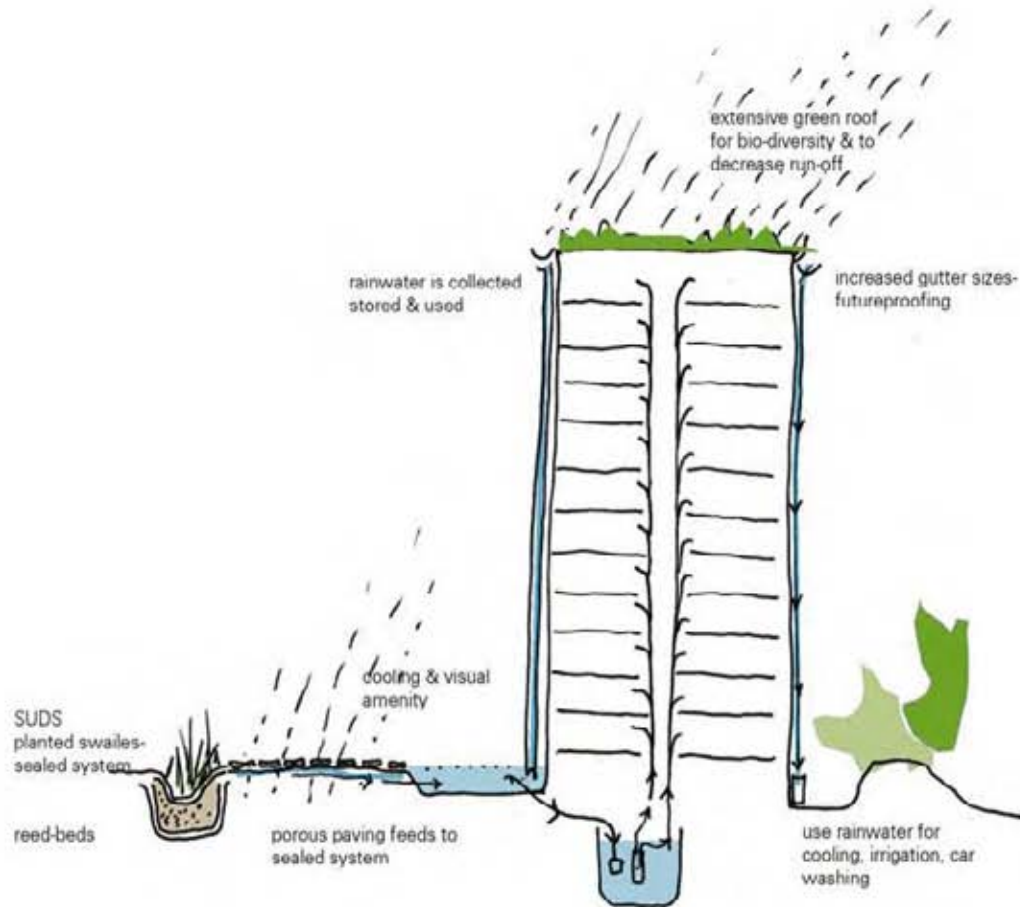
Leak-proof high performance skin



Adjustable private external spaces



European examples of leak-proof, high performance panel skins



A water strategy is an essential part of sustainable construction proposals. Water should be harvested from roofs, permeate through hard surfaces and be stored in small-scale cooling ponds. These ponds would also serve to mitigate heat island effect.

Extensive, non-habitable green roofs to the towers are encouraged for bio-diversity and as a SUDS measure. Green roofs to lower terraces may be accessible in some cases. The location of simple rainwater bunds around the site as integrated landscape elements is encouraged, serving to naturally irrigate the gardens. Given the remediated nature of Gallions Park, all on-site SUDS and water collection must be sealed.

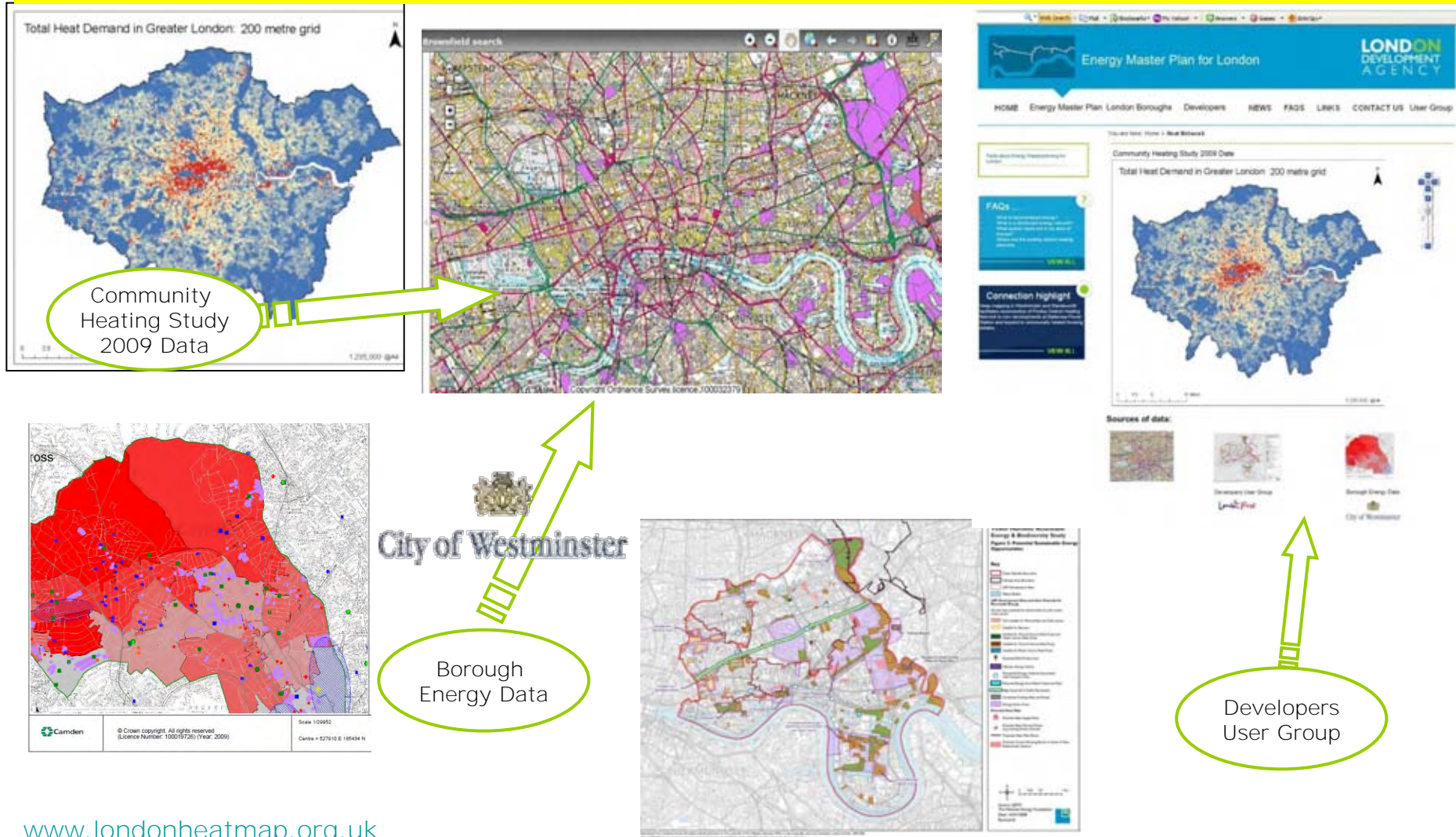
A re-use strategy and parallel grey water system should be employed, serving water-saving wc's, washing machines and wash-basins and drawing on all possible alternative water sources. Residents are encouraged to minimise water consumption. 100% water-saving sanitaryware and white-goods must be specified throughout.

Decentralised energy

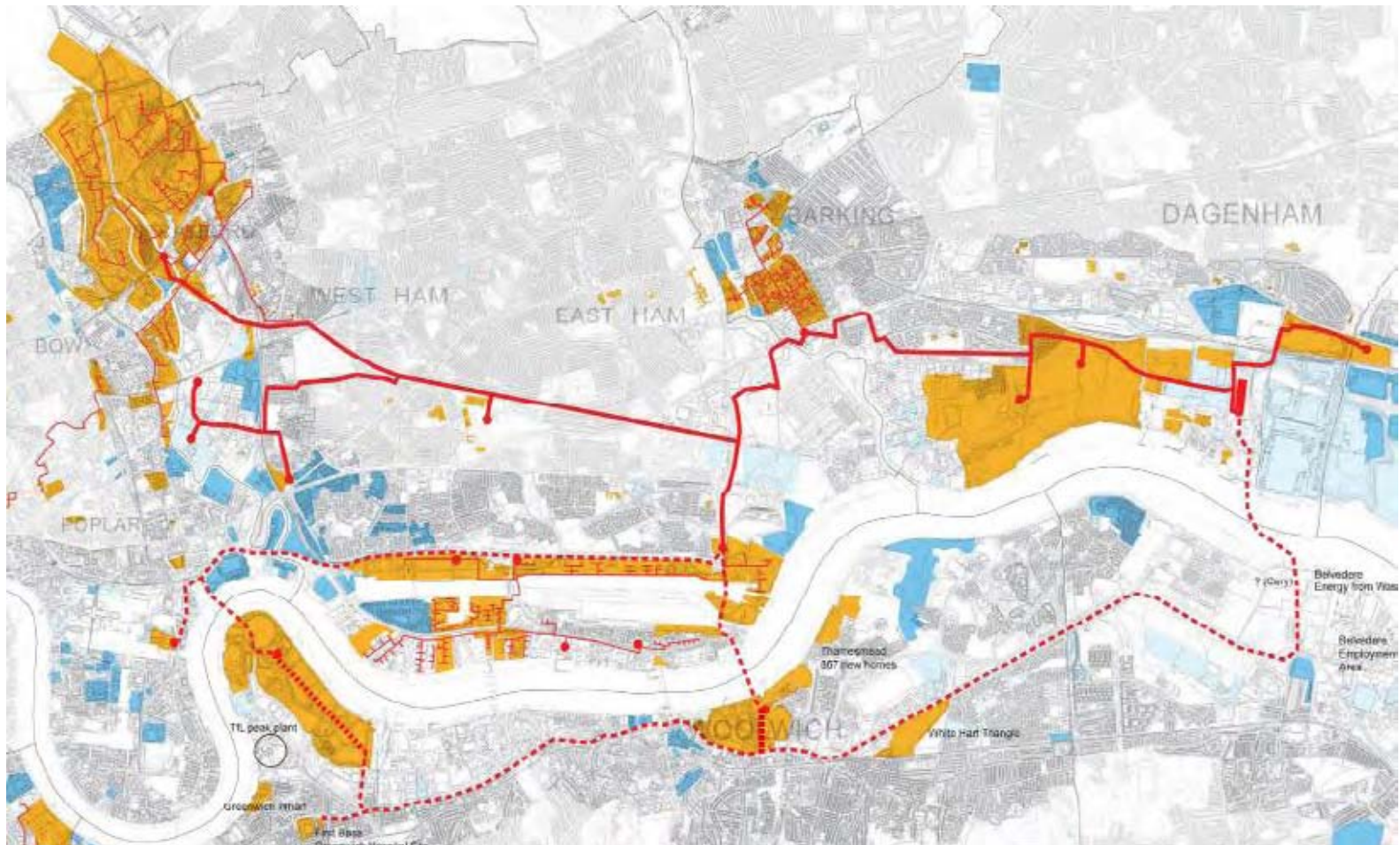
- Targeting 25% of London's energy supply from DE by 2025
- London-wide energy masterplanning
- Thames Gateway Heat Network aiming for first heat delivery in 2012
- Overview of other DE projects supported by LDA
- DE Prospectus

Energy Master Plan for London

The Energy Master Plan for London will be based on the London Heat Map which comprises data from boroughs, the GLA's Community Heating Study, and private sector developers groups such as London First.



The London Thames Gateway Heat Network (LTGHN) Project



Waste

- £2b of £12b London's energy consumption could be delivered through energy from waste
- 3-year, £84m London Waste and Recycling Board fund-142 bids ranging from £5k to £10m; first disbursements expected September 2009



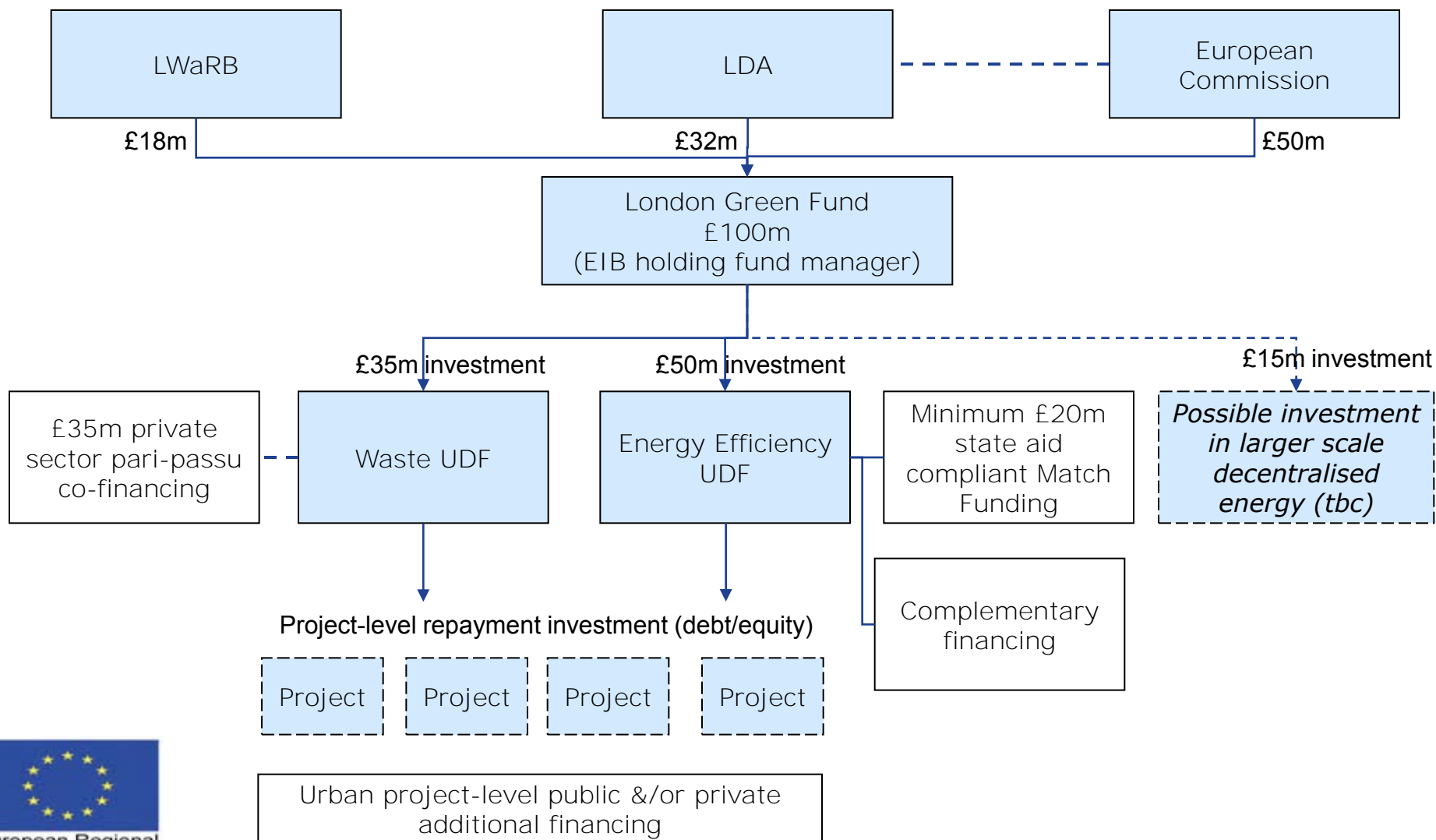
Transport



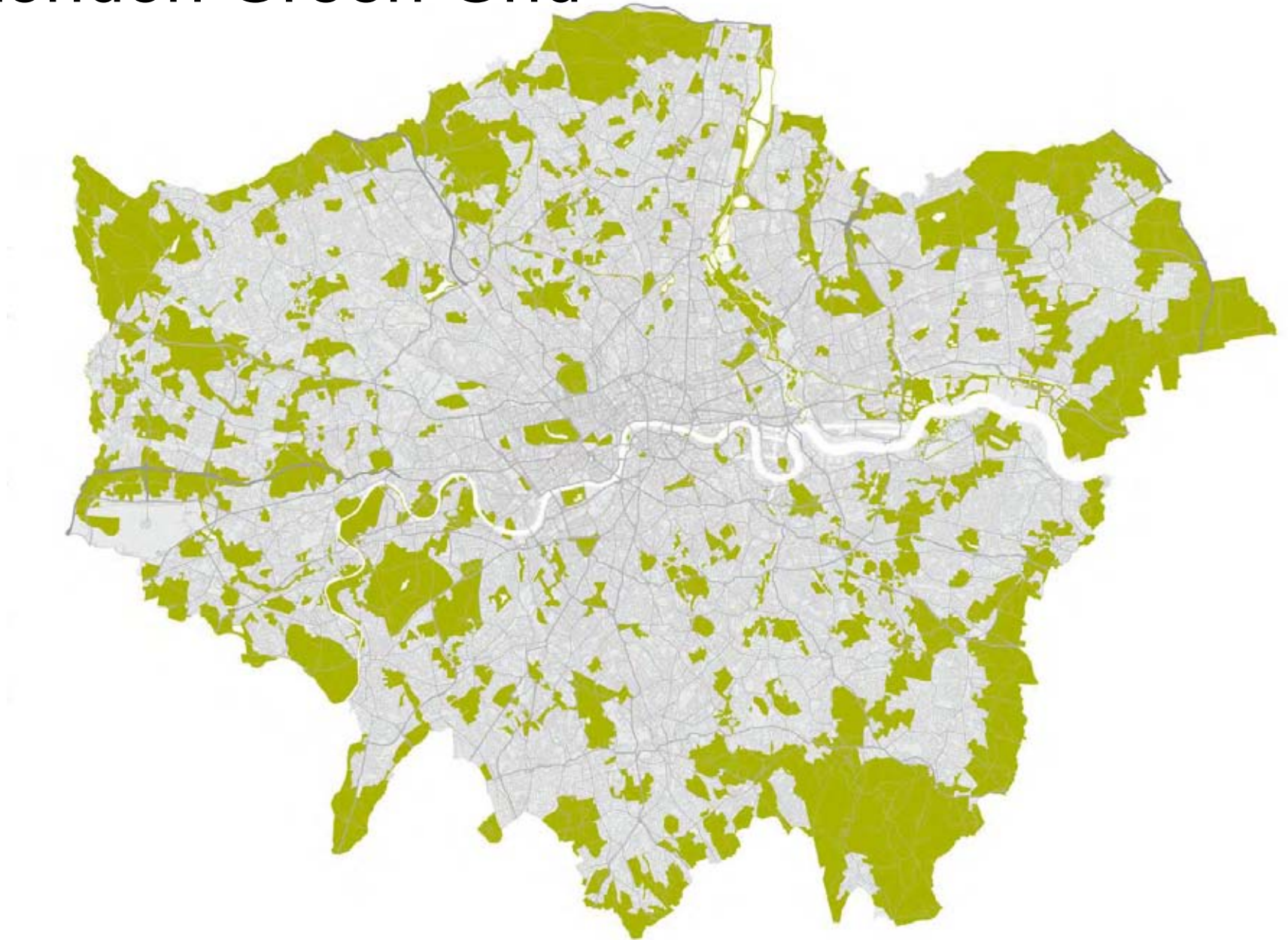
- Bike hire scheme May 2010; 12 'cycling superhighways' by 2012
- Full hybrid conversion of 8,000 vehicle bus fleet
- LED traffic light conversion underway; street lights?
- Securitising Underground electricity use?

- Electric Vehicle Delivery Plan launched June 2009
- Own fleet: Delivery Plan Autumn 2009, start procurement early 2010 (1,000+ ultra low carbon vehicles)
- International EV procurement initiative with Clinton Foundation

London Green Fund



London Green Grid











Policy

The FALP sets the policy context for the East London Green Grid Framework Supplementary Planning Guidance (SPG – Draft, November 2006).

The SPG provides further non-statutory guidance on implementing the policy. The final version will be published when the statutory process for these alterations has been completed – early in 2008.

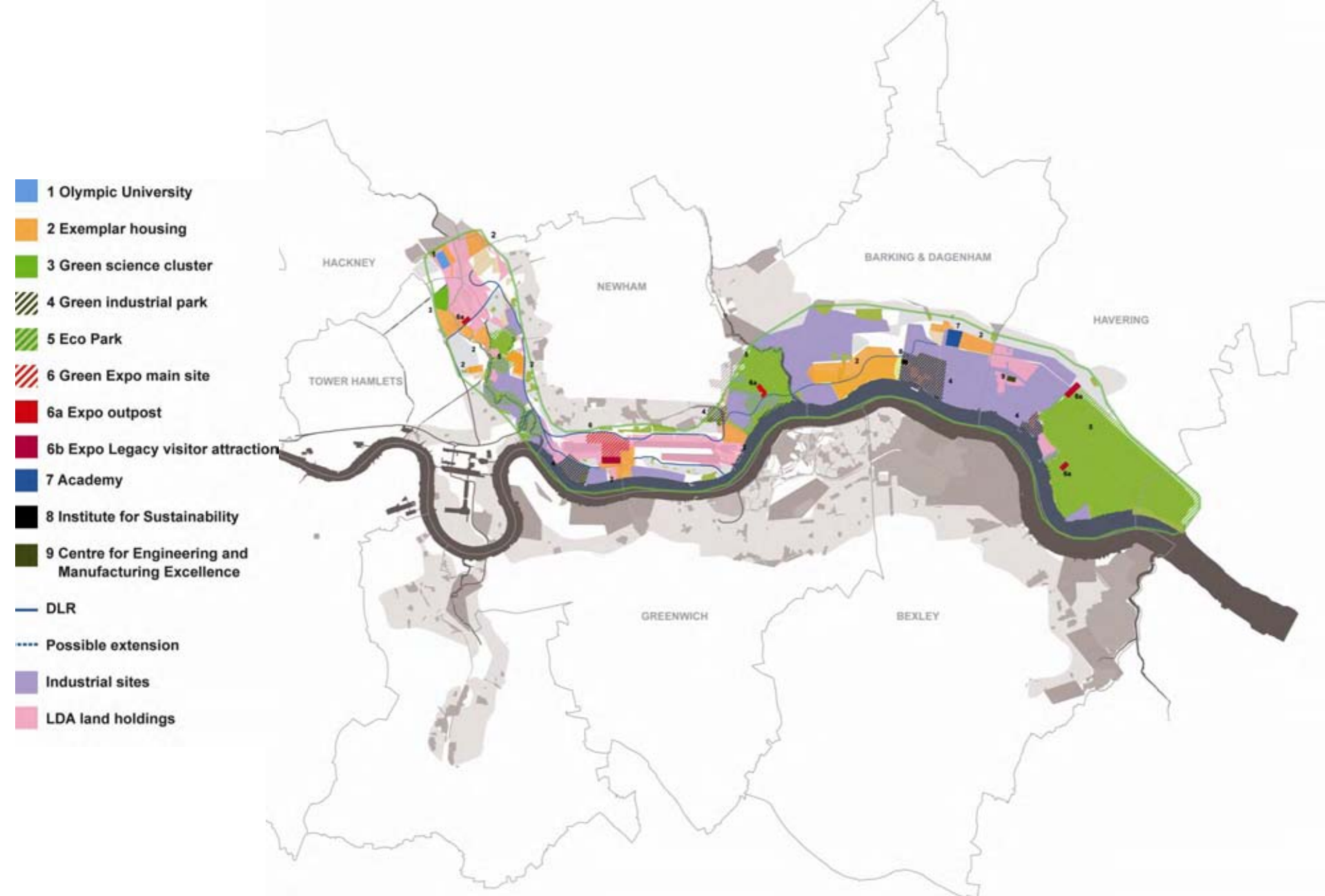


Lea River Park

A new park network which transforms the working landscape of the Lower Lea Valley to connect neighbouring communities and extend London's only regional park to the Thames.







Green Enterprise District

