

The Mayor's Climate Change Mitigation and Energy Strategy

Martin Powell

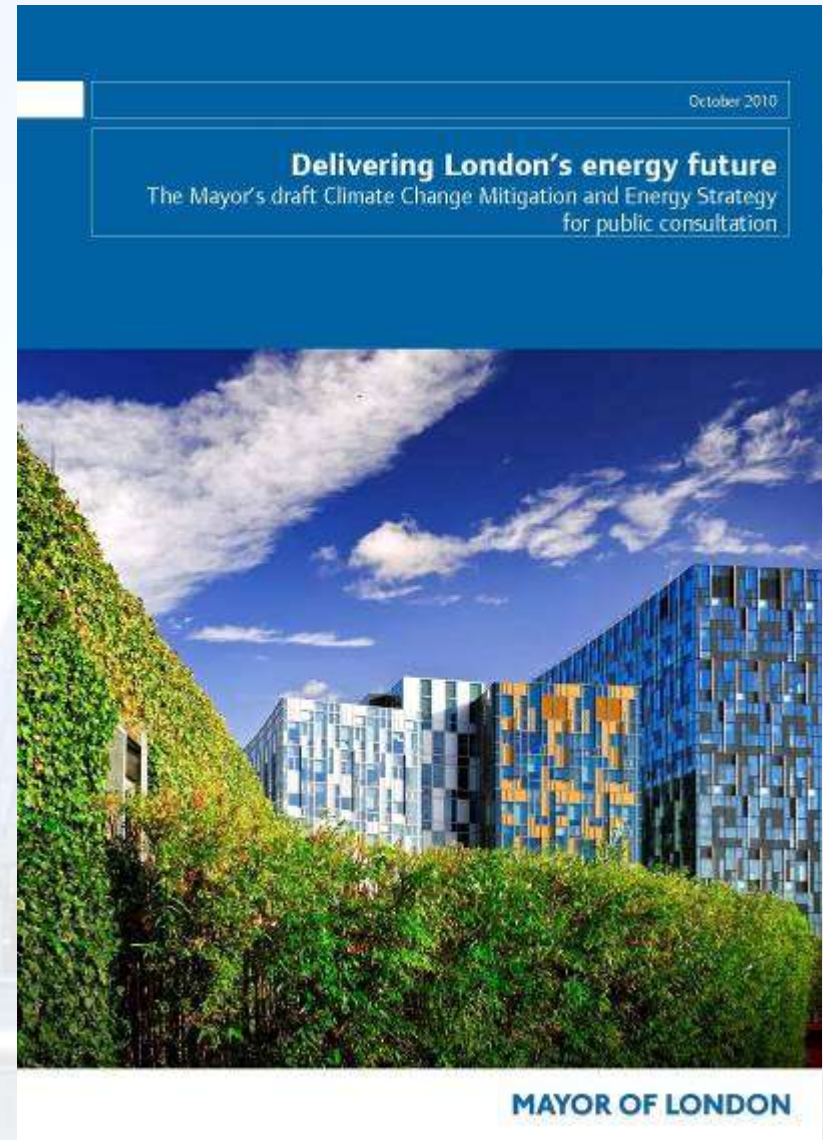
Environment Director

13 April 2011



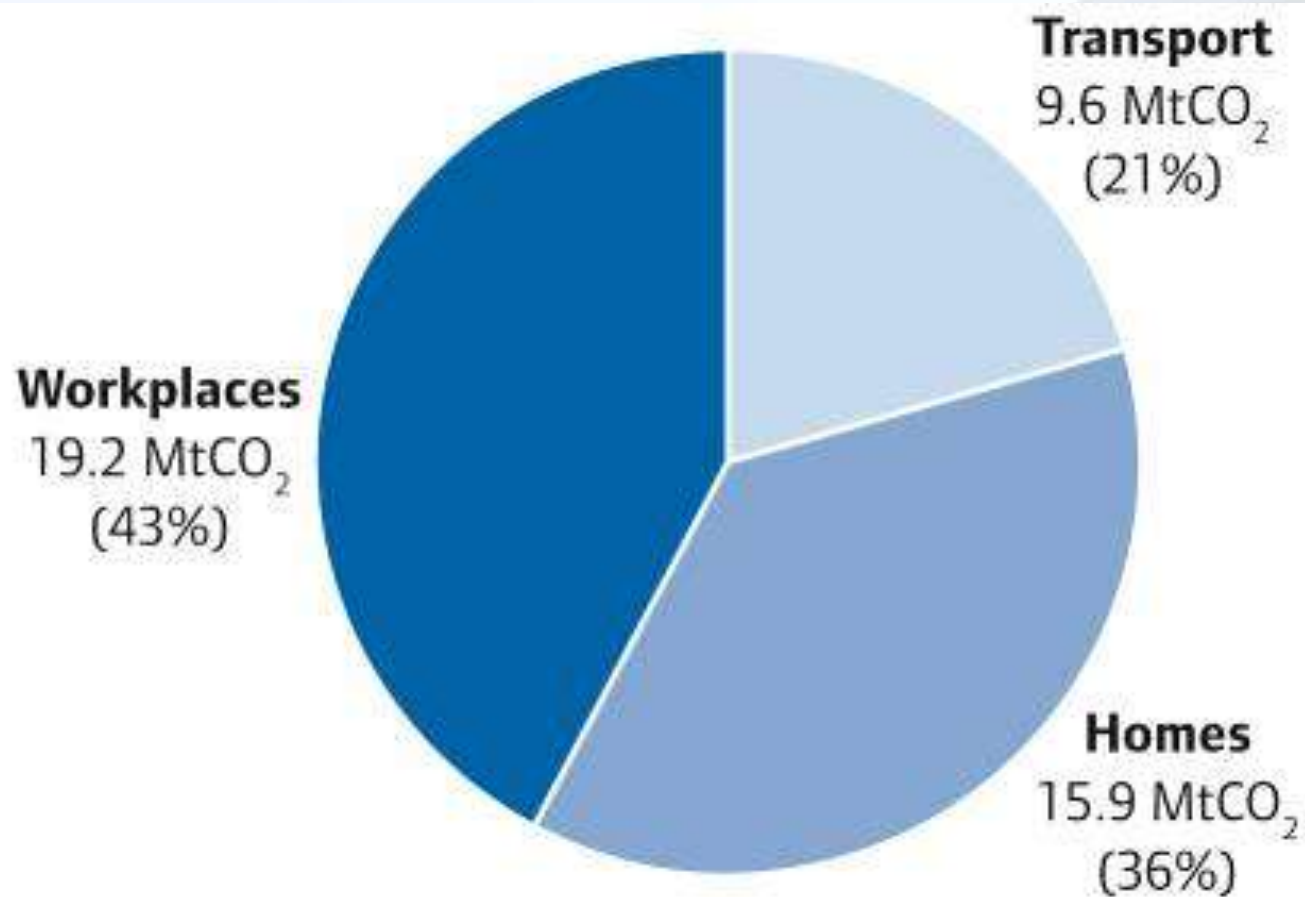
Overview

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



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

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



LONDON | GREEN500
LEADING TO A GREEN LONDON

LONDON BETTER
LEADING TO A GREEN LONDON BUILDINGS
PARTNERSHIP

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



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

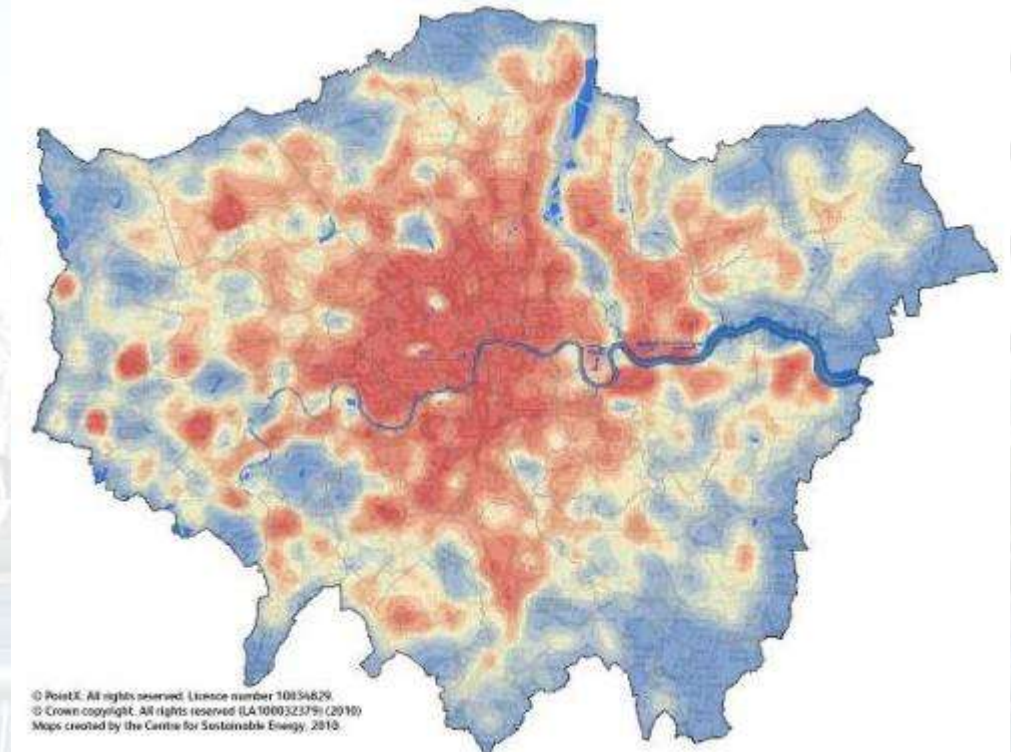
All new buses introduced to the London bus fleet low carbon by 2012



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



Financing the programmes

London Green Fund

- £100m fund
- Independently managed Urban Development Funds – investing in energy efficiency, waste and decentralised energy

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



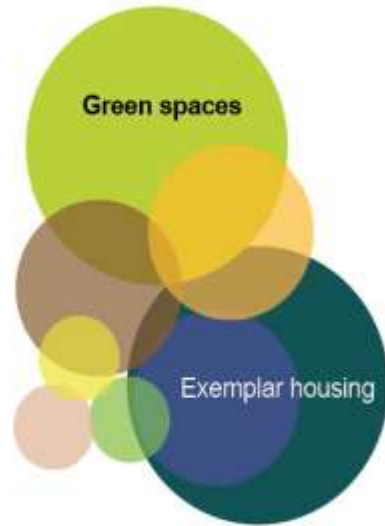
Green Transport
Green Utilities
Education

2010



Attractions
Clean tech cluster
Green Industrial Park
Green Transport
Green Utilities

2015



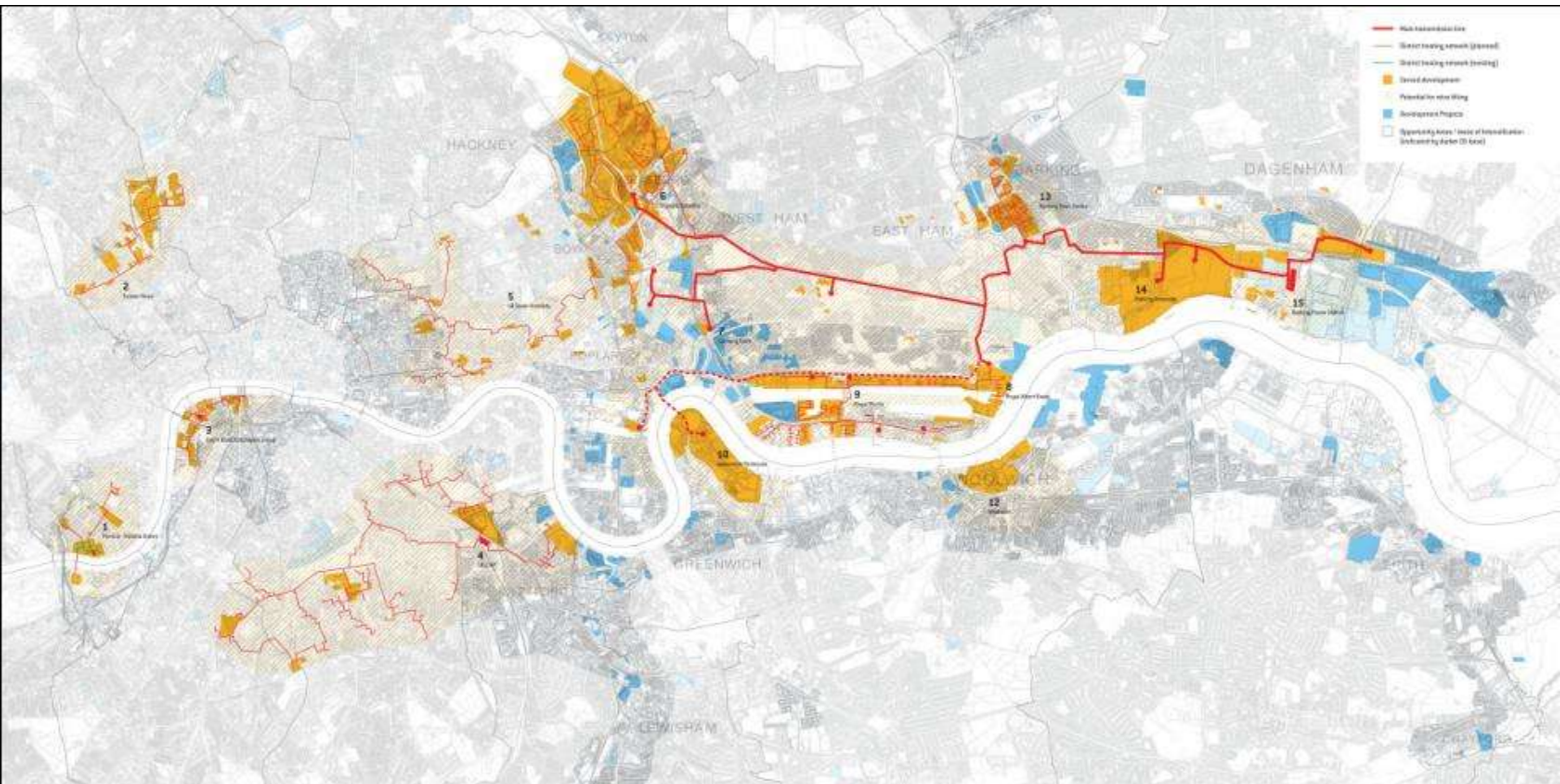
Green spaces
Attractions
Clean tech cluster
Exemplar housing
Green Transport
Green Utilities

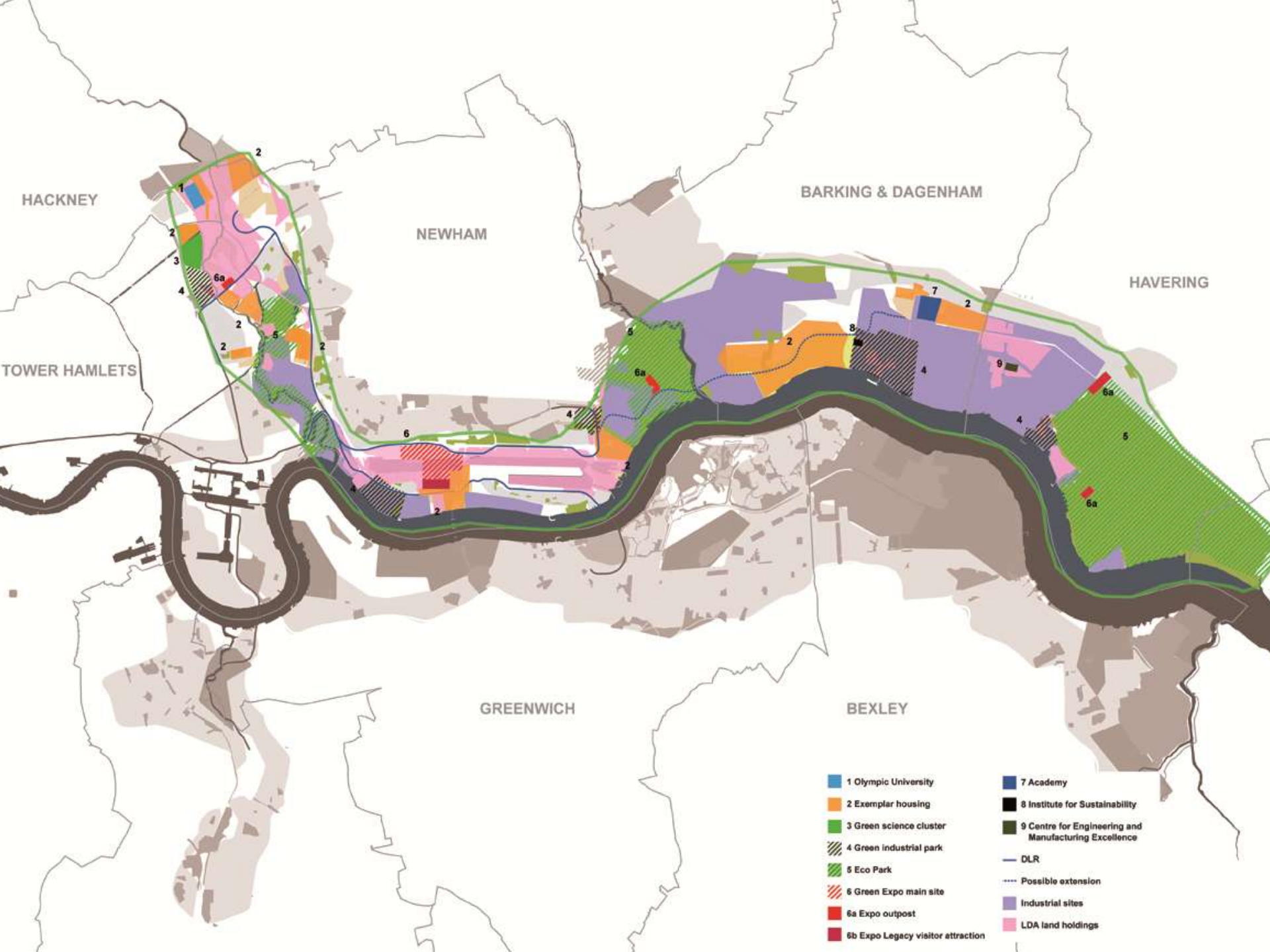
2020



Green spaces
Attractions
Clean tech cluster
Higher skill services
Exemplar housing
Green Transport
Green Utilities

2025





HACKNEY

NEWHAM

BARKING & DAGENHAM

HAVINGING

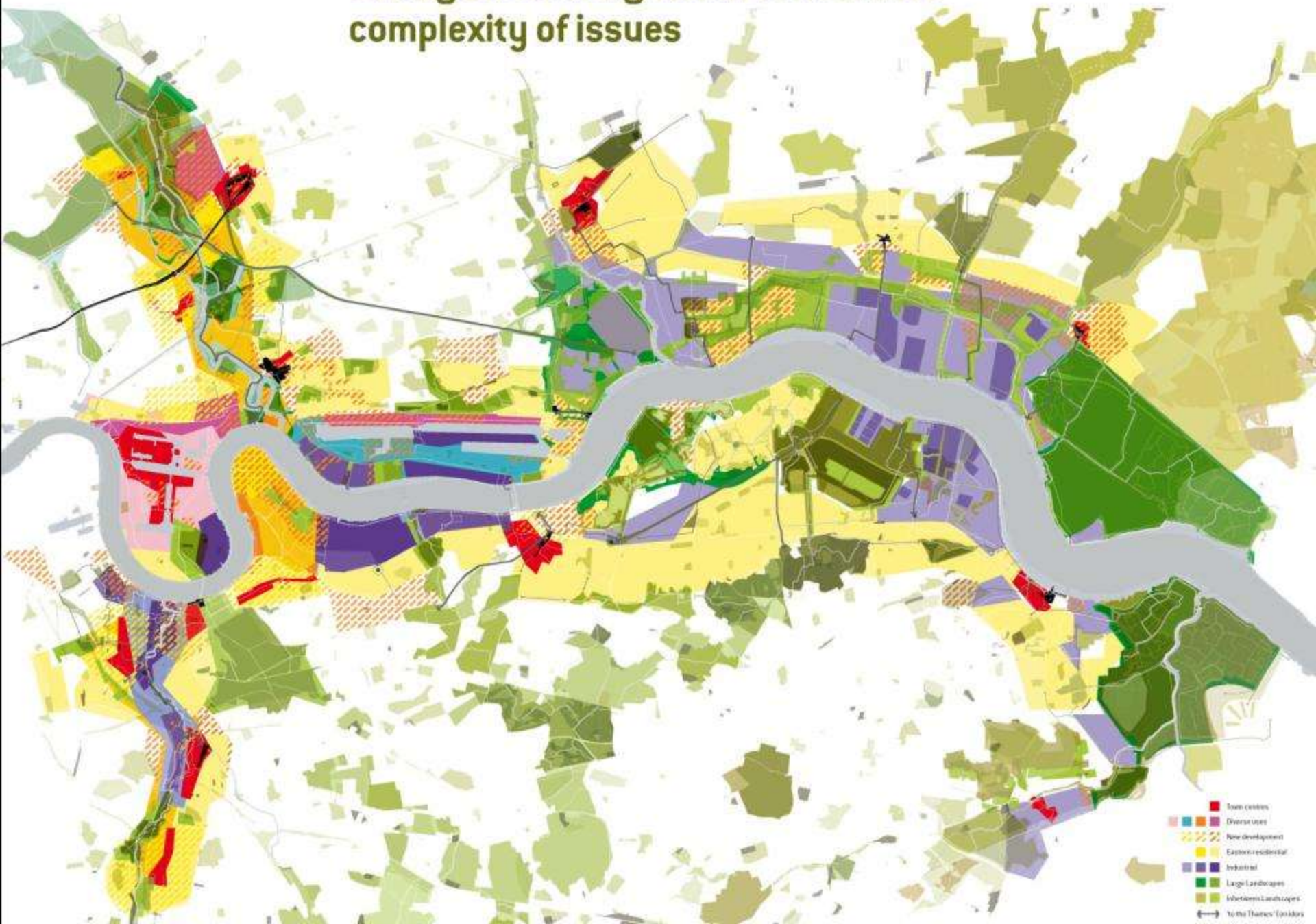
TOWER HAMLETS

GREENWICH

BEXLEY

- | | |
|--|---|
| ■ 1 Olympic University | ■ 7 Academy |
| ■ 2 Exemplar housing | ■ 8 Institute for Sustainability |
| ■ 3 Green science cluster | ■ 9 Centre for Engineering and Manufacturing Excellence |
| ■ 4 Green industrial park | — DLR |
| ■ 5 Eco Park | — Possible extension |
| ■ 6 Green Expo main site | ■ Industrial sites |
| ■ 6a Expo outpost | ■ LDA land holdings |
| ■ 6b Expo Legacy visitor attraction | |

Strong structuring vision to deal with complexity of issues



MAKING LONDON THE GREENEST BIG CITY IN THE WORLD



- London's first hydrogen refuelling station to open at Temple Mills
- Hydrogen fuel cell buses to London fleet
- 250 Electric Vehicle charging points in place
- 10% carbon emissions cut in City Hall
- 20 Electric Vehicle's in GLA fleet
- 5,000 street trees planted
- Launch of GLA Group wide Sustainable Food initiative
- Launch of National Farmer's Union joint funding of Business Development Managers project
- Dust suppressant application
- London Heat Map to include local heat maps for 10 boroughs - 30 new decentralised energy opportunities identified
- Olympic Energy Centre Unveiled

- Year of Walking
- Identification of flooding hotspots in London
- Community Flood Plans Project
- Installation of retrofit green roofs under DRAIN London
- Release of green roof portal on london.gov.uk
- "ReLeaf London" - launch of 2 million trees initiative
- Support 150 businesses building food supply chain in London
- Delivery of 56 hybrid buses
- London Heat Map to include local heat maps for 18 boroughs - 50 new decentralised energy opportunities identified
- Launch of Source London Network

- Delivery of more than 2 Cycle Superhighways

- Delivery of Biking Borough projects
- 5 new decentralised energy opportunities market ready

- Meet the EU Directive requirements for the annual limit value of PM10

- Phase 2 of Cycle Hire Scheme
- Low Emission Zone Phase 3 launch
- Improvements to 11 Priority Parks
- 8 Olympic Greenways (tbc)
- All drinking fountains as part of Great Spaces and Priority Parks to be installed
- Planting of 10,000 street trees

- 200 Electric Vehicle's into the Olympic fleet
- East London Line Extension, Phase 2 complete
- Work begins on Orchard Wharf, Tower Hamlets
- 86 London's Great Outdoors projects to be delivered

- RENEW programme deliver energy efficiency measures in 200,000 homes
- 66,000 new cycle parking spaces

- 2,012 pieces of land turned into community growing spaces
- Ten Low Carbon Zones - 20.12% reduced carbon emissions in each zone
- 5,000 street trees
- First phase of London Thames Gateway Heat Network underway
- Roll out of All London Green Grid
- Number of LWaRB funded projects operational

Oct - Dec

Jan - Mar

Apr - Jun

Jul - Sept

Oct - Dec

Jan - Mar

Apr - Jun

Jul - Sep

Oct - Dec

2010

2011

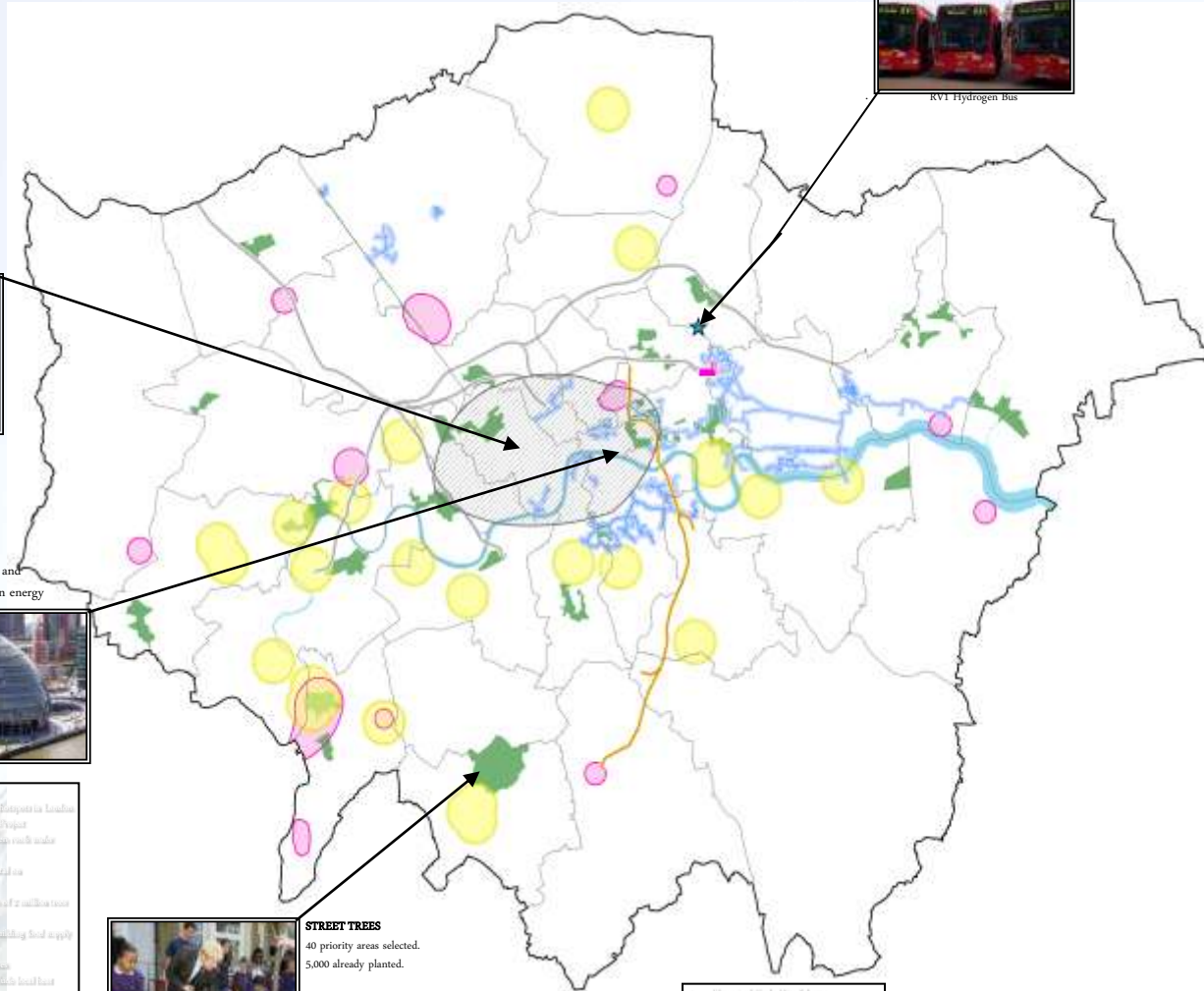
2012

LONDON HYDROGEN PARTNERSHIP

London's first hydrogen refuelling station will open at Temple Mills in December 2010.



RVT Hydrogen Bus



GREEN TRANSPORT AND AIR QUALITY

- East London Line
- London Underground

Cycle Hire Area

- Phase 1

WASTE AND ENERGY INFRASTRUCTURE

- Flagship Hydrogen Refuelling Facility
- Electric Charge Point Areas
- Heat Networks - Existing and Proposed
- Decarbonised Energy

ENERGY EFFICIENCY

- Olympic Energy Centre

URBAN GREENING

- Street Tree Areas

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CYCLE HIRE

The scheme has over 100,000 members undertaking an average of 20,000 trips a day. Once Phase 1 is complete 6,000 bikes will be available from 400 docking stations, located approx. every 300m across Zone 1.



Birry Street Station

RE-FIT

The GLA has led by example – retrofitting 42 of its buildings and reducing carbon emissions by 28% and saving £1m per year on energy bills. A further 58 GLA buildings will be retrofitted under the next phase of the programme.



- Air of Warning
- Announcement of the Green Programme
- Community Fund Plans Report
- Installation of roof-top photovoltaic panels
- U2/ATV London
- Release of grant and guidance funding for 42
- 2010 London - Launch of a million trees
- Support for summer building fund supply chain in London
- Delivery of 100,000 trees
- London Heat Map to include local heat maps for 10 boroughs - 30 new decentralised energy opportunities identified
- Olympic Energy Centre Unveiled



STREET TREES
40 priority areas selected.
5,000 already planted.

- London's first hydrogen refuelling station to open at Temple Mills
- Hydrogen fuel cell buses to London fleet
- 250 Electric Vehicle charging points in place
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<ul style="list-style-type: none"> • Delivery of 100,000 trees • Delivery of more than 200,000 trees 	<ul style="list-style-type: none"> • Delivery of 100,000 trees • Street decarbonised energy opportunities identified 	<ul style="list-style-type: none"> • Meet for EU Climate requirements for the second time value of PM10 	<ul style="list-style-type: none"> • Phase 2 of Cycle Hire scheme • Low-carbonisation of Phase 2 (2000) improvements to 15 Energy Parks • 8 Olympic Greenways (200) • All docking locations as part of Coast Space and Priority Parks to be installed • Planning of street-level trees 	<ul style="list-style-type: none"> • 200 Electric Vehicle's into the Olympic fleet • East London Line Extension, Phase 2 complete • Work begins on Olympic White Water Hub • 200 London's Great Wall of London project to be delivered 	<ul style="list-style-type: none"> • 20,000 professional and energy efficiency assessment 200,000 tonnes of CO2 from cycle parking system
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URBAN GREENING

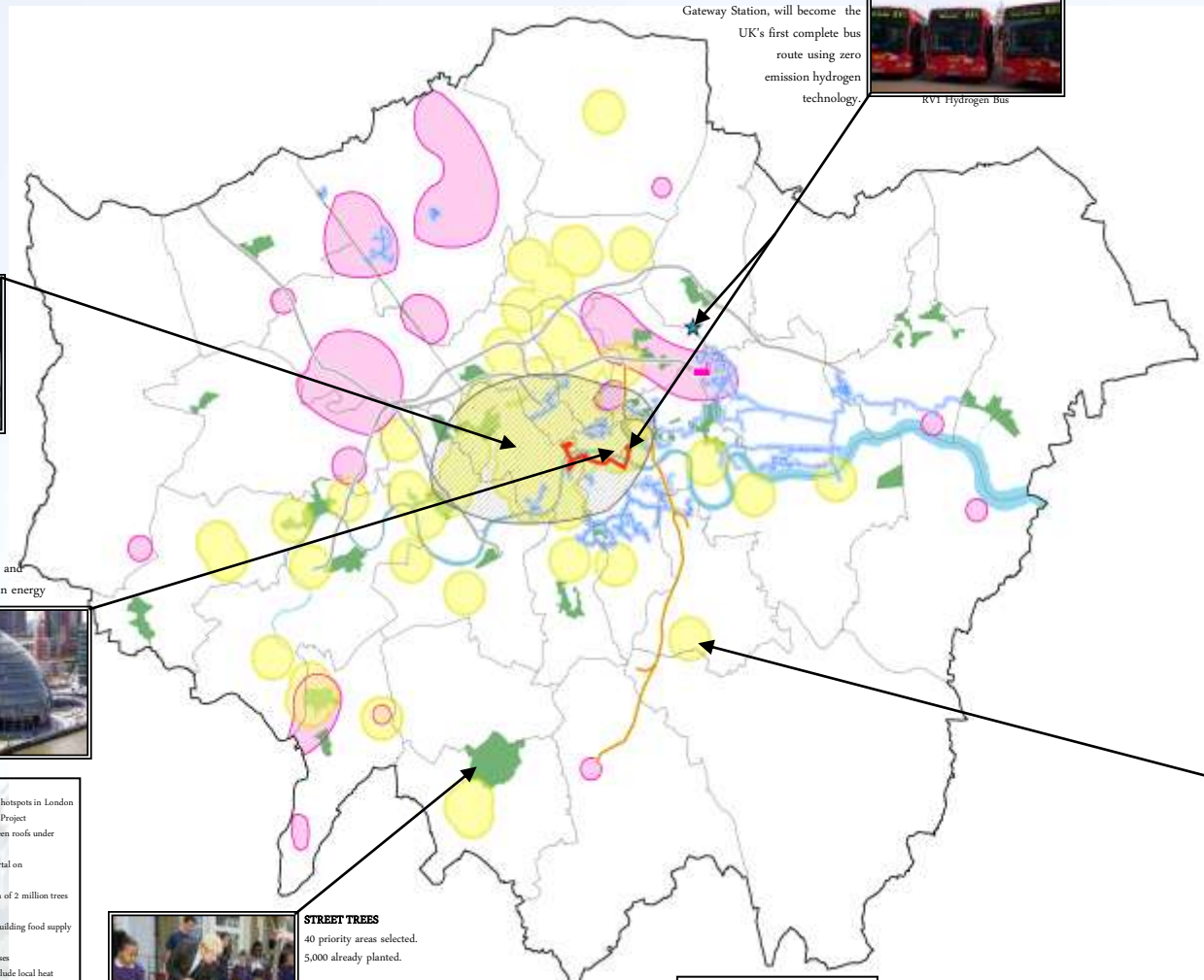


LONDON HYDROGEN PARTNERSHIP

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RVT1 Hydrogen bus



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Bury Street Station

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- 'ReLeaf London' - launch of 2 million trees initiative
- Support 150 businesses building food supply chain in London
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STREET TREES
40 priority areas selected.
5,000 already planted.



ELECTRIC VEHICLES

Source London Network launched spring 2011 will establish at least 300 charging points by 2012. 100,000 Electric Vehicle's to be on London's streets by 2012.

- 2012 project of local based micro community energy generation
- The Low Carbon Zone - 20% reduced carbon emissions in park area
- Sustainable Lane
- Heat plant in London (Tower Gateway) that Network underway
- Roll out of All London Green Card
- Number of LWRB funded projects operational

<ul style="list-style-type: none"> • Delivery of Living Streets projects • 300 decentralised energy opportunities identified 	<ul style="list-style-type: none"> • Meet the EU Emission requirements for the second limit value of PM10 	<ul style="list-style-type: none"> • Phase 2 of Cycle Hire scheme • Low-carbon/zero-carbon Phase 3 launch • Implementation of 11 Energy Parks • 8 Olympic Greenways (GAP) • All docking locations as part of Coast Space and Priority Parks to be installed • Planning of street-level trees 	<ul style="list-style-type: none"> • 200 Electric Vehicle's into the Olympic fleet • East London Line Extension, Phase 2 complete • Work begins on Oxford White Horse Hub/Lea • 2nd London's Great Londoners project to be delivered 	<ul style="list-style-type: none"> • 20,000 decentralised energy opportunities identified (20,000) based on 6000 new cycle parking spaces
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- RV1 Bus Route
- East London Line
- London Overground
- Cycle Superhighways

- Cycle Hire Area
- Phase 1
- WASTE AND ENERGY INFRASTRUCTURE
- Flagship Hydrogen Refuelling Facility

- Electric Charge Point Areas
 - Heat Networks - Existing and Proposed
 - Decentralised Energy
- ENERGY EFFICIENCY
- Olympic Energy Centre

URBAN GREENING

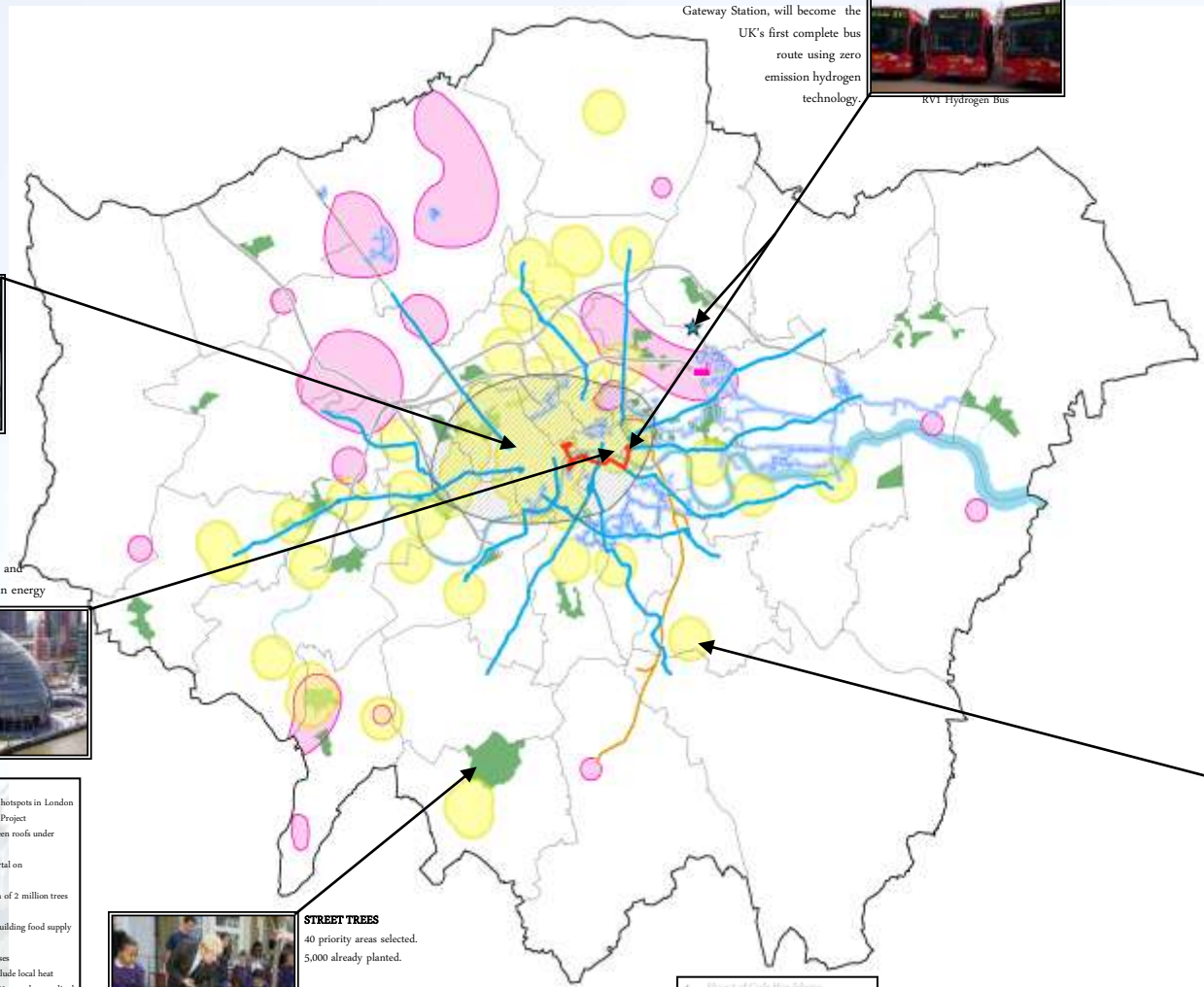
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RV1 Hydrogen Bus



CYCLE HIRE

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Bury Street Station

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STREET TREES
40 priority areas selected.
5,000 already planted.

- Delivery of 56 hybrid buses
- 300 decentralised energy opportunities identified

Meet the EU Climate requirements for the annual limit value of PM10

- Phase 2 of Cycle Hire Scheme
- Low-emission fleet Phase 2 launch
 - Implementation of 11 Energy Parks
 - 8 Olympic Greenways (50%)
 - All docking locations as part of Coast Space and Priority Parks to be installed
 - Planning of street-level trees

- 200 Electric Vehicle's into the Olympic fleet
- East London Line Extension, Phase 2 complete
- West End on Oxford White Horse
- 200 London's Great Walkers projects to be delivered

- 20,000 operational shared energy efficiency measures at 20,000 homes
- 6000 new cycle parking spaces



ELECTRIC VEHICLES

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- 2012 project of local based micro community energy generation
- The Low Carbon Zone - 20 residential developments in each area
- 500,000 trees
- Heat plant in London (Tower Gateway Heat Network) underway
- Roll out of All London Green Card
- Number of Localised Energy projects operational

Oct - Dec	Jan - Mar	Apr - Jun	Jul - Sept	Oct - Dec	Jan - Mar	Apr - Jun	Jul - Sep	Oct - Dec
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Biking Boroughs

- RV1 Bus Route
- East London Line
- London Underground
- Cycle Superhighways

Cycle Hire Area

- Phase 1

WASTE AND ENERGY INFRASTRUCTURE

- Flagship Hydrogen Refuelling Facility
- Electric Charge Point Areas
- Heat Networks - Existing and Proposed
- Decentralised Energy

ENERGY EFFICIENCY

- Olympic Energy Centre

URBAN GREENING

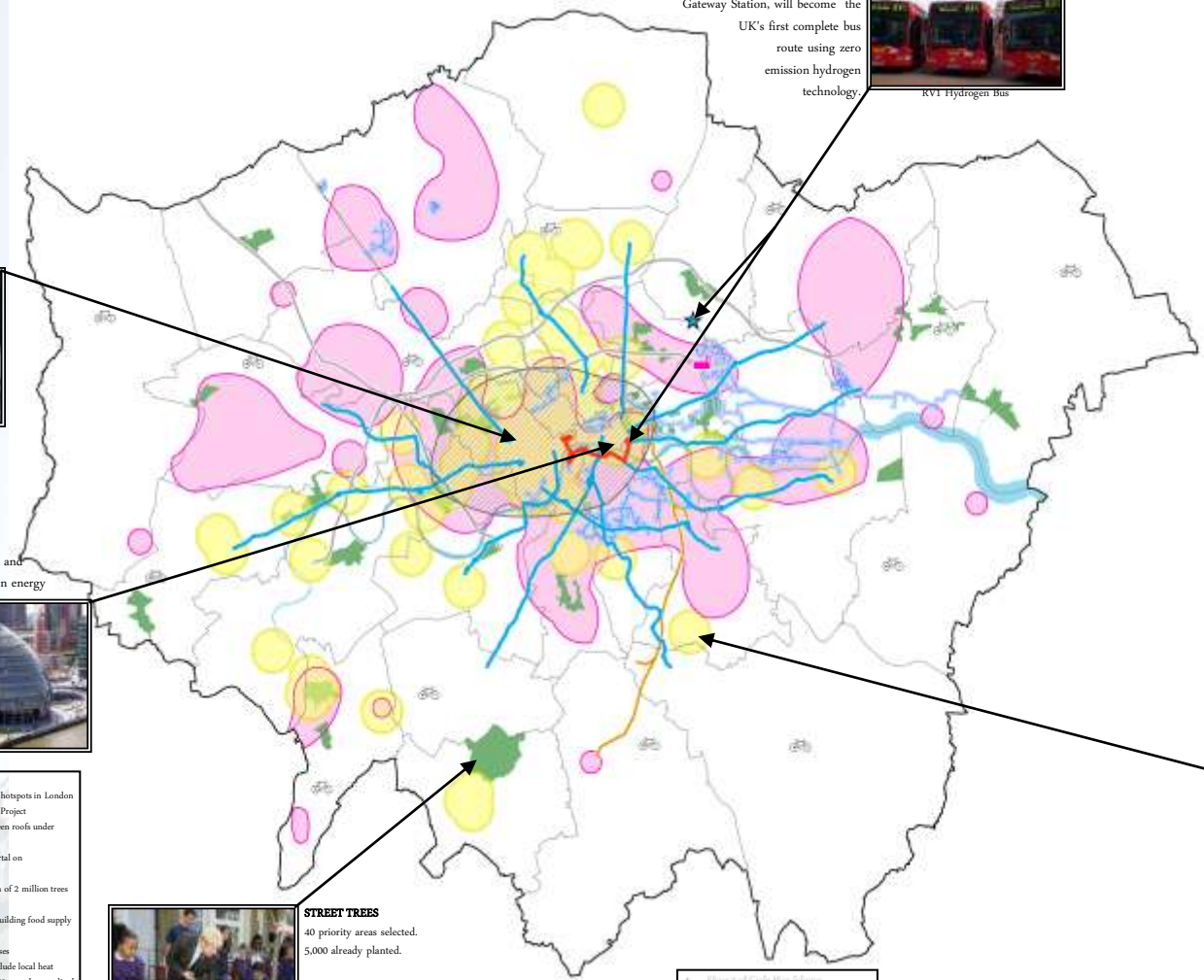
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RV1 Hydrogen Bus



CYCLE HIRE

The scheme has over 100,000 members undertaking an average of 20,000 trips a day. Once Phase 1 is complete 6,000 bikes will be available from 400 docking stations, located approx. every 300m across Zone 1.



Birry Street Station

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STREET TREES
40 priority areas selected.
5,000 already planted.

- Delivery of Biking Borough projects
- 5 new decentralised energy opportunities market ready

• Meet the EU Emissions requirements for the second limit value of PM10

- Phase 2 of Cycle Hire scheme
- Low-emission fleet Phase 2 launch
- Implementation of 11 Energy Parks
- 8 Olympic Greenways (200)
- All Biking locations as part of Coast Space and Priority Parks to be installed
- Planning of street-level trees

- 200 Electric Vehicle's into the Transport fleet
- East London Line Extension, Phase 2 complete
- Work begins on Oxford Street Green Planter
- 2nd London's Great Londoners project to be delivered

- 20,000 operational shared energy efficiency measures at 20,000 homes
- 6000 new cycle parking spaces



ELECTRIC VEHICLES

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- 2012 project of local based micro community generation
- The Low Carbon Zone - 20 residential developments in each zone
- 100,000 trees
- First phase of London Thames Gateway Heat Network underway
- Roll out of All London Green Card
- Number of LWB's funded projects operational

GREEN TRANSPORT AND AIR QUALITY

Biking Boroughs

- RV1 Bus Route
- East London Line
- London Overground
- Cycle Superhighways

Priority Locations for Air Quality Improvements

Cycle Hire Area

Phase 1

WASTE AND ENERGY INFRASTRUCTURE

- Flagship Hydrogen Refuelling Facility
- Electric Charge Point Areas
- Heat Networks - Existing and Proposed
- Decentralised Energy

ENERGY EFFICIENCY

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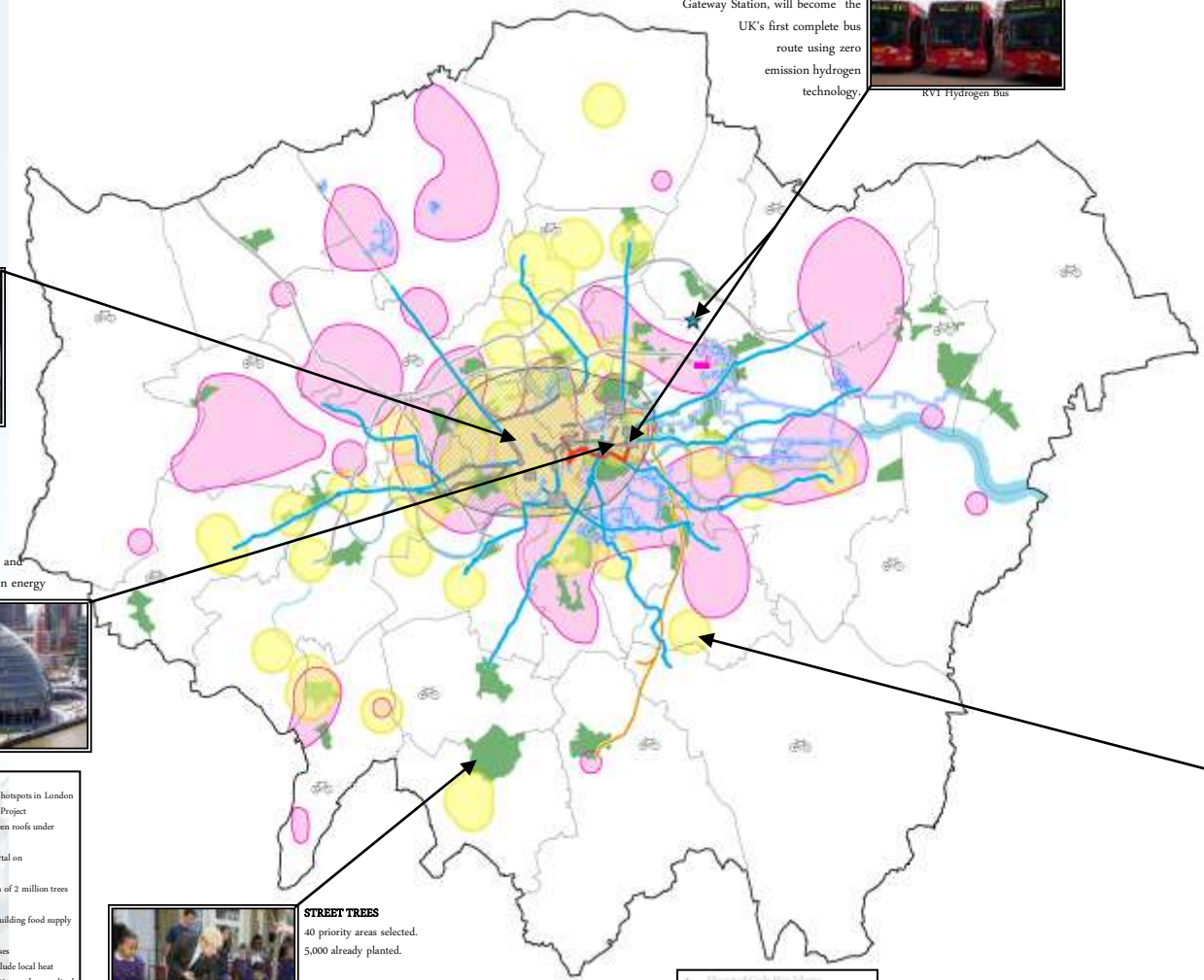
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RV1 Hydrogen bus



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Bury Street Station

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40 priority areas selected.
5,000 already planted.

- Delivery of Biking Borough projects
- 5 new decentralised energy opportunities market ready

- Meet the EU Directive requirements for the annual limit value of PM10

- Phase 2 of Cycle Hire delivery
- Low-emission fleet Phase 2 launch
- Implementation of 11 Energy Parks
- 8 Olympic Greenways (50%)
- All Biking locations as part of Coast Space and Priority Parks to be installed
- Phase 3 of Street Tree Area

- 200 Electric Vehicle's into the RV1 bus fleet
- East London Line Extension, Phase 2 complete
- Work begins on Oxford Street Green Planter
- 2nd London's Great Londoners project to be delivered

- 20,000 professional labour energy efficiency assessment (20,000) houses
- 6000 new cycle parking spaces



ELECTRIC VEHICLES

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- 2012 portion of Land based into community green programme
- The Low Carbon Zone - 20 residential developments in each zone
- 500,000 trees
- Heat phase of London Thames Gateway Heat Network underway
- Roll out of All London Green Card
- Number of LWA's funded projects operational

GREEN TRANSPORT AND AIR QUALITY

- Biking Boroughs
- Olympic Greenways
- RV1 Bus Route
- East London Line
- London Underground
- Cycle Superhighway
- Priority Locations for Air Quality Improvements
- Cycle Hire Area:**
 - Phase 1
 - Phase 2
- WASTE AND ENERGY INFRASTRUCTURE**
 - Flagpole Hydrogen Refuelling Facility
 - Electric Charge Point Area
 - Heat Networks - Existing and Proposed
 - Decentralised Energy
- ENERGY EFFICIENCY**
 - Olympic Energy Centre
- URBAN GREENING**
 - Drinking Fountains
 - Priority Parks
 - Street Tree Areas

LONDON HYDROGEN PARTNERSHIP

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RV1 Hydrogen Bus



Moysbrook Park

PRIORITY PARKS
Upgrade of eleven run-down parks in London, equivalent to over 400 hectares of green space improvements.

CYCLE HIRE

The scheme has over 100,000 members undertaking an average of 20,000 trips a day. Once Phase 1 is complete 6,000 bikes will be available from 400 docking stations, located approx. every 300m across Zone 1. Phase 2 will expand scheme to Tower Hamlets and Canary Wharf for 2012.



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STREET TREES
40 priority areas selected. 5,000 already planted. 10,000 new trees on the streets of London by 2012.

- Delivery of Biking Borough projects
- 5 new decentralised energy opportunities market ready

- Meet the EU Directive requirements for the annual limit value of PM10

- Phase 2 of Cycle Hire Scheme
- Low Emission Zone Phase 3 launch
- Improvements to 11 Priority Parks
- 8 Olympic Greenways (tbc)
- All drinking fountains as part of Great Spaces and Priority Parks to be installed
- Planting of 10,000 street trees

- 200 Electric Vehicle's onto the Olympic fleet
- East London Line Extension, Phase 2 complete
- West End on Oxford Street Greenway finished
- 20 London's Great London projects to be delivered

- 20,000 operational decentralised energy opportunities identified
- 2000 new cycle parking spaces



ELECTRIC VEHICLES

Source London Network launched spring 2011 will establish at least 300 charging points by 2012. 100,000 Electric Vehicle's to be on London's streets by 2012.

- 2012 project of local based micro community energy generation
- The Low Carbon Zone - 20 residential developments in each zone
- 100,000 trees
- Heat phase of London Thames Gateway Heat Network underway
- Roll out of All London Green Fuel
- Number of LWRB funded projects operational

Oct - Dec 2010	Jan - Mar	Apr - Jun	Jul - Sept	Oct - Dec 2011	Jan - Mar	Apr - Jun	Jul - Sep	Oct - Dec 2012
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GREAT OUTDOORS

£225 million invested in 50 public space projects to ensure London has a truly great outdoors.



Oxford Circus

CYCLE HIRE

The scheme has over 100,000 members undertaking an average of 20,000 trips a day. Once Phase 1 is complete 6,000 bikes will be available from 400 docking stations, located approx. every 300m across Zone 1. Phase 2 will expand scheme to Tower Hamlets and Canary Wharf for 2012.



Birly Street Station

RE-FIT

The GLA has led by example – retrofitting 42 of its buildings and reducing carbon emissions by 28% and saving £1m per year on energy bills. A further 58 GLA buildings will be retrofitted under the next phase of the programme.



- Year of Walking
- Identification of flooding hotspots in London
- Community Flood Plans Project
- Installation of retrofit green roofs under DRAIN London
- Release of green roof portal on london.gov.uk
- "ReLeaf London" – launch of 2 million trees initiative
- Support 150 businesses building food supply chain in London
- Delivery of 56 hybrid buses
- London Heat Map to include local heat maps for 18 boroughs - 50 new decentralised energy opportunities identified
- Launch of Source London Network



STREET TREES
40 priority areas selected. 5,000 already planted. 10,000 new trees on the streets of London by 2012.

- Delivery of Biking Borough projects
- 5 new decentralised energy opportunities market ready

LONDON HYDROGEN PARTNERSHIP

London's first hydrogen refuelling station will open at Temple Mills in December 2010. The RV1 bus route, from Covent Garden to Tower Gateway Station, will become the UK's first complete bus route using zero emission hydrogen technology



RV1 Hydrogen Bus



Moylebrook Park

PRIORITY PARKS

Upgrade of eleven run-down parks in London, equivalent to over 400 hectares of green space improvements.

GREEN TRANSPORT AND AIR QUALITY

- Biking Boroughs
- Subsidised Wharves
- Olympic Greenways
- RV1 Bus Route
- East London Line
- London Underground
- Cycle Superhighways

Priority Locations for Air Quality Improvements

Cycle Hire Area:
Phase 1
Phase 2

WASTE AND ENERGY INFRASTRUCTURE

- Flagship Hydrogen Refuelling Facility
- Electric Charge Point Area
- Heat Networks - Existing and Proposed
- Decentralised Energy

ENERGY EFFICIENCY

- Olympic Energy Centre

URBAN GREENING

- Drinking Fountains
- Priority Parks
- Great Outdoors Projects
- Street Tree Areas



ELECTRIC VEHICLES

Source London Network launched spring 2011 will establish at least 300 charging points by 2012. 100,000 Electric Vehicle's to be on London's streets by 2012.

- 2012 phase of Land based infrastructure programme
- The Low Carbon Zones - 20 residential demonstration parks area
- 100,000 trees
- First phase of London Thames Gateway Heat Network underway
- Roll out of All London Green Grid
- Number of LWRB funded projects operational

- London's first hydrogen refuelling station to open at Temple Mills
- Hydrogen fuel cell buses to London fleet
- 250 Electric Vehicle charging points in place
- 10% carbon emissions cut in City Hall
- 20 Electric Vehicle's in GLA fleet
- 5,000 street trees planted
- Launch of GLA Group wide Sustainable Food initiative
- Launch of National Farmer's Union joint funding of Business Development Managers project
- Dust suppressing application
- London Heat Map to include local heat maps for 10 boroughs - 30 new decentralised energy opportunities identified
- Olympic Energy Centre Unveiled

- Phase 2 of Cycle Hire Scheme
- Low Emission Zone Phase 3 launch
- Improvements to 11 Priority Parks
- 8 Olympic Greenways (tbc)
- All drinking fountains as part of Great Spaces and Priority Parks to be installed
- Planting of 10,000 street trees

- 200 Electric Vehicle's into the Olympic fleet
- East London Line Extension, Phase 2 complete
- Work begins on Orchard Wharf, Tower Hamlets
- 86 London's Great Outdoors projects to be delivered

• 92,000 residential energy efficiency measures installed
• 60,000 new cycle parking spaces

GREAT OUTDOORS

£225 million invested in 50 public space projects to ensure London has a truly great outdoors.



Oxford Circus

CYCLE HIRE

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Birly Street Station

RE-FIT

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STREET TREES
40 priority areas selected. 5,000 already planted. 10,000 new trees on the streets of London by 2012.

- Delivery of Biking Borough projects
- 5 new decentralised energy opportunities market ready

- Meet the EU Directive requirements for the annual limit value of PM10

LONDON HYDROGEN PARTNERSHIP

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RV1 Hydrogen Bus



Moylebrook Park

PRIORITY PARKS

Upgrade of eleven run-down parks in London, equivalent to over 400 hectares of green space improvements.

GREEN TRANSPORT AND AIR QUALITY

- Biking Boroughs
- Subsidised Wharves
- Olympic Greenways
- RV1 Bus Route
- East London Line
- London Underground
- Cycle Superhighways

Priority Locations for Air Quality Improvements

Cycle Hire Area:

- Phase 1
- Phase 2

WASTE AND ENERGY INFRASTRUCTURE

- Flagship Hydrogen Refuelling Facility
- Electric Charge Point Area
- Heat Networks - Existing and Proposed
- Decentralised Energy

ENERGY EFFICIENCY

- Olympic Energy Centre

RE-NEW

- Roll out across London
- Decentralisation areas
- Technical trial

URBAN GREENING

- Drinking Fountains
- Priority Parks
- Great Outdoors Projects
- Street Tree Areas



ELECTRIC VEHICLES

Source London Network launched spring 2011 will establish at least 300 charging points by 2012. 100,000 Electric Vehicle's to be on London's streets by 2012.

- 2012 project of local level into community greenways
- The Low Carbon Zones - 20 residential neighbourhoods in each zone
- 100,000 trees
- First phase of London Thames Gateway that Network underway
- Roll out of All London Green Grid
- Number of LWRB funded projects operational

- Phase 2 of Cycle Hire Scheme
- Low Emission Zone Phase 3 launch
- Improvements to 11 Priority Parks
- 8 Olympic Greenways (tbc)
- All drinking fountains as part of Great Spaces and Priority Parks to be installed
- Planting of 10,000 street trees

- 200 Electric Vehicle's into the Olympic fleet
- East London Line Extension, Phase 2 complete
- Work begins on Orchard Wharf, Tower Hamlets
- 86 London's Great Outdoors projects to be delivered

- RE-NEW programme deliver energy efficiency measures in 200,000 homes
- 66,000 new cycle parking spaces

LOW CARBON ZONES

Ten pilot Low Carbon Zones in place across London. Each zone aims to reduce carbon emissions by 20.12% by 2012. Successful schemes will be rolled out across London helping the city reduce its total carbon emissions by 60% by 2025.



CYCLE HIRE

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RE-FIT

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- Dust suppressing application
- London Heat Map to include local heat maps for 10 boroughs - 30 new decentralised energy opportunities identified
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- 86 London's Great Outdoors projects to be delivered



CAPITAL GROWTH
2,012 new community growing spaces by 2012. 10,000 people involved.

- RENEW programme deliver energy efficiency measures in 200,000 homes
- 66,000 new cycle parking spaces



ELECTRIC VEHICLES

Source London Network launched spring 2011 will establish at least 1,300 charging points by 2012. 100,000 Electric Vehicle's to be on London's streets by 2012.

- 2,012 pieces of land turned into community growing spaces
- Ten Low Carbon Zones - 20.12% reduced carbon emissions in each zone
- 5,000 street trees
- First phase of London Thames Gateway Heat Network underway
- Roll out of All London Green Grid
- Number of LWaRB funded projects operational

GREEN TRANSPORT AND AIR QUALITY

- Biking Boroughs
- Safeguarded Wayways
- Olympic Greenways
- RV1 Bus Route
- East London Line
- London Overground
- Cycle Superhighways
- Congestion Charge Zone
- Priority Locations for Air Quality Improvements

Cycle Hire Area

- Phase 1
- Phase 2

WASTE AND ENERGY INFRASTRUCTURE

- Flagship Hydrogen Refuelling Facility
- LWaRB Funded Projects
- Electric Charge Point Areas
- Heat Networks - Existing and Proposed
- Decentralised Energy

ENERGY EFFICIENCY

- Olympic Energy Centre
- Low Carbon Zones
- RE-NEW
- Roll out across London
- Domestication areas
- Technical trial

URBAN GREENING

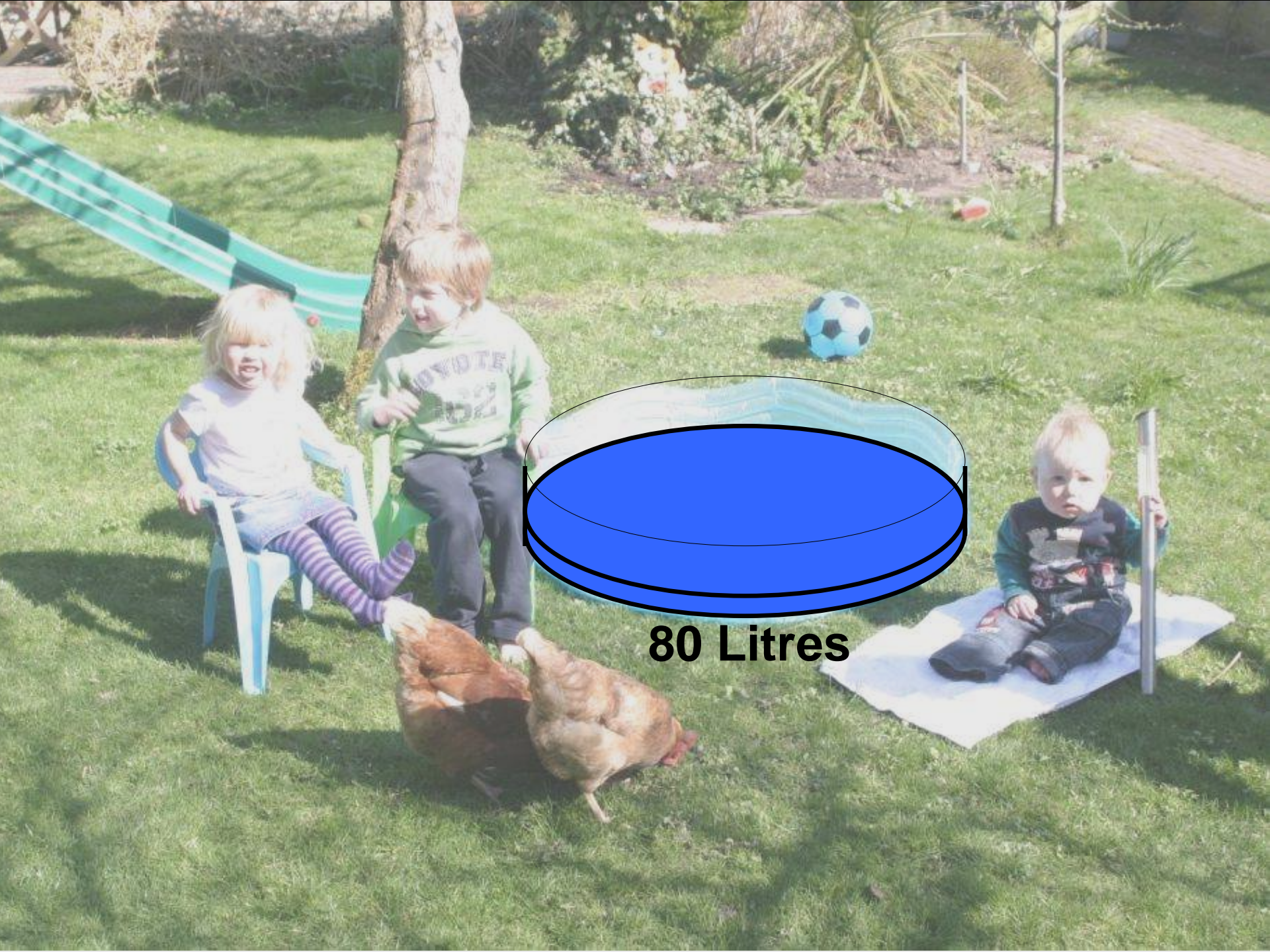
- Capital Growth Locations
- Drinking Fountains
- Priority Parks
- Great Outdoors Projects
- Street Tree Areas
- All London Green Grid Area

Oct - Dec	Jan - Mar	Apr - Jun	Jul - Sept	Oct - Dec	Jan - Mar	Apr - Jun	Jul - Sep	Oct - Dec
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The Final Challenge







80 Litres

Our Strategies – www.london.gov.uk

- Energy & Climate Change
- Air Quality
- Municipal Waste
- Business Waste
- Adaptation
- Water
- Biodiversity



Thank You!

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