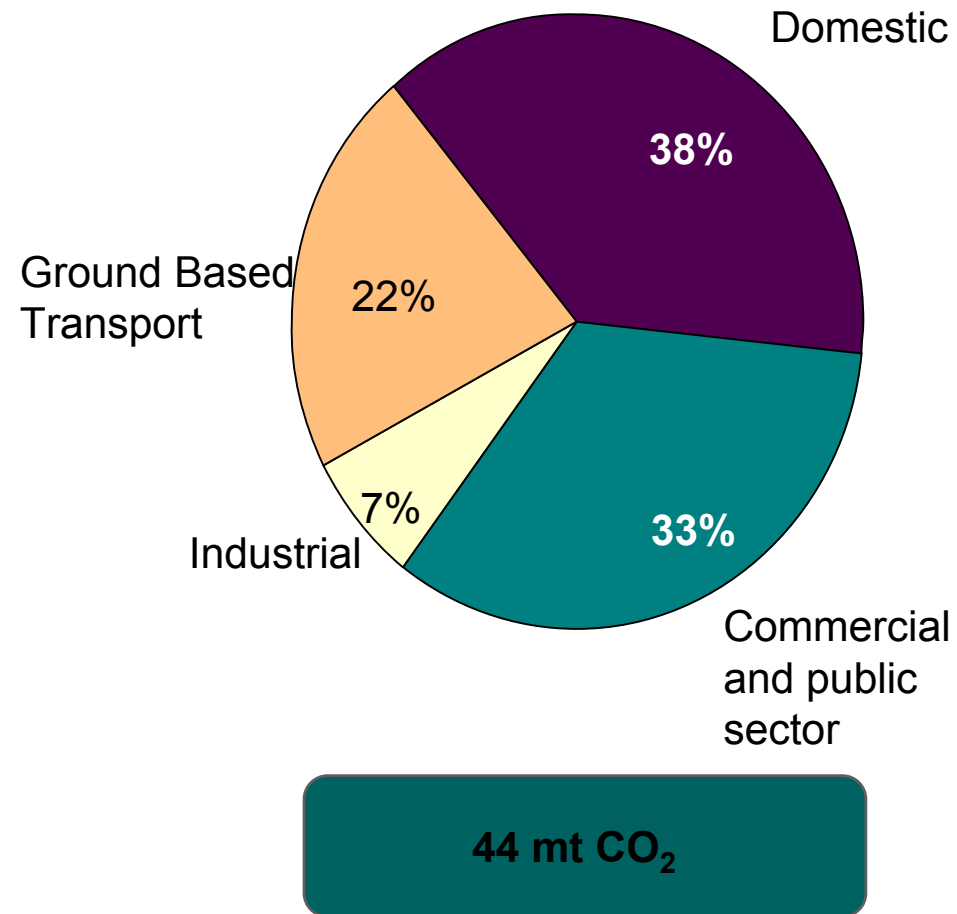


Urban Planning and Decentralised Energy in London

Andy Deacon
GLA Environment Team

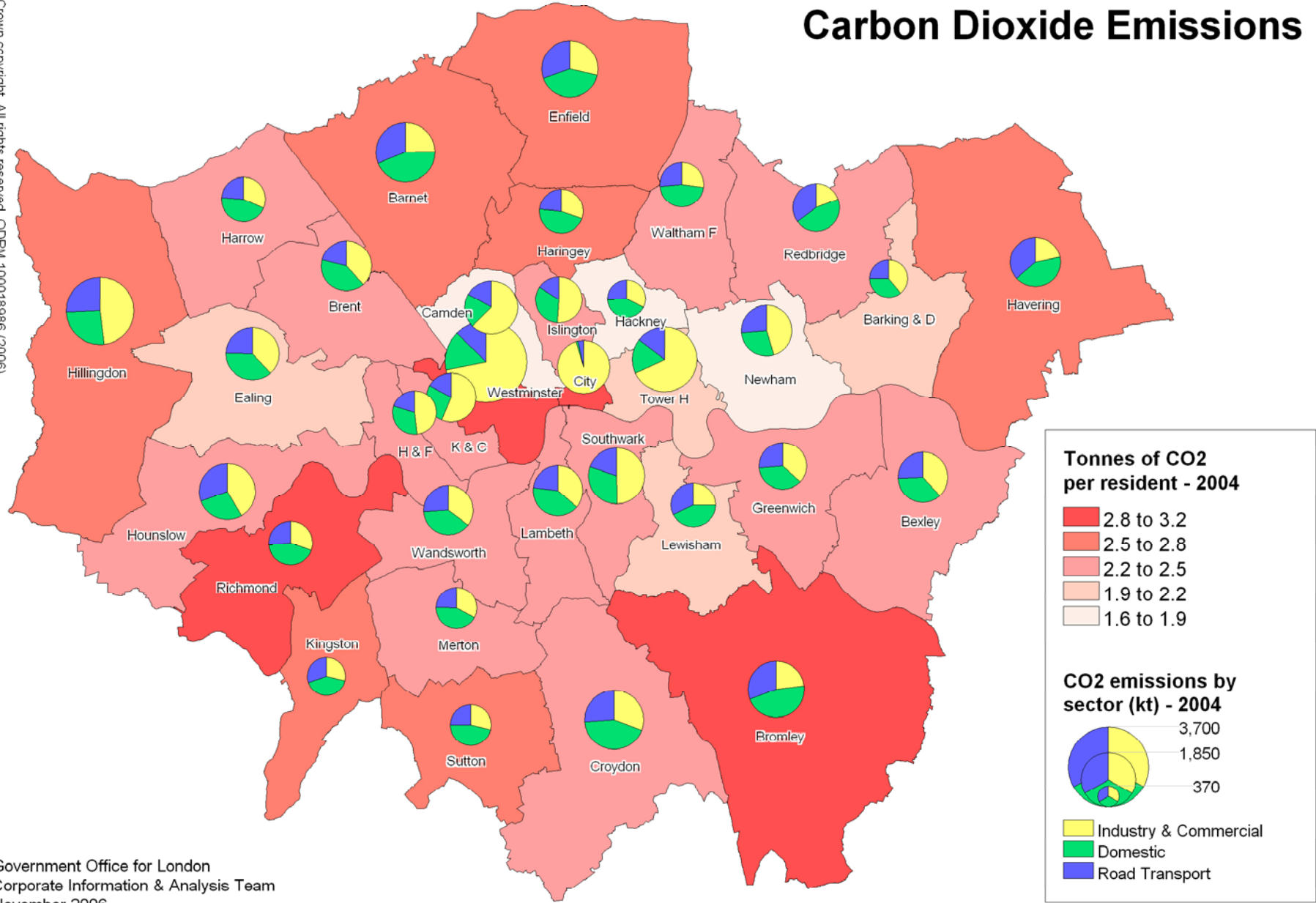


Current CO₂ emissions from London

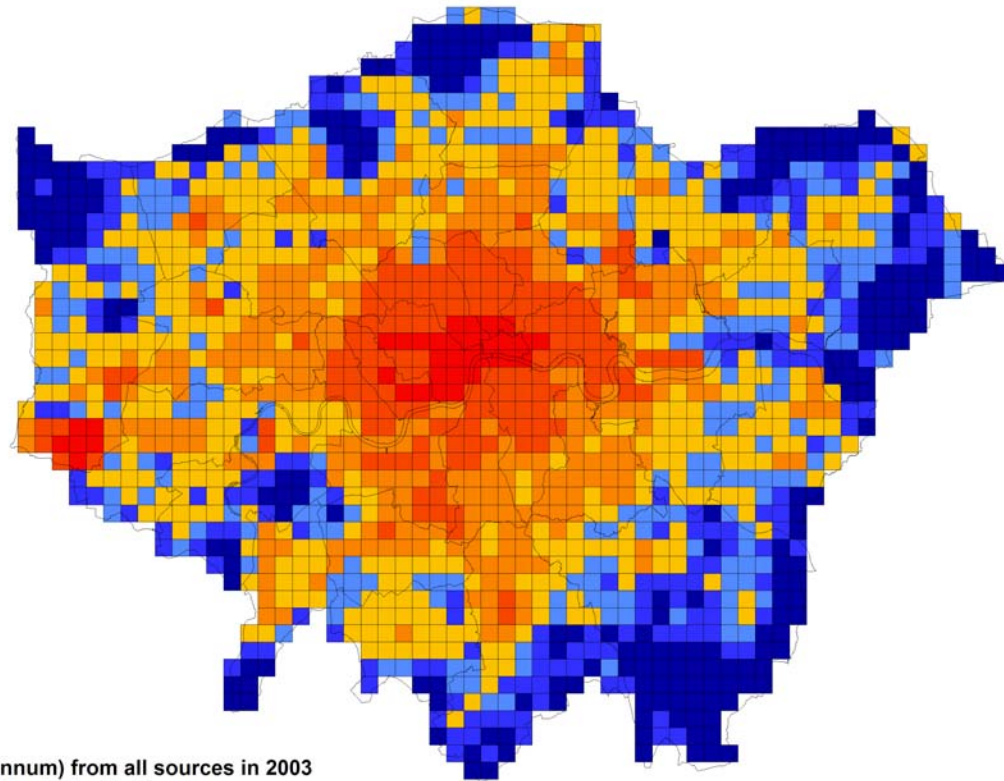


Carbon Dioxide Emissions

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Emissions Map – Total CO₂ (2003)



Carbon dioxide emissions (tonnes/annum) from all sources in 2003

Source: LECI 2003; Natural break classification

■	106,000 to 428,000	(34)
■	48,000 to 106,000	(161)
■	28,000 to 48,000	(308)
■	18,000 to 28,000	(451)
■	13,000 to 18,000	(228)
■	7,000 to 13,000	(193)
■	0 to 7,000	(229)

Planning system in London

Policy

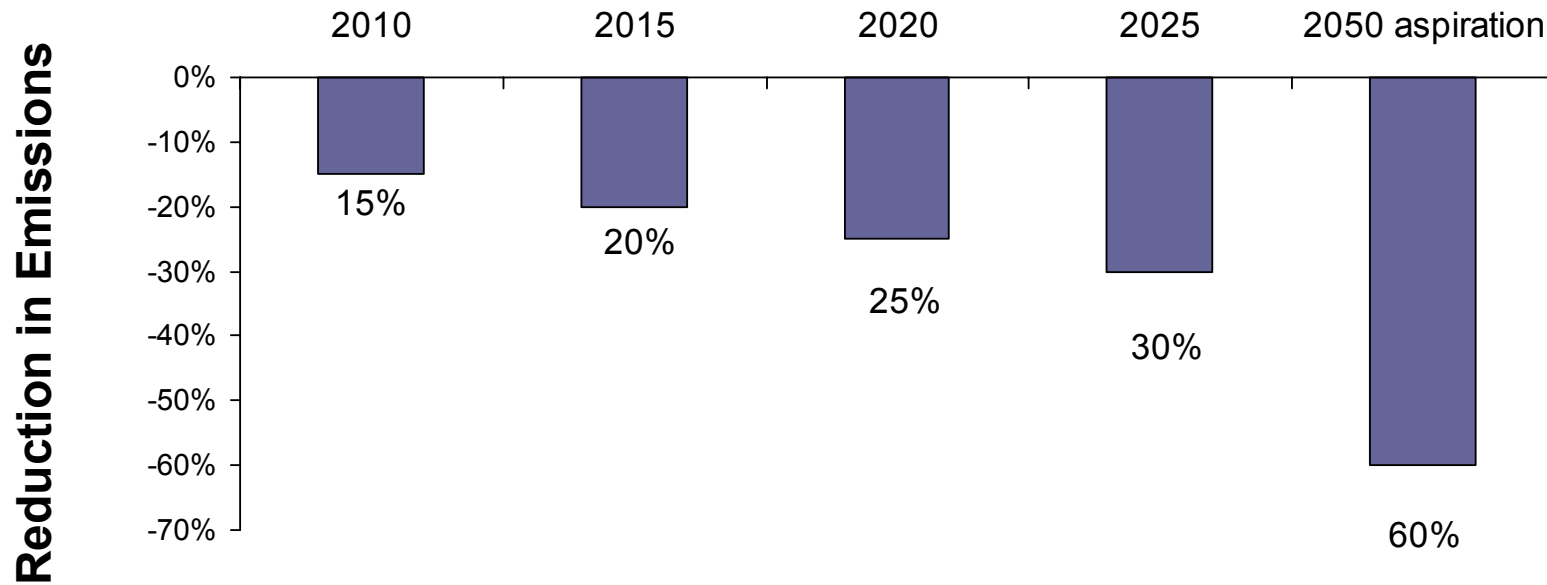
- Government Planning Policy Statements
- London Plan – Spatial Development Strategy for Greater London
- Local Development Plan Documents

Decisions

- Application to borough*
- Referable to Mayor (criteria incl. size, height)
- Mayor may “direct refusal” of an application



CO2 targets announced in draft London Plan



The London Plan

Policy 4A.7

Requirement to include energy efficiency design and technology, and renewable energy technology wherever feasible.

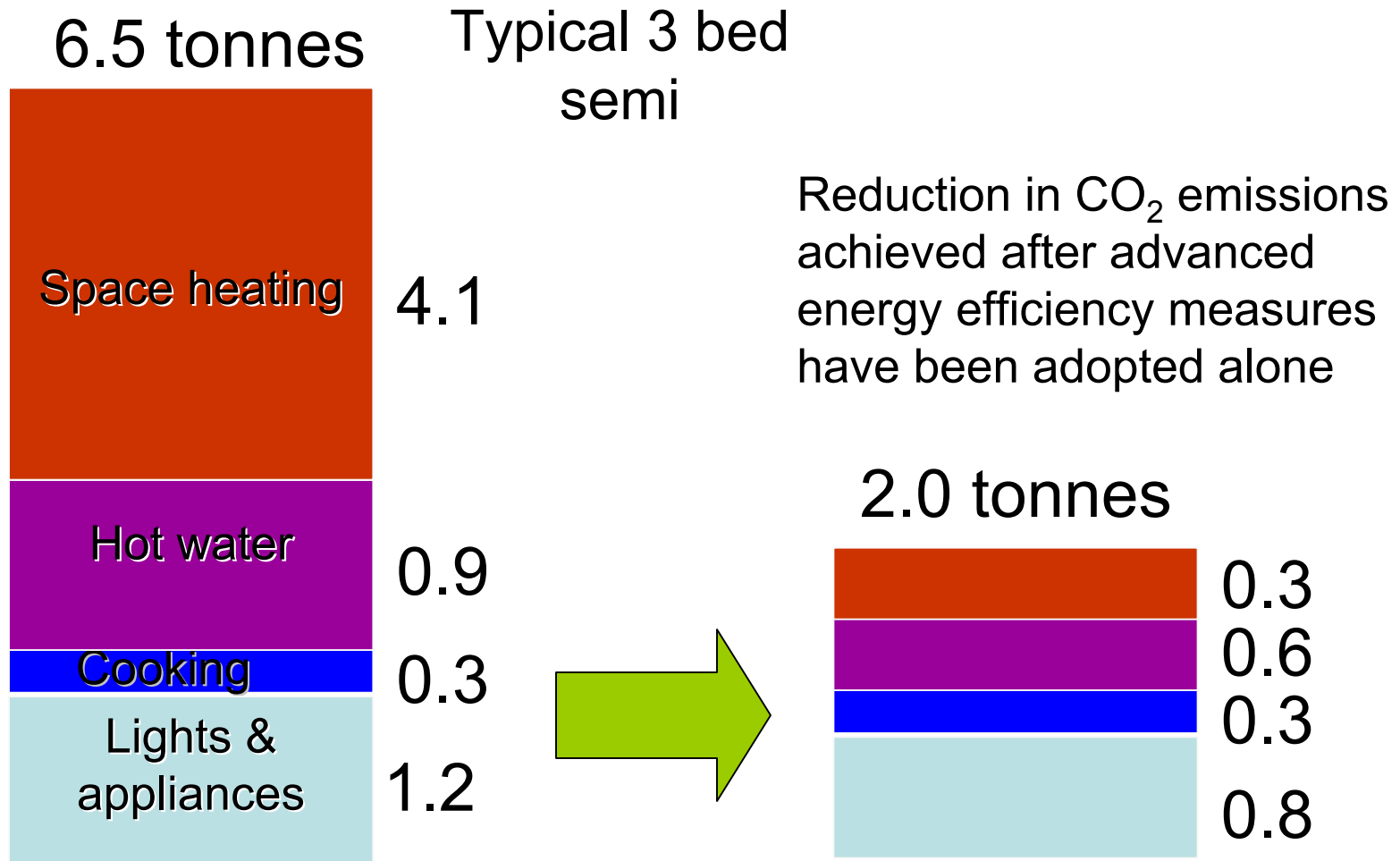
Policy 4A.8

Requirement for energy assessment; Mayor's energy hierarchy for heating.

Policy 4.9

Demonstration of contribution of renewable energy technology

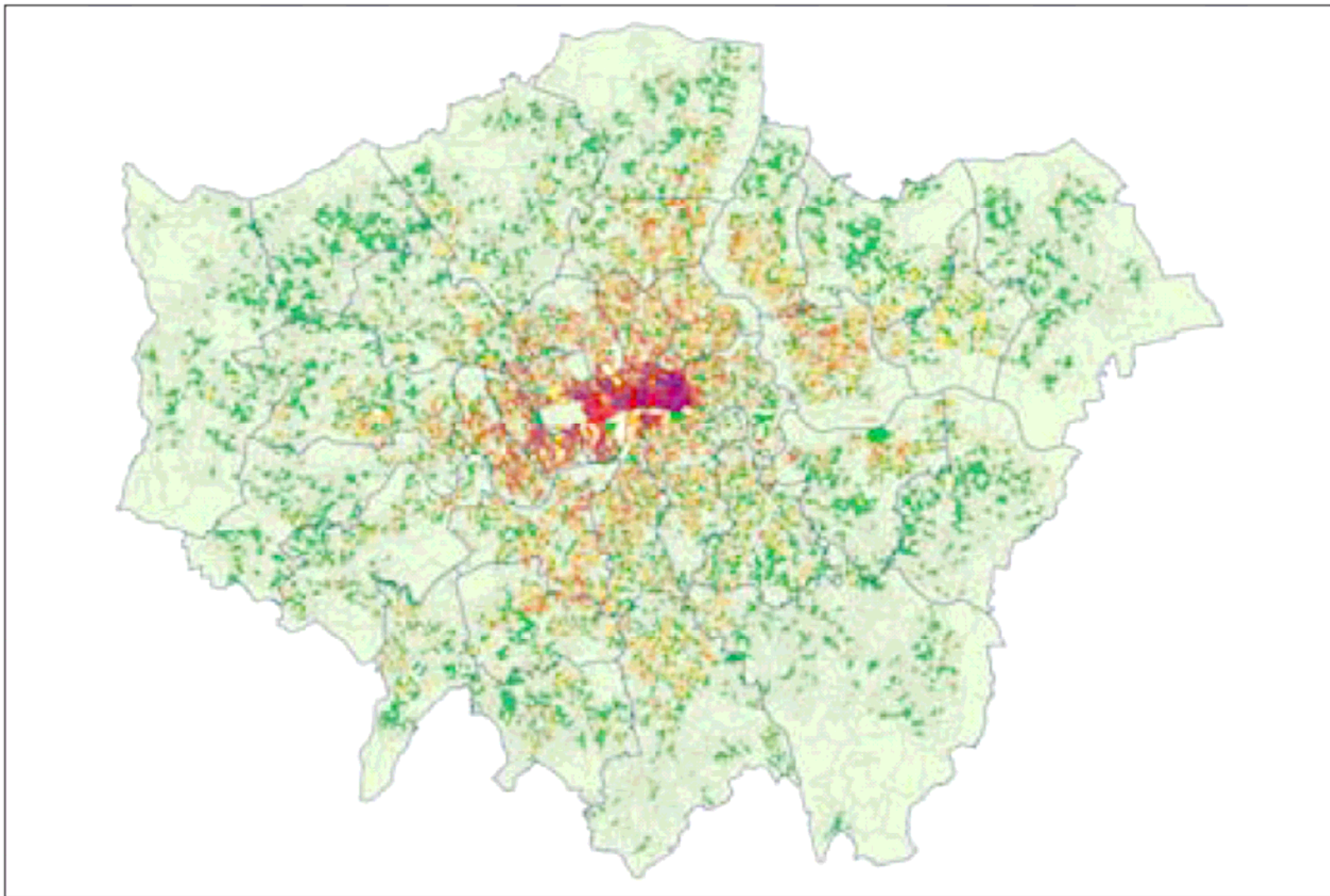
Energy Efficiency



Prioritising decentralised energy generation and renewables

- Design to minimise CO₂ emissions from the outset
- Maximise passive design and integration with CCHP/CHP
- All major new developments should establish or connect to a local combined cooling, heat and power network
- Minimise need for active cooling systems
- Incentivise new technologies, including hydrogen as an alternative to fossil fuels
- Developments are required to achieve a reduction in CO₂ emissions of 20% from onsite renewable energy generation





Map 1:

The heat map for London as mapped by The Community Heating Development Study for London (GLA 2005). It shows the density of the heat loads within the city.

Supporting publications

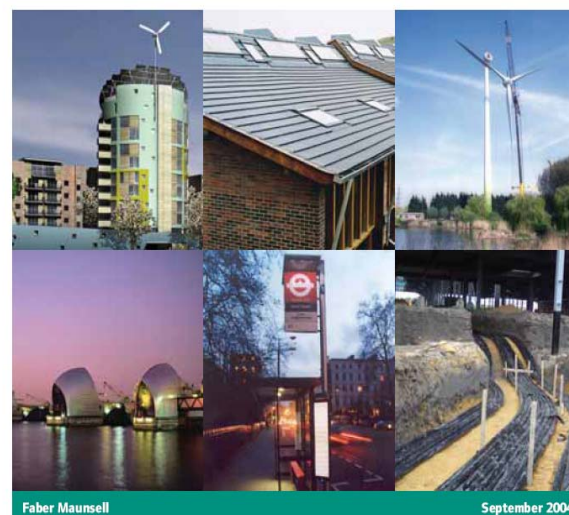
Sustainable Design and Construction SPG: Published May 2006 and includes guidance how to approach community heating, CHP and CCHP in planning applications.

London Renewables Toolkit: Published in September 2005 to provide technical support to GLA planners, London borough planners and applicants on incorporating renewable energy technologies in line with the Mayor's London Plan policies.



**LONDON
RENEWABLES**

Integrating renewable energy into new developments:
Toolkit for planners, developers and consultants



London Renewables, match funded by the Department of Trade and Industry, comprises representatives of the Greater London Authority, the London Development Agency, the Association of London Government, the Government Office for London, EDF Energy, London First, Imperial College London, London Sustainability Exchange, solarcentury, the Renewable Power Association, Creative Environmental Networks and the London Environment Coordinators Forum.

http://www.london.gov.uk/mayor/environment/energy/docs/renewables_toolkit.pdf

GREATER **LONDON** AUTHORITY

Energy Action Areas



Southwark - Elephant and Castle



Barking Town Centre

- Pilot EAA programme
- Network of learning
- ESCOs advice & support
- Guide to Becoming an EAA
- Carbon Accounting
- Round 2 of Energy Action Areas

Toward Zero Carbon Development

- Supportive information for boroughs
- Target of one zero carbon development per borough by 2010
- Definition of zero carbon development
- Steps a borough can take to take this forward, stakeholders, planning policy
- Published July 2006:
www.london.gov.uk/mayor/environment/energy/partnership-steering-group/index.jsp



Wind Power and Biomass Supply Chain

Builds on the Wind and Biomass study:

- **Wind:** looked at potential for installing commercial-scale non-building integrated wind turbines. (>100kW)
- **50.34MW of wind energy capacity identified** which would lead to 144. GWh of electricity generated annually.



- **Biomass:** Potential to displace around 10% of conventional energy sources

Ongoing Supply chain work

- Locations have been identified for further tree stations in London.
- **Guidelines for biomass use in London** for Developers and Planners

Partnership Approach

The screenshot shows the website's header with the 'LONDON' logo, a search bar, and navigation links for 'Home' and 'About us'. A main banner features a wind turbine and the text 'Transform city for su...'. A sidebar on the left contains a 'Working tow...' section with an image of a dome and text about 'The health and qu... promote the very 'c development of the and helping the grc Hydrogen Partners'. Below this is a 'What's ne...' section with text about 'Recently publ London's Low report identifies mechanisms to billion investme London's carbon'. At the bottom, there is a 'MAYOR OF LON' logo and a 'LO dev AG' logo.

[London Climate Change Partnership](#)

London Climate Change Partnership



The aim of the London Climate Change Partnership is to help ensure that London is prepared for its changing climate. It is chaired by Gerry Acher and supported by the GLA. It comprises key stakeholders across different sectors of London governance and business.

Home

The London Climate Change Partnership is supported by the support of the HSBC, Sir Robert Frimley Corporation.

The Agency is advised by KPMG, Greenpeace and Energy Savings Trust.

London Climate Change Partnership is controlled by the Mayor of London.

Latest Publications

[London's City Hall: London's City Hall state-of-the-art power energy.](#)

[UK's first combined heat and power installed in central London.](#) Planning permission granted.

Publications

- [Business as usual?!](#), November 2006
- [A good practice guide for sustainable communities](#), October 2006
- [Lessons for London](#), July 2006
- [A checklist for development](#), November 2005
- [The impacts of climate change on London's transport systems](#), September 2005
- [London's warming: The impacts of climate change on London](#), October 2002

If your organisation could contribute to adapting London to climate change, please contact the LCCP at climatechangepartnership@london.gov.uk.

Related Pages

[Aims and objectives](#)

[Chair](#)

[Membership](#)

[Consultation responses](#)

[Press releases](#)

[Steering Group minutes](#)