



“Ceci n’est pas un pipe”

Living for the city

Dr Edward Hobson
11 September 2009

Commission for Architecture
and the Built Environment

The government’s advisor
on architecture, urban design
and public space

About CABE



- CABE is the government’s advisor on architecture, urban design and public space.
- It is the centre of excellence for advice for clients, decision makers, professionals and the public on how to create well designed buildings, places and spaces.

Creating Successful Neighbourhoods

Lessons and actions for Housing Market Renewal

Start with the park

Creating sustainable urban green spaces in areas of housing growth and renewal

cabe
space

ating

Creating successful masterplans

A guide for clients



Design and manage a sustainable community



- provide habitat for a variety of species as well as humans
- be self-sufficient
- grow and reproduce over time as the availability of natural resources dictate
- create a microclimate and provide shade & shelter
- accrue solar energy as fuel and also use it to produce foods
- distil water and contribute to better groundwater drainage
- ensure waste is bio-degradable and locally recycled
- fix nitrogen in soils and directly provide local nutrients
- filter local airborne pollutants
- sequester carbon over the short and long term
- produce oxygen and regulate the atmosphere
- be aesthetically enriching, even changing colours with the seasons
- inspire artists, lovers and even worshippers
- give us an enormous sense of well-being...

*Institute of Mechanical Engineers
Geo-Engineering – Giving us time to act?*



Artificial trees

- Research is being undertaken into building machines which, like trees, can remove CO₂ from the atmosphere. This occurs when air passes through the device (the tree) and CO₂ sticks to a sorbent material (the leaves). The CO₂ is then removed and buried underground in the same way as conventional carbon capture and storage (CCS).



Living for the city





'We face a major economic crisis and we face a still bigger climate crisis and by thinking through clearly and carefully, and acting quickly, we can respond to both of them at the same time'.

Lord Stern, January 2009

Do you share our vision?



- We believe that every town and city can be resilient, prosperous, life-affirming places with the vision and capacity to improve the lives of all citizens through sustainable urban design and management
- Climate change is a spur to help us achieve this. We should be doing it anyway because of the benefits to society.



“Leadership is taking people to somewhere they wouldn’t go on their own.”

William McDonough, 2009

City leaders wanted for hazardous journey.

Hard choices, bitter arguments, long months in political wilderness, constant peril, safe re-election uncertain. Honour and recognition in case of success.
sustainablecities.org.uk



Commission for Architecture and the Built Environment



Hallmarks of a sustainable city



“This is not a sustainable city”

Do you live/work in one?

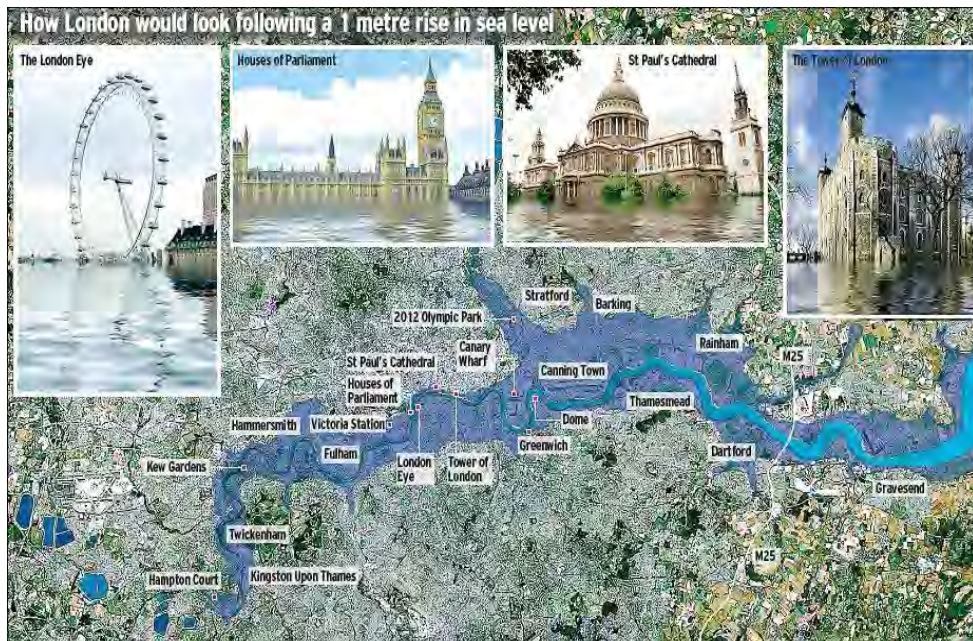
Priority 1



Understand and nurture a place's unique qualities as the basis of responding to a changing climate

- Nurture genius loci: there is no one size fits all, for physical solutions or processes
- Use the UK Climate Projections and tools to ensure that local characteristics are deployed to contribute to the city's response





Priority 2



Use the planning system to target interventions at the most appropriate scale

- Ensure the spatial distribution of activities within cities coheres communities and reduces demands on key areas such as transport and energy
- Promote and represent the ethos of the city through cultural and political leadership and active engagement of citizens





Priority 3

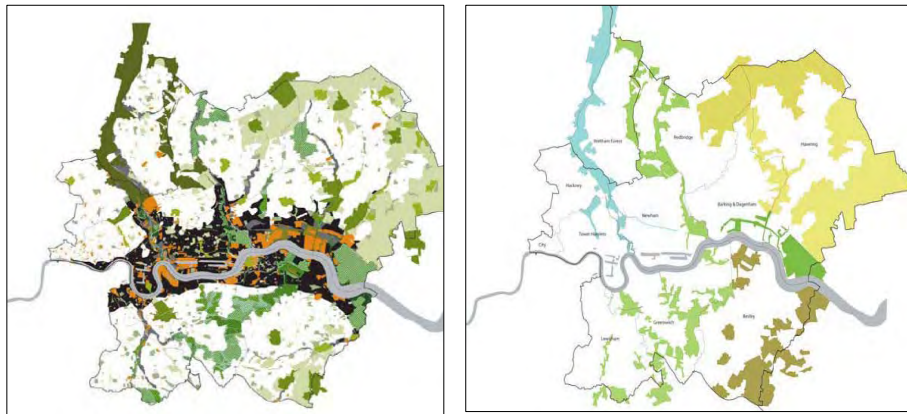


Forge a new city vision and infrastructure through civic leadership and collective action

- Flexible infrastructure of networks, not hierarchies, long life, low energy, low emission and loose fit
- Integrate the urban landscape and natural ecological systems to operate as a key part of civic infrastructure



East London Green Grid



Priority 4

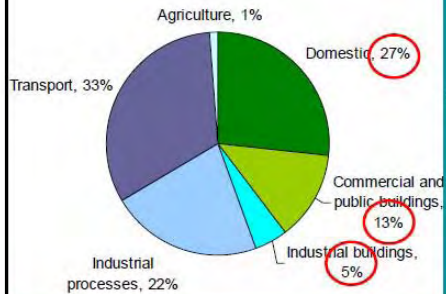


Know your starting point, set targets and celebrate progress

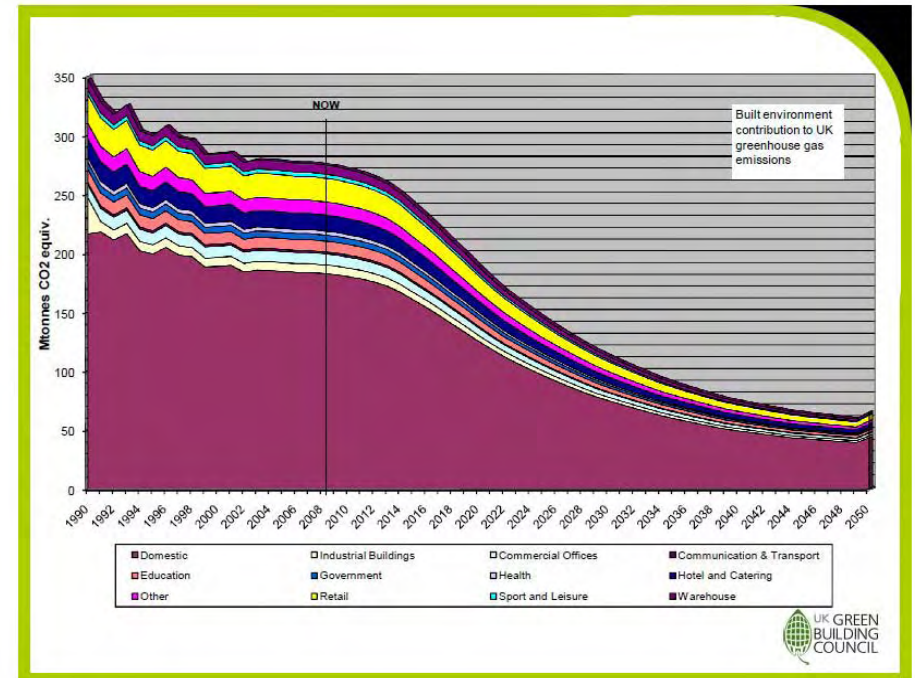
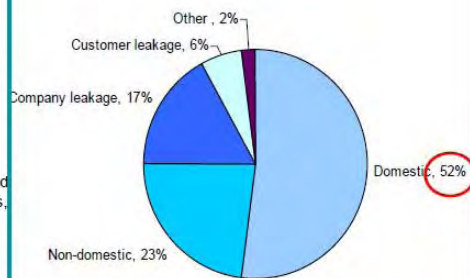
- Ensure that city-wide consumption follows the hierarchy of reduce; reuse; recycle and recover
- Establish ecological footprints and benchmarks against which to measure performance

The built environment has a significant impact on emissions and water consumption

Carbon emissions from energy use in buildings account for 45% of UK emissions; our homes 27%



Water use in homes accounts for over half of public water consumption in England and Wales



Dealing with the priorities you face



Energy	Waste	Water	Transport	Green Infrastructure	Public Space
Reduce energy demand	Plan for sustainable waste management	Manage surface water and flood risk	Encourage public transport, walking and cycling	Integrate green infrastructure into urban areas	Maximise the potential of public space
Develop a low carbon and renewable energy portfolio	Deal with construction waste	Encourage sustainable water use	Reduce car use and improve the carbon efficiency of vehicles	Moderate the urban heat island	Adapt public space to climate change
	Turn waste into energy	Protect water courses		Help wildlife adapt to change	





The end. The beginning.

'Signs that Say What You Want
Them To Say and
Not Signs that Say What Someone
Else Wants You To Say'

1992-3

Gillian Wearing

Living for the city





sustainablecities.org.uk

ehobson@cabe.org.uk

www.cabe.org.uk

Commission for Architecture
and the Built Environment

The government's advisor
on architecture, urban design
and public space