



ISOCARP

44th INTERNATIONAL ISOCARP CONGRESS
Dalian, China, 19-23 September 2008
Keynote Speaker

RONAN UHEL

Background: Geography, Physical planning and Oceanography - Training in EU environmental legislation and regional policies.

Research: 20 years in environmental and sustainable development information and analysis at the European and international level. Bridging between science (knowledge) and policy (actions), assessing the state-of-the-environment and policy effectiveness. Coordination and editorial responsibility of many studies, reports and publications on these topics with broad coverage from economic sectors to technologies to education. Participation in many committees, working groups at European and international levels on environmental governance, speaker/discussant in conferences and workshops covering all aspects of environment/development issues.



Teaching: Lecturer in training schools and summer universities on sustainability issues.

Private life: Remain active and open to the many beauties of the world.

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Opening Session

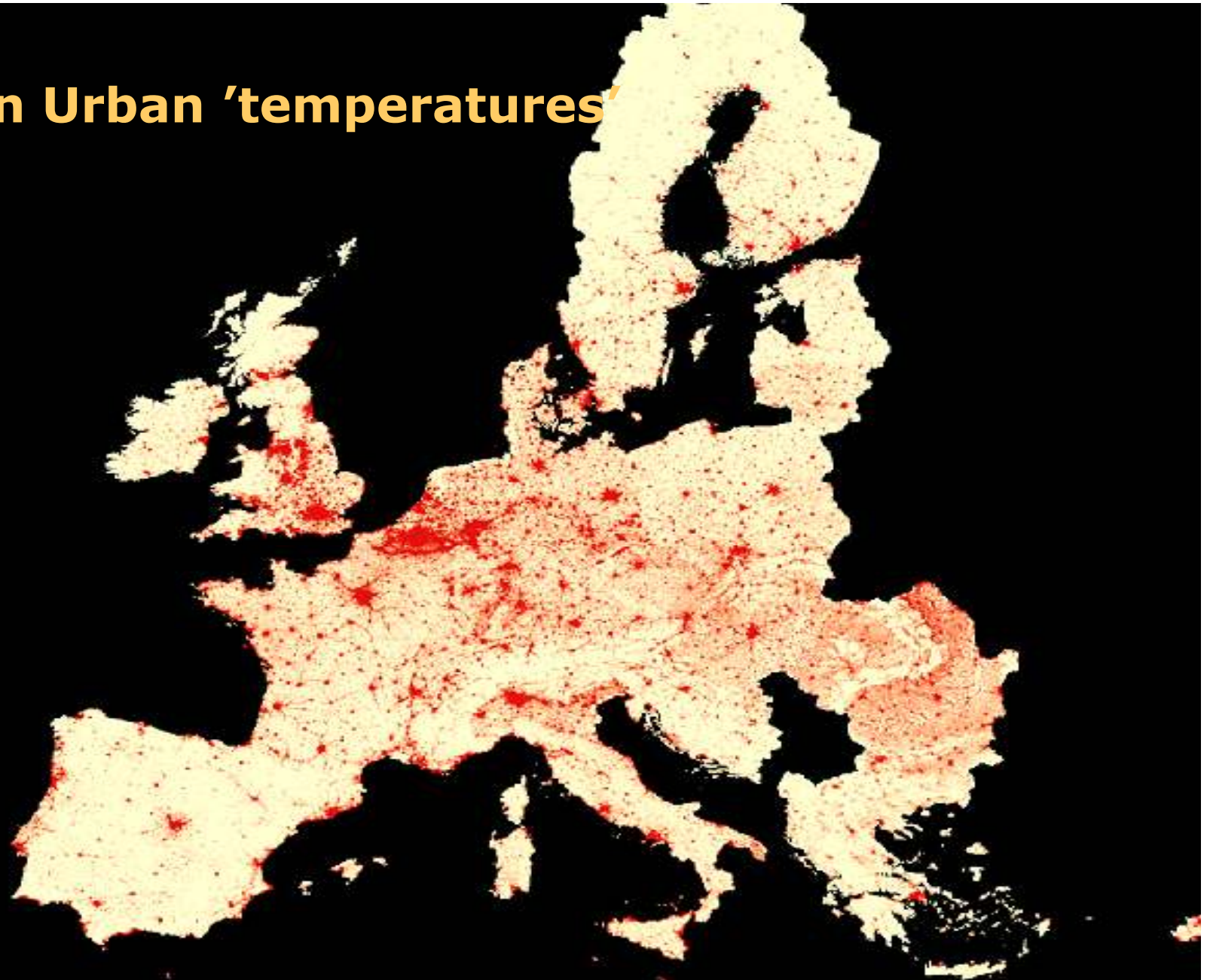
Urbanisation in Europe: Limits to spatial growth

Ronan Uhel
European Environment Agency





European Urban 'temperatures'



74 % population live in Urban Areas...80 % by 2020

EEA Report | No 10/2006

Urban sprawl in Europe

The ignored challenge

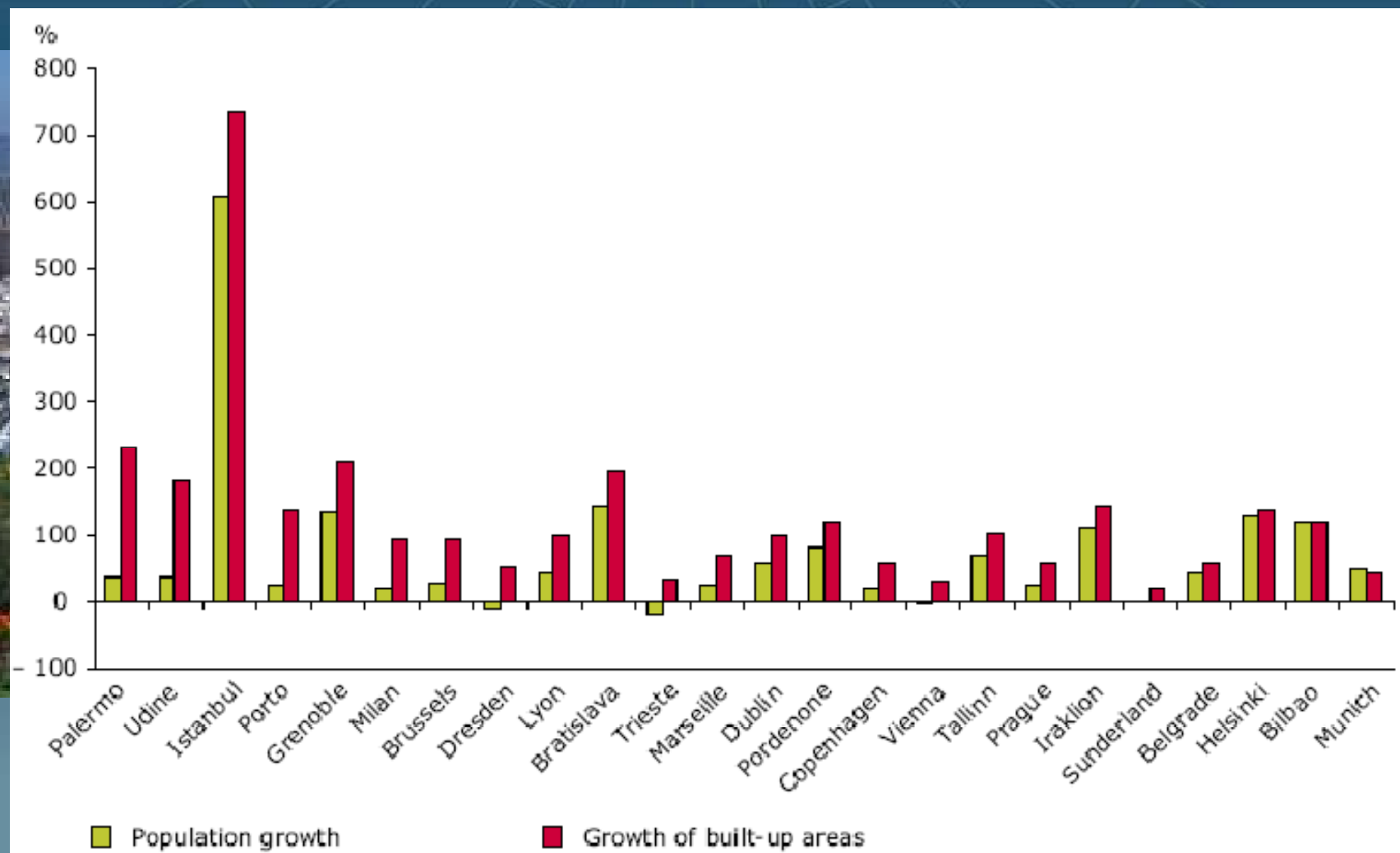
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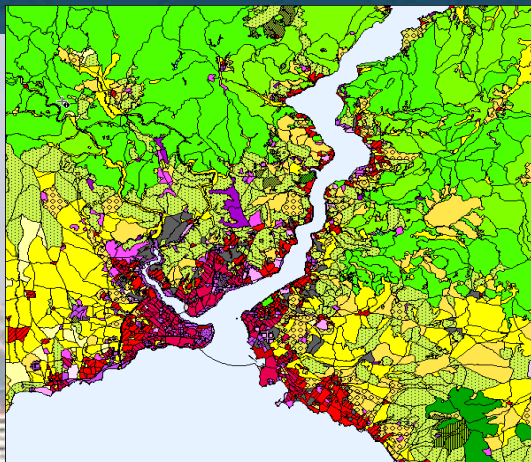


Growth of Urban Areas from 1950s to the late 1990s

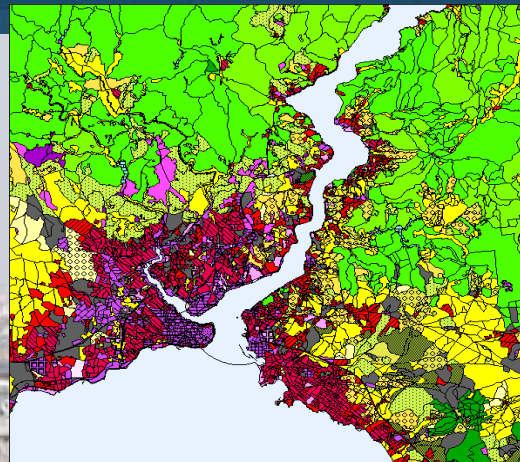


Istanbul, Turkey

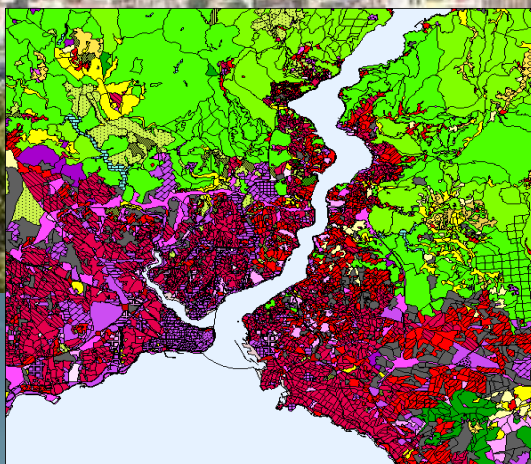
1945



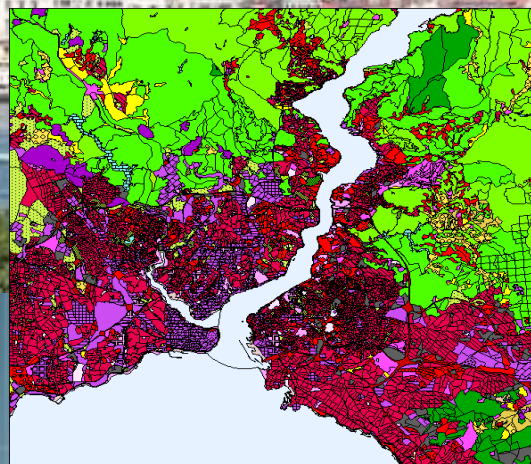
1968



1988



2000





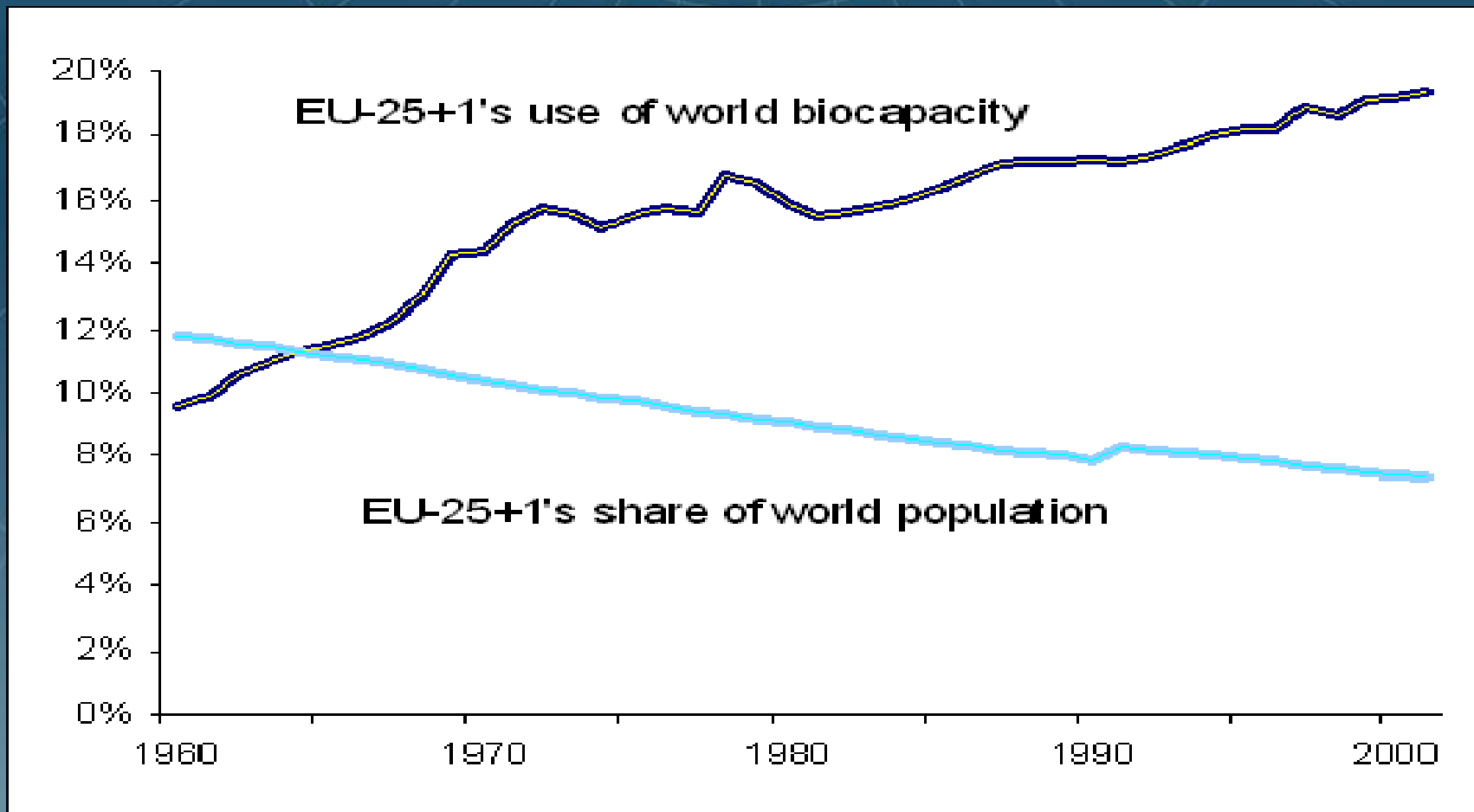
5 times the size of Great London.....

Great London: It takes 293 times its area to sustain its needs...

Sprawl of urban areas



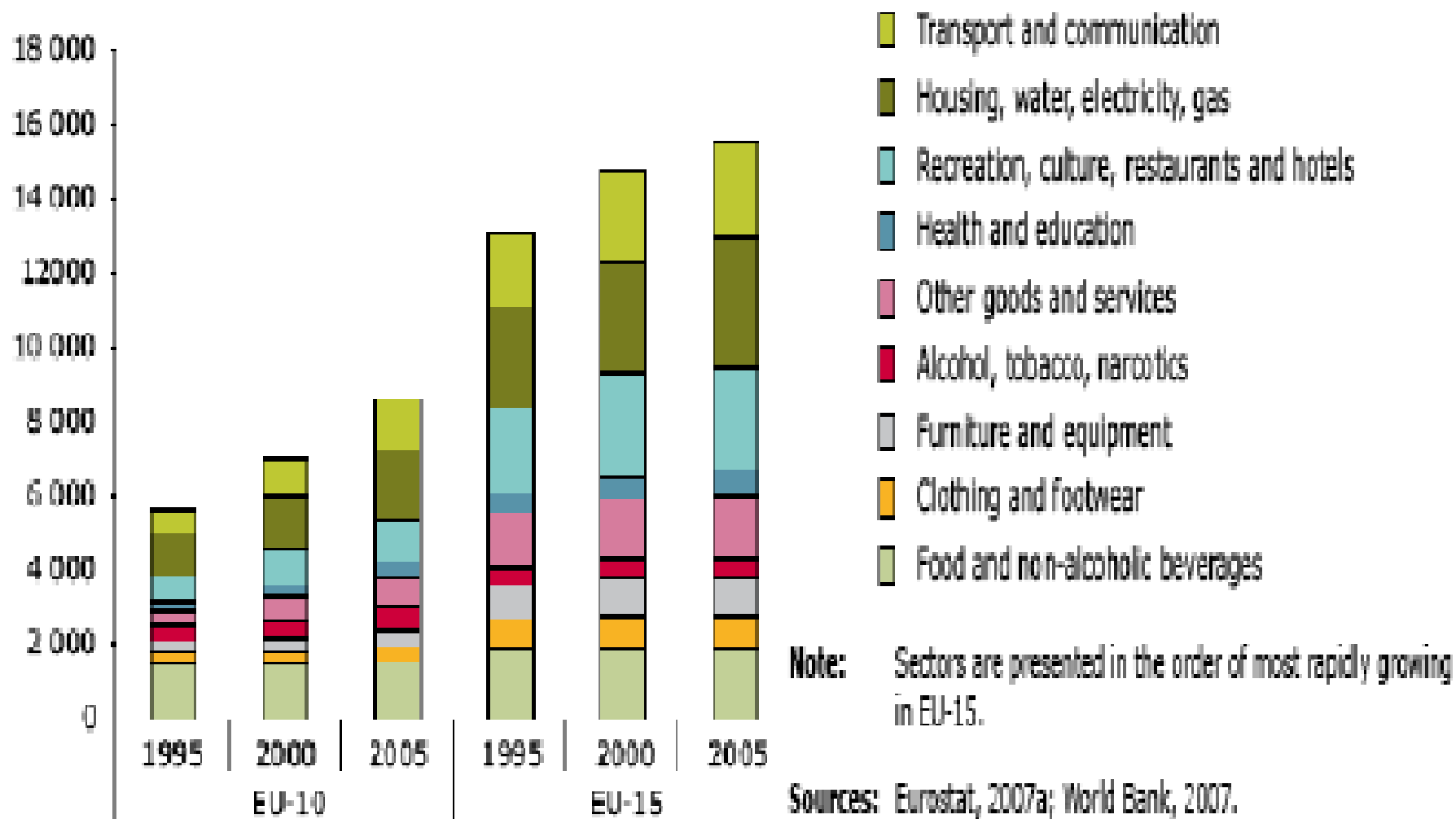
Consumption, urban growth and trade needs more than double our biological capacity



Source: EEA/GFN, 2005: Global ecological overshoot

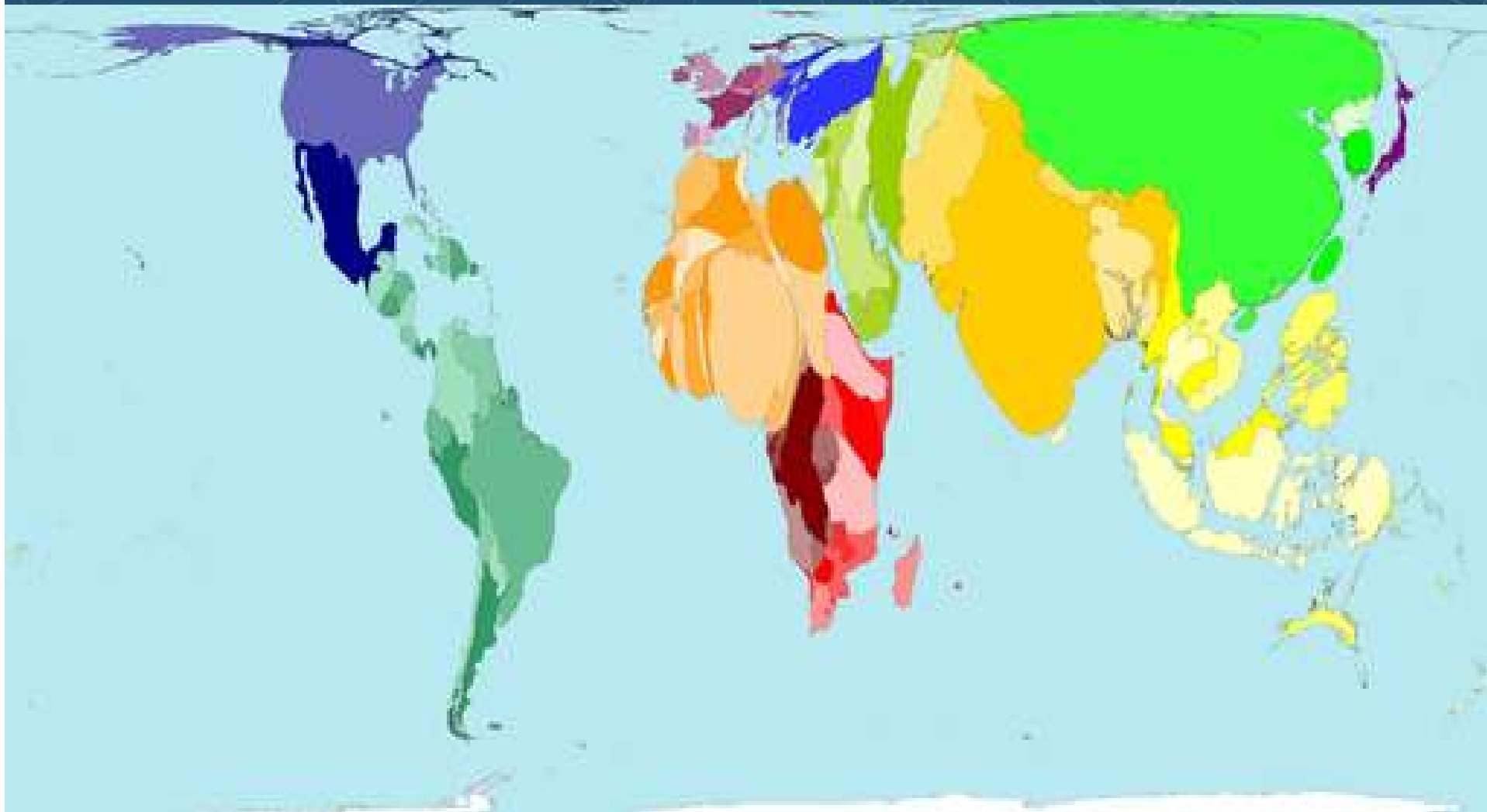


...due to changes in household consumption (expenditure per capita in PPP, constant 2000 prices)





City Growth 2002-2015





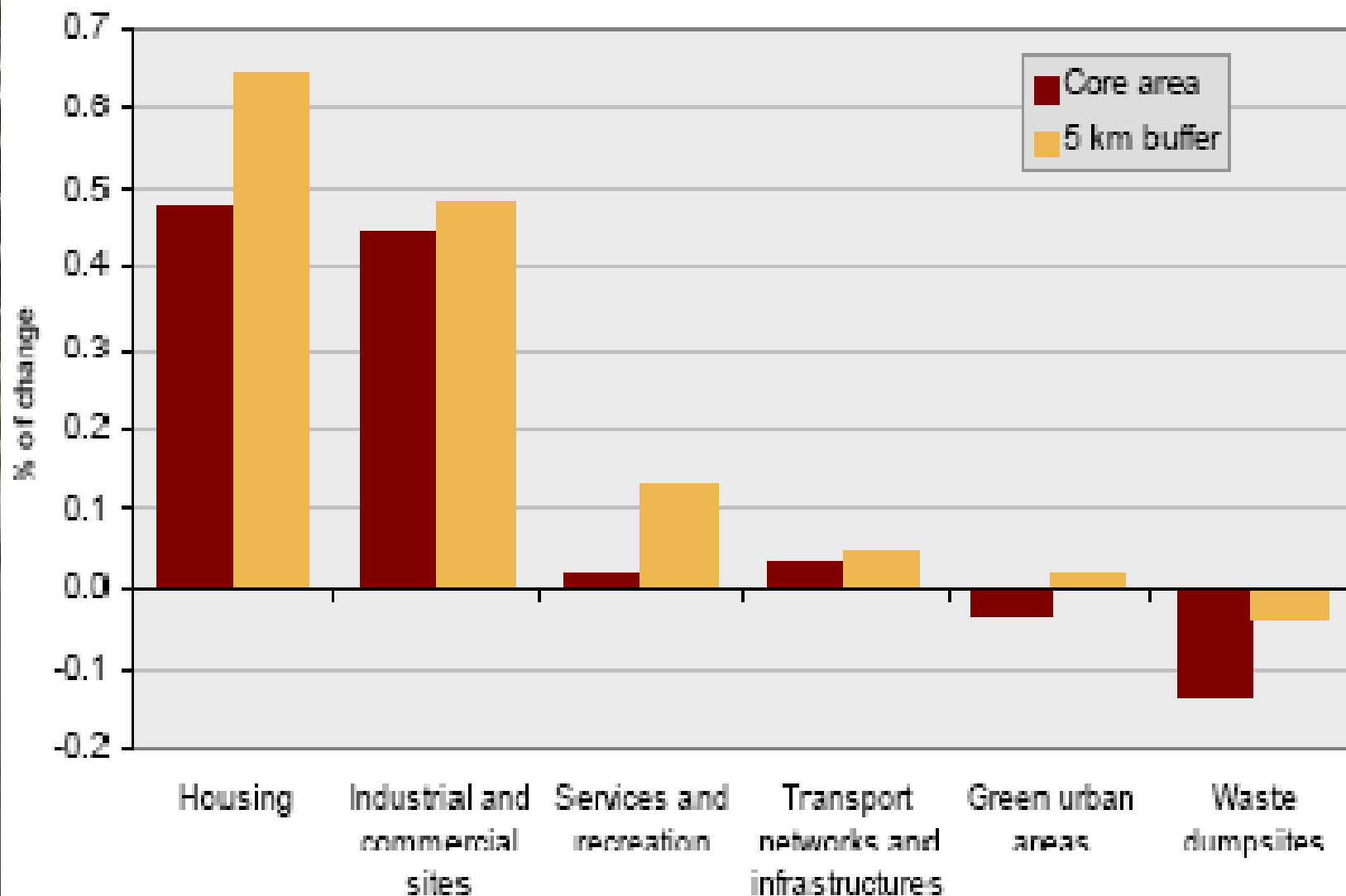
"WHEN, EXACTLY, DID BACKGROUND NOISE BECOME FOREGROUND NOISE?"



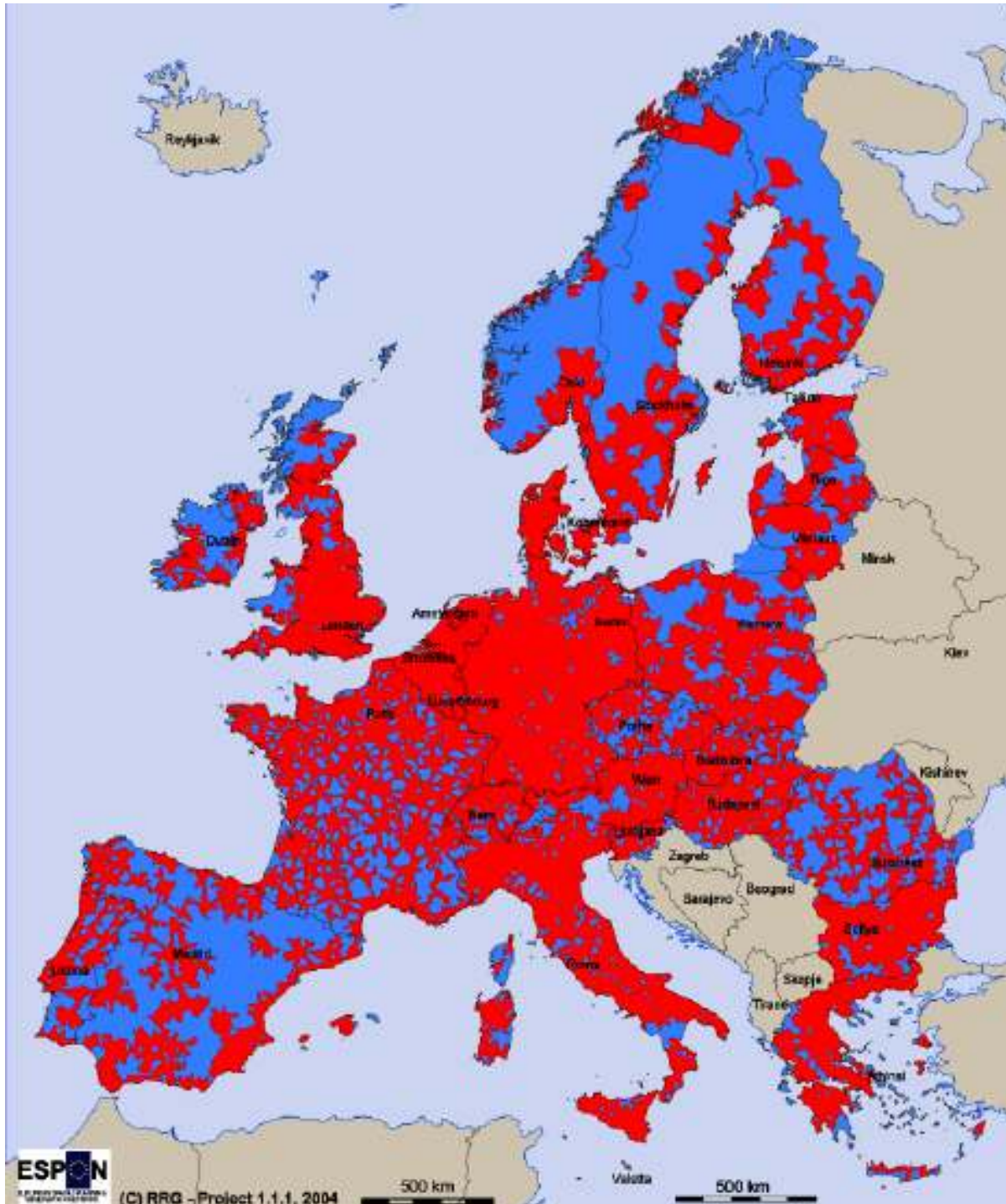


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Top-drivers of urban land development...





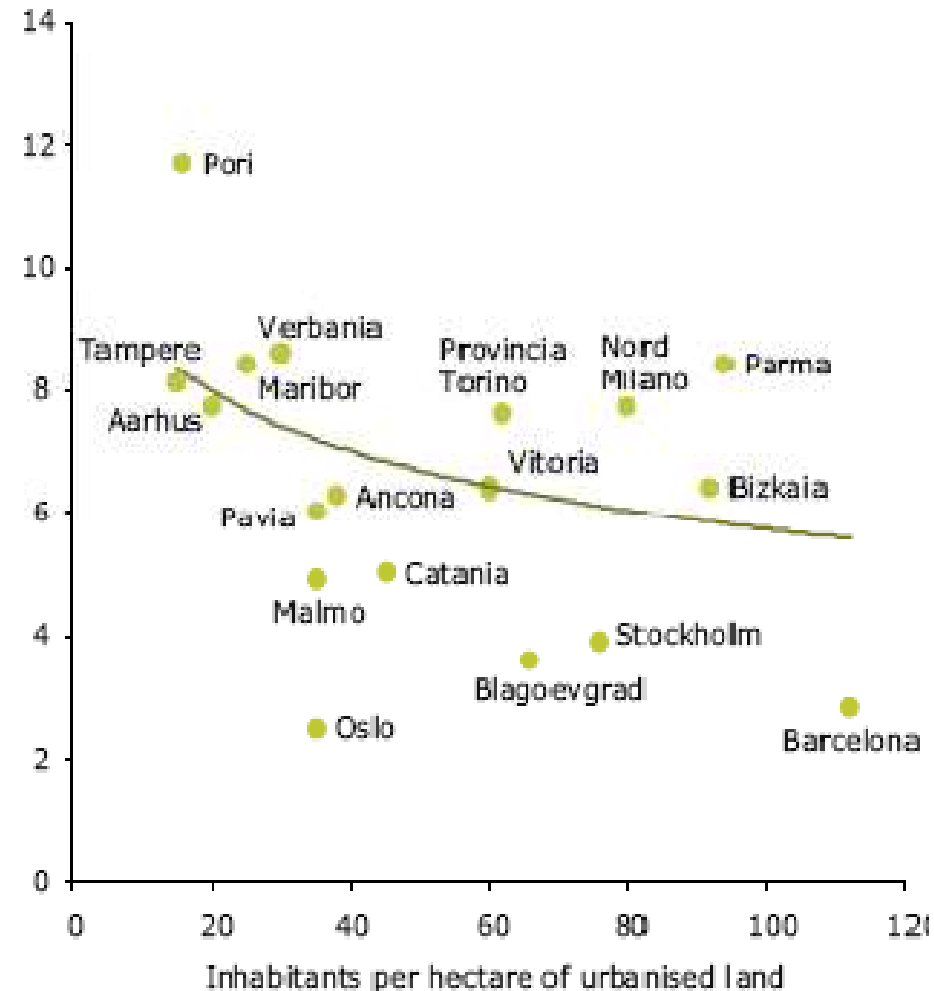


Sprawl contributes both CO₂ and impacts!

Energy consumption per capita (1 000 millions of joules)



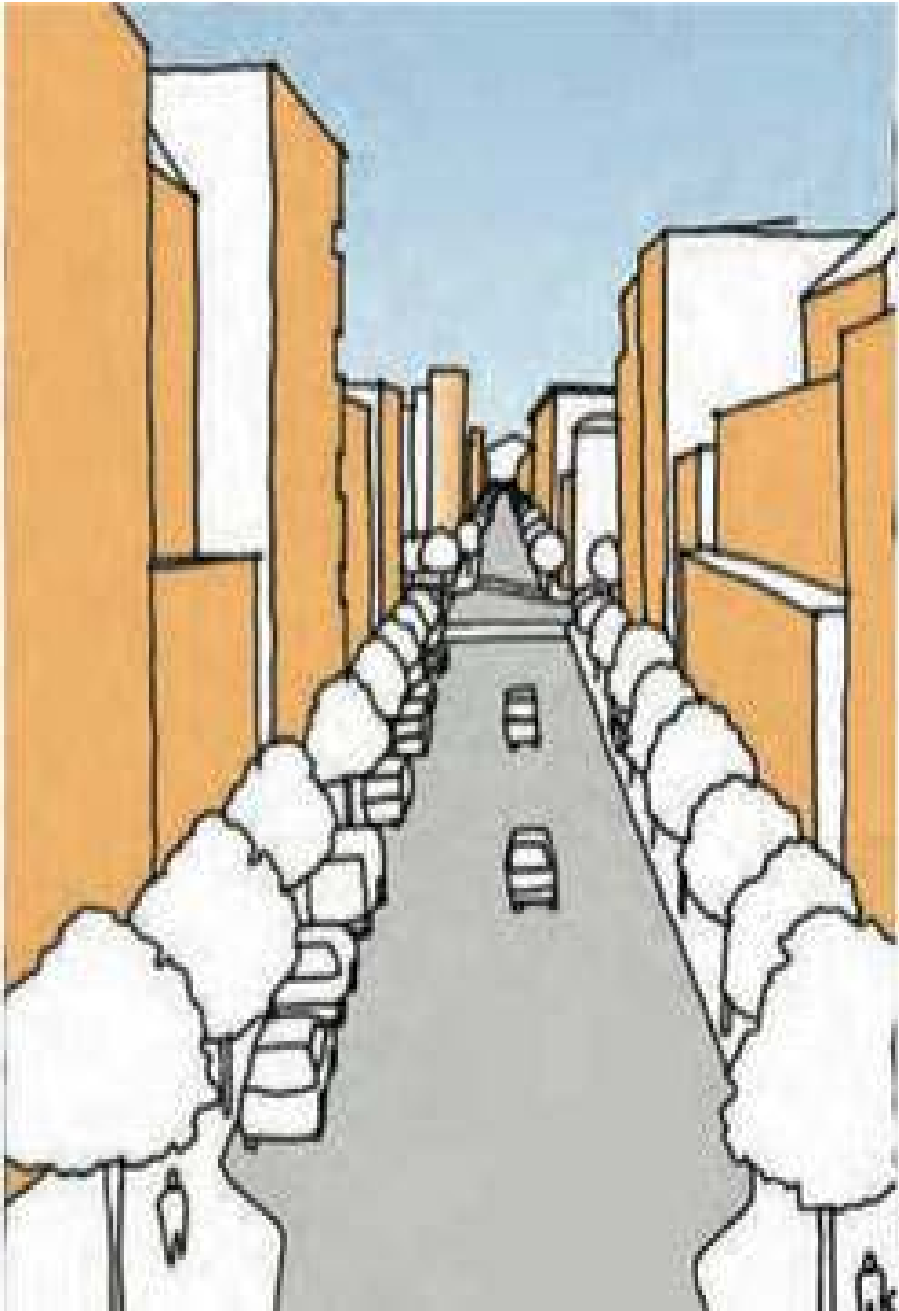
Total CO₂ emissions per capita (tonnes)

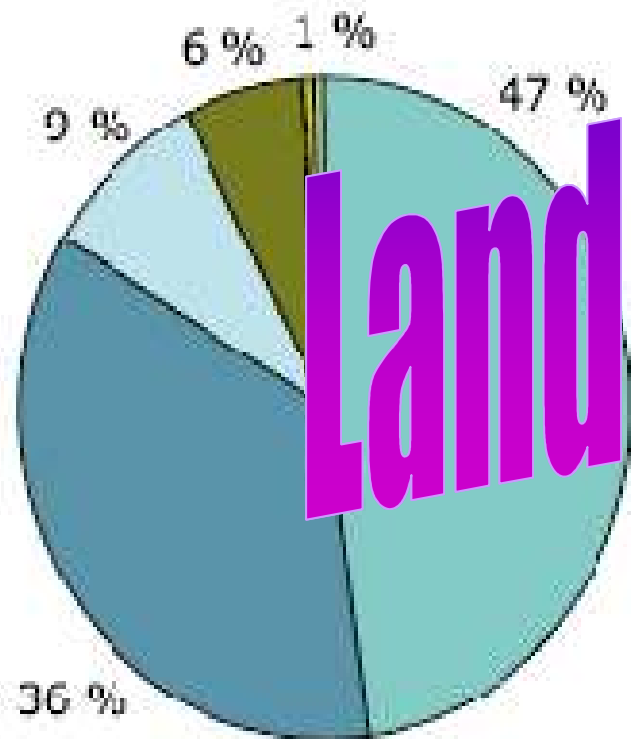


Urban ...mobility!



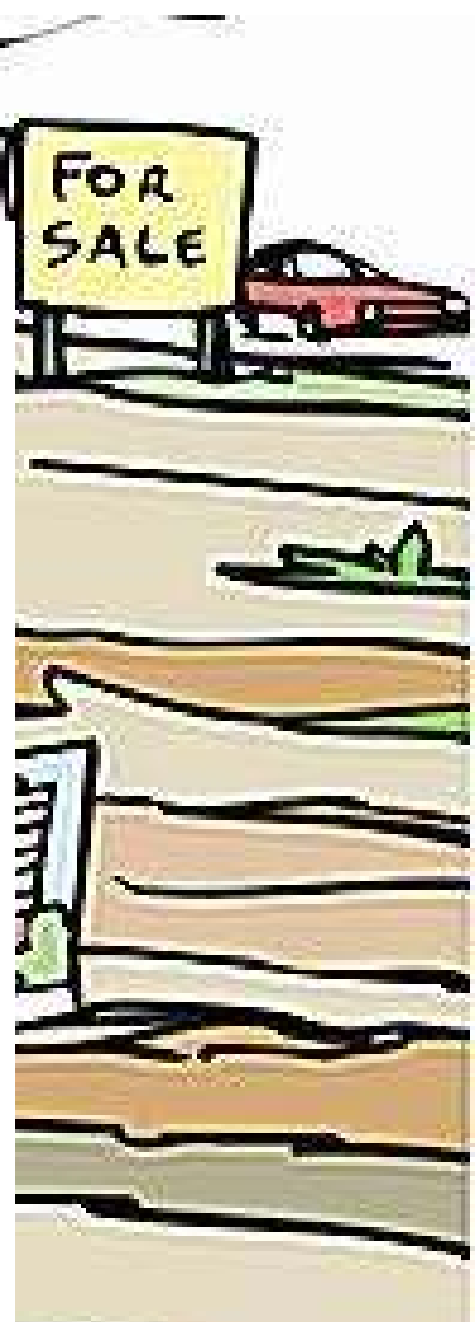
DESIGN for a LIVABLE DOWNTOWN





Land pricing!!!

- Arable land and permanent crops
- Pastures and mixed farms
- Transitional
- Open spaces with little or no vegetation
- Wetlands
- Water bodies





A climate proof future...?



Courtesy VROM, NL

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Drivers of urban sprawl

Macro-economic factors

- Economic growth
- Globalisation
- European integration

Micro-economic factors

- Rising living standards
- Price of land
- Availability of cheap agricultural land
- Competition between municipalities

Demographic factors

- Population growth
- Increase in household formation

Housing preferences

- More space per person
- Housing preferences

Inner city problems

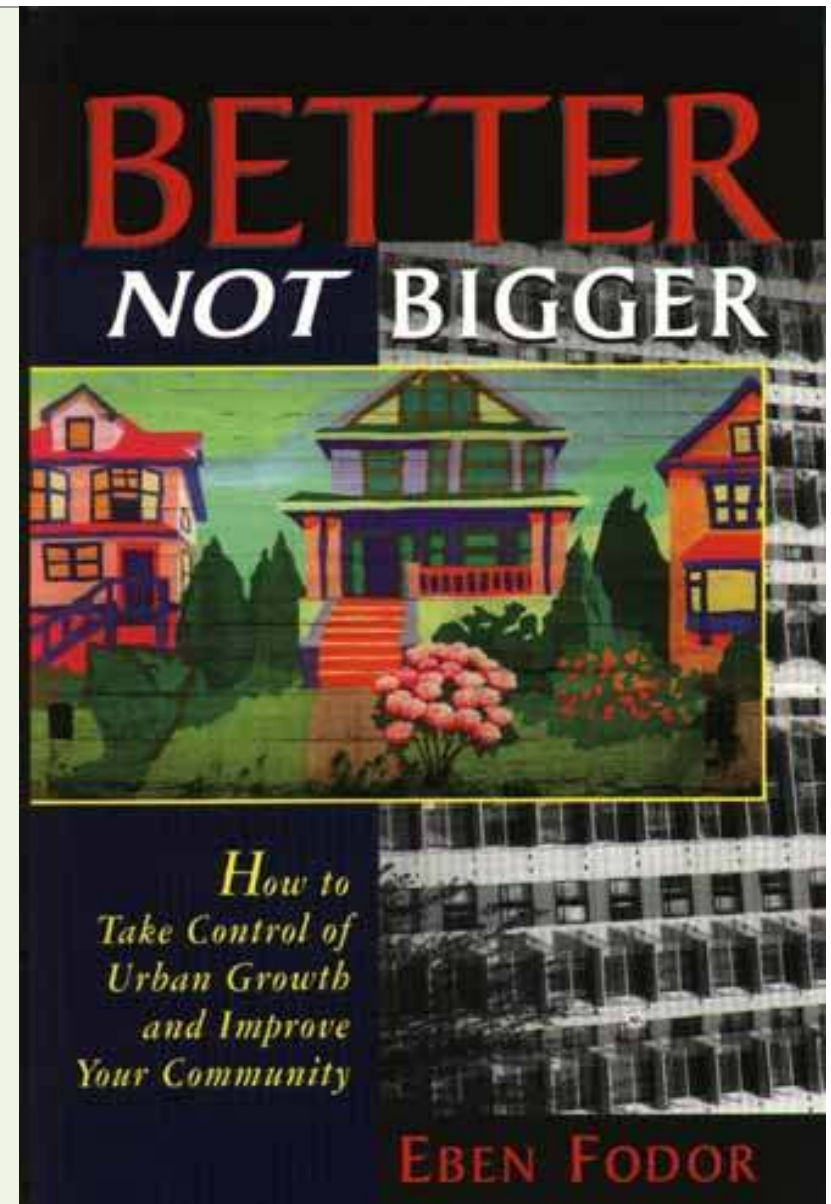
- Poor air quality
- Noise
- Small apartments
- Unsafe environments
- Social problems
- Lack of green open space
- Poor quality of schools

Transportation

- Private car ownership
- Availability of roads
- Low cost of fuel
- Poor public transport

Regulatory frameworks

- Weak land use planning
- Poor enforcement of existing plans
- Lack of horizontal and vertical coordination and collaboration



Munich

Smart Growth Marvel



**Why
different,
how do they
manage?**





Area x time consumption for a 5 km length trip



Parking



Running



Source: UITP - UITP - UITP

UITP - UITP - UITP



Ecosystem benefits to a city in the developed world The case of Greater London, United Kingdom

1 Medicines

There are an estimated 392 children with leukemia or lymphoma in London. In 1970, only 127 of those children would have survived, but thanks to improved treatments, using vinblastine and vincristine derived from the Rosy Periwinkle from Madagascar, 312 of those children can now be expected to live.

2 Fish

Londoners consume 72,000 tonnes of fish each year, much of it from the North Sea, but also from the coastal waters of the Pacific Ocean, which has the world's most productive fisheries.

3 Coffee

More than 1.3 billion cups of coffee are consumed in London each year. Native bees from tropical forests boost yields in adjacent coffee plantations by 20%, helping farmers to feed demand for the world's most traded legal commodity after oil. Almost 25% of UK coffee comes from Vietnam.



6 Physical and mental health

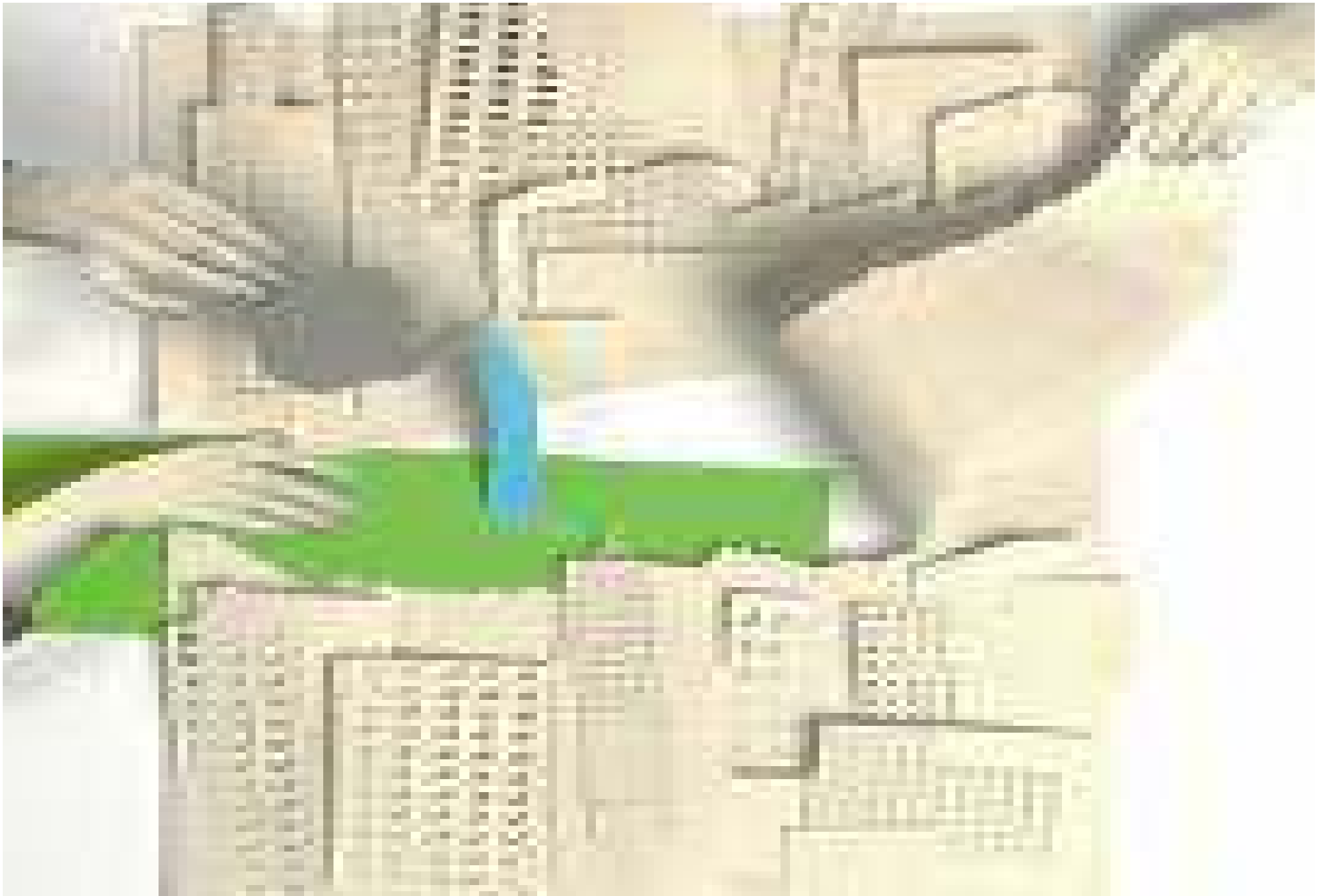
There are at least 22,500 children in London under the age of ten with Attention Deficit Hyperactivity Disorder, which puts them at greater risk of dropping out of school and becoming involved in crime. Children given the opportunity to interact with nature (for example at the London Wetlands Centre, which has 180,000 visitors each year) show a 30% improvement in symptoms.

4 Flooding

London has 1.2 million people living in a floodplain, at increasing risk from rising sea level. London contributes to climate change by emitting 53 million tonnes of CO₂ each year. The tropical forests of Masoala National Park in Madagascar store 44 million tonnes of CO₂.

5 Existence values

The Royal Society for the Protection of Birds, with 120,000 members in London, is working to conserve 101,000 ha of rainforest in Indonesia and 75,000 ha in Sierra Leone, in addition to 200 reserves within the UK.





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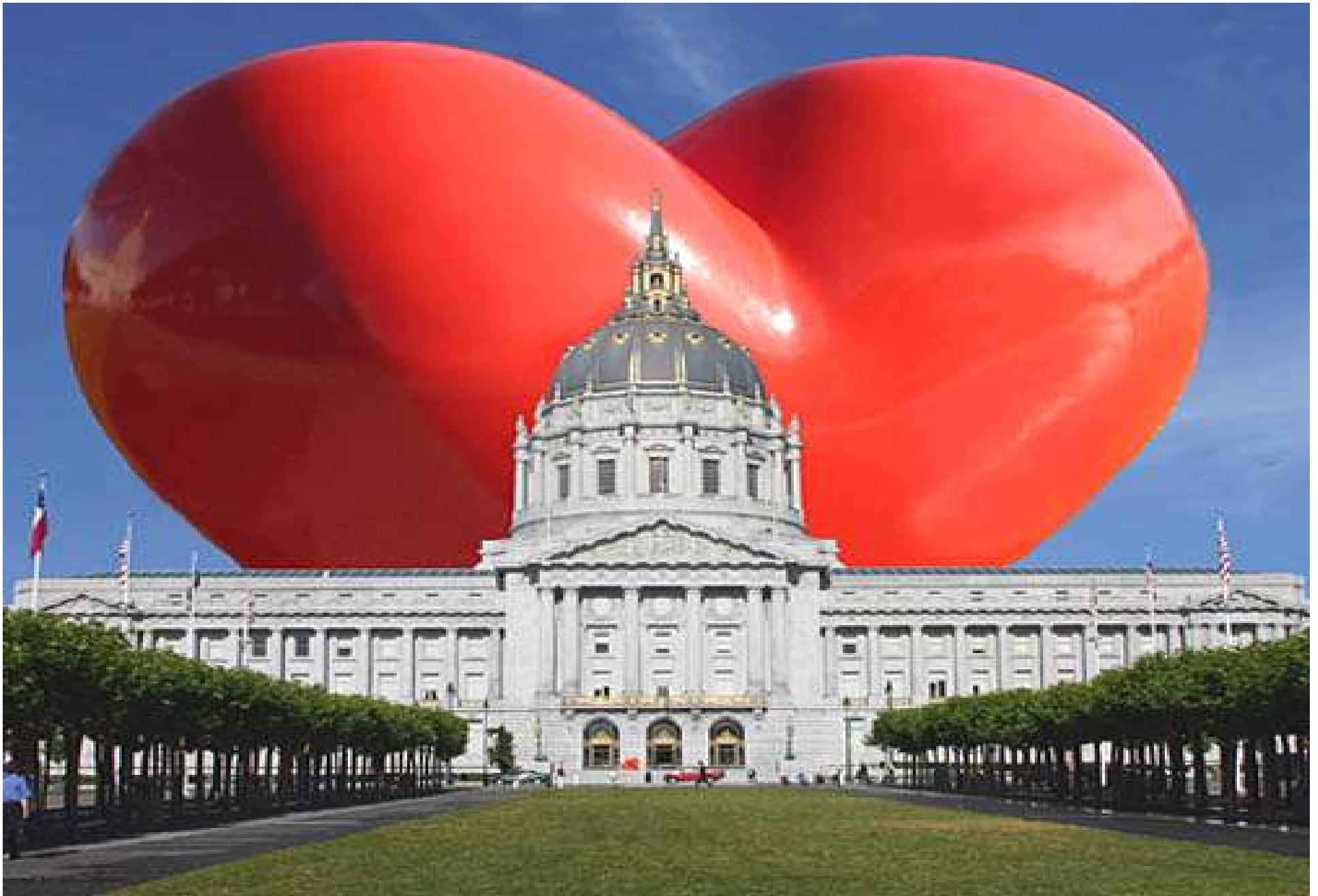


COURTESY OF GREENLEAF HOLDINGS LLC

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Fifth Edition

Urban Land Use Planning



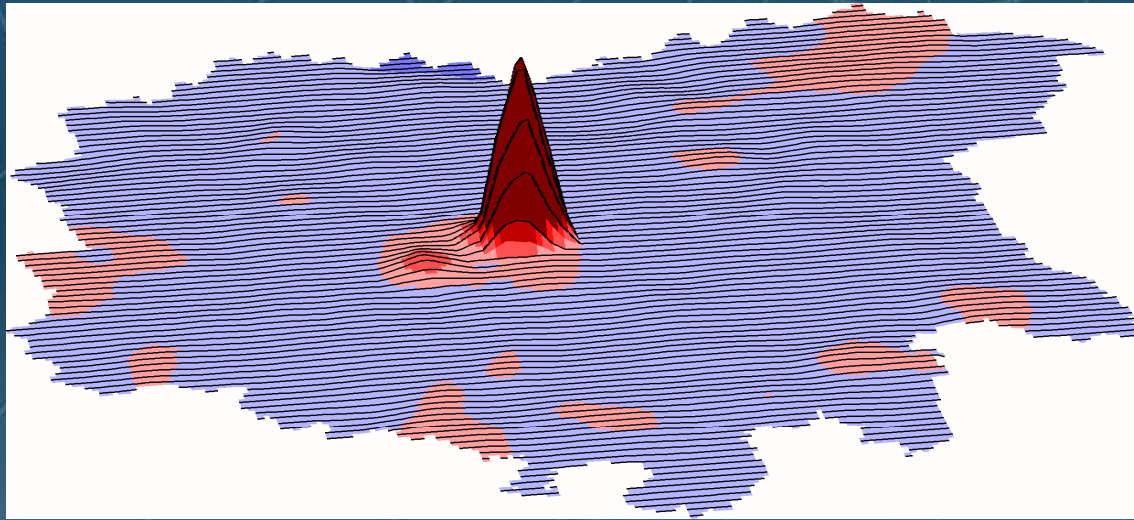
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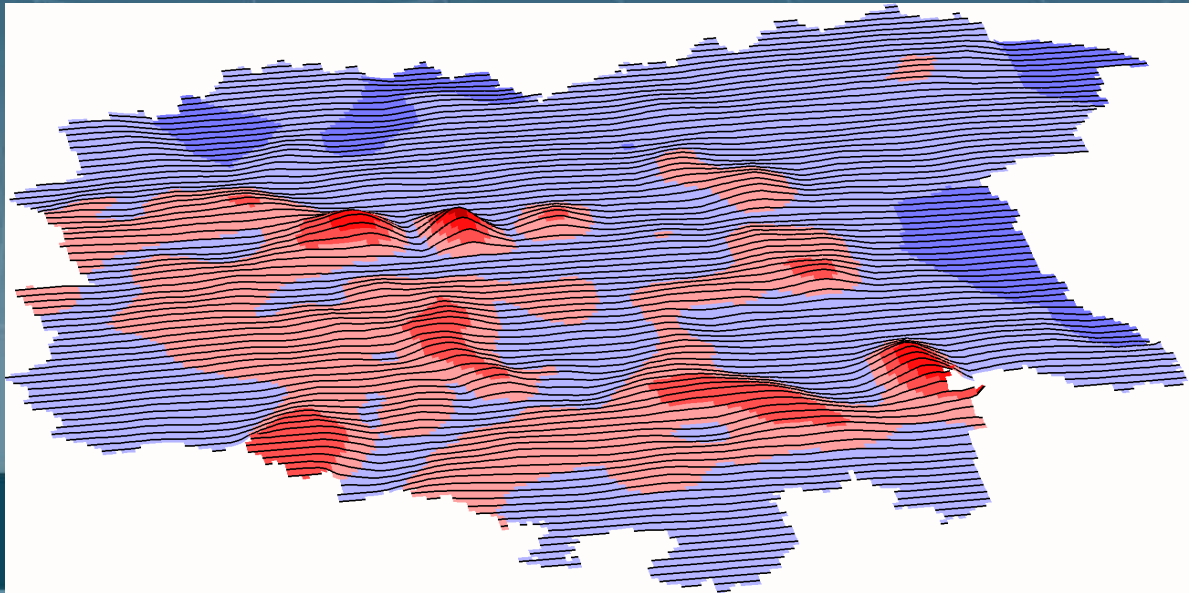
Which form of urban development?

Compact City Scenario



← Which quality of life?

Sprawling Scenario



Which impact of land use on sealing of surfaces? →

Thank you for your attention

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