

Towards more green and resilient cities in the EU

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Presentation outline

- What is EESC?
- Urbanisation trends
- Becoming a „Green Energy City“: At which cost?
- Conclusions



European cities in the EU institutional context

- **Decentralization** not always accompanied with devolution of adequate human and financial resources
- **More responsibilities to come in the medium- and long-term:** e.g. climate change (20 % GHG reduction by 2020; 80-90% by 2050)
- **Weak political representation** at the EU institutional level
- **Confronted with a growing number of regulations and obligations** (e.g. directives on air/noise/water), that are often contracted by upper national and regional levels



Urbanisation trends

- **60% of EU population** lives in urban areas of over 50,000 inhabitants (80% in urban contexts)
- Europe characterized by a **unique polycentric structure** of large, midsize and small cities (apart from Paris and London)
- European cities encompass **significant disparities** in economic and social opportunities, either spatially between neighborhoods or socially between different groups of population
- **Cities consume 75% of the world's natural resources and produce 75% of its waste**



Urban opportunities

- **Economy**: place of growth (GDP/capita of cities often superior to the one of their country; Brussels: 9% of BE population but 19% of BE GDP)
- **High quality jobs**: e.g. 3/4 of European cities attract a higher share of well educated people (tertiary educated) than their country as a whole
- **Culture**: place of human interactions and “events”
- **Tourism**: cities as poles of attraction for short trips



Urban challenges

- **Air pollution** (e.g. a majority of EU cities have days with excess ozone despite the EU legislation)
- **Climate change**
- **Congestion** (time loss)
- **Noise**
- **Health**

external costs of transport ~ 1.7% of EU GDP

- **Degradation of the built environment and cultural heritage** (e.g. 40% of citizens in the new MS live in large communist era housing estates)
- **Urban sprawl***
- **Social exclusion and poverty** (e.g. single mothers are over-represented among the poor)



Urban challenges

- **Unemployment** (the paradox of cities: better jobs but yet high unemployment; cities concentrate the largest share of people with very low skills and levels of qualification; 2/3 of EU cities have an activity rate inferior to that of the country as a whole; some neighborhoods exhibit unemployment rates twice the city average – up to 60% in e.g. Marseille)
- **Insecurity and crime**
- **Demography, ageing and ethnic minorities** (e.g. up to 20% immigrants in large capital cities)
- **Uniformisation** of city centers caused by globalisation (e.g. franchises)
- And **slums** (!) (7% of EU population lives in slums)



Vulnerability of cities

1. man-made and natural risks

- Climate change should put natural risks on the rise
- Many cases of recent breakdown episodes (e.g. electricity shut down, terrorism, tsunami)
- Key infrastructures at risk amount to > 1,000 billion \$ in 136 port cities
- Many large cities have plans to reduce GHG emissions and cope with CC risks: e.g. Chicago, London, N-Y
- **Covenant of Mayors**: to date, 1801 Mayors commit to go beyond the EU energy and climate change objectives (i.e. SEAPs)
- On 17 June 2010, The Union of Italian Provinces (UPI) has joined the Covenant of Mayors as a Supporting Structure



Vulnerability of cities

2. financial and economic crisis

- World finance uses the “city” as an investment field (short term and high returns), e.g. to build new infrastructures that are not always responding to social and economic need (e.g. post Olympics syndrome)
- Crises lead to quick “visual degradation” of the urban environment, with e.g.:
 - An increase of empty shops, homes and offices
 - More homeless people (with an increasing number of them issued from the middle class)
 - A substantial reduction of investments in vital urban facilities
 - A slow down of the move towards more sustainable cities
 - NYC lost 10 \$ billion in 2008 due to “subprime” crisis





Becoming a “Green Energy City”:

At which cost?

(based on recent EESC opinions)



Cost-effectiveness

- Greening a city has a cost, even if it is likely to be much lower than the expected return on investment
- But today's context of **depleting public finances** means more scrutiny on projects' selection
- Two important aspects:
 - Limits of technology development (in the context of SET-Plan)
 - "Boundary conditions" for an optimal city investment



Limits of technology development – the focus of the SET Plan

- The SET-Plan is the technology pillar of the EU's energy and climate policy
- 25 to 30 European cities to become champions of **energy efficiency** and **renewable energy technologies**
- SET Plan Communication says: “Energy efficiency is the simplest and cheapest way to secure CO₂ reductions”

HOWEVER

- So far, improved energy efficiency has been largely **offset by rising energy demand**, especially in the transport sector



« **Boundary conditions** » for an **optimal city investment**

- Cities do share similar problems but they significantly vary in size, socio-economic conditions, demography, built environment, governance, etc.
- Similar measures and policies would therefore have different impacts
- No size-fits-all approach
- Differentiated measures and policies are needed for each city
- The cost-effectiveness of green measures and policies very much depends on aspects such as
 - the urban structure
 - the land use pattern
 - consumption practices
 - cultural approaches



The urban structure

- The type and quality of the built environment
- Public infrastructures and facilities (esp. the energy network)
- Industrial/semi-industrial/tertiary sector
- Green spaces
- etc.



The land use pattern

- Social and functional mixity
- Density
- Urban/peri-urban/rural development
- The transport network
- etc.



Urban sprawl: “the main ignored challenge*”

- **Unstructured and uncontrolled expansion of urban areas**, caused by little planning and market forces
- In 1996-2001, nearly all European cities in the new EU countries lost population at the expense of suburban areas (up to 15%)
- Households’ decisions to move to suburbs are often taken based on “commuting times” instead of “commuting costs”
- In the last 20 years, 11% increase in built-up areas in the EU for only 2.5% increase of urban population
- EU countries have put in place different policies (e.g. ABC policy in NL, “green belt” in UK)

* November 06 EEA report



Urban sprawl: “the main ignored challenge*”

- **External costs presumably very high** (higher energy consumption, higher costs for infrastructure provision, higher demand for transport, strong dependence on car use, loss of social interaction and “centrality”)
- Every third job in EU cities goes to a commuter
- Low density suburban residential areas = deprived areas of tomorrow, if tomorrow is characterised by high cost of energy
- Leads to segregation of residential development and social classes



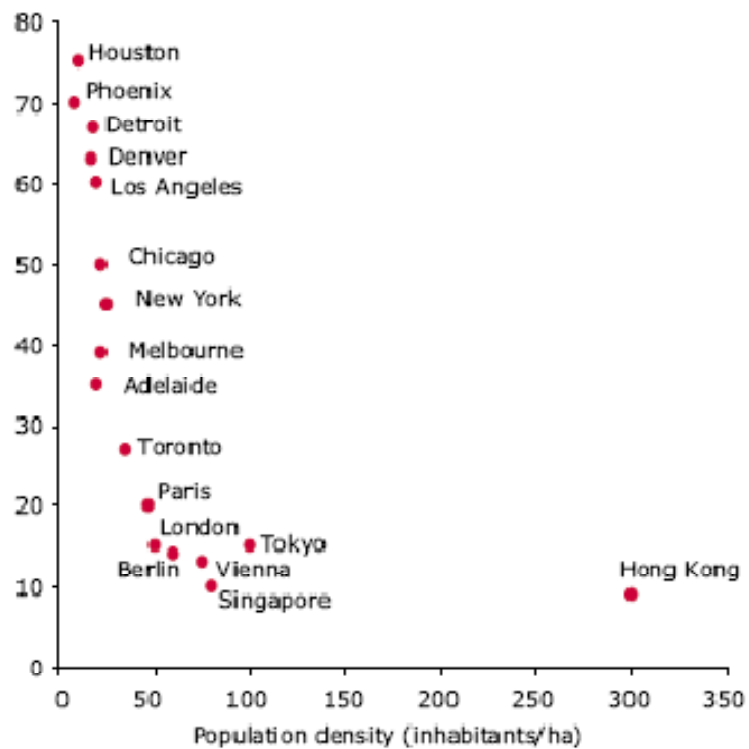
3 times the size of Luxembourg...

Sprawl of urban areas

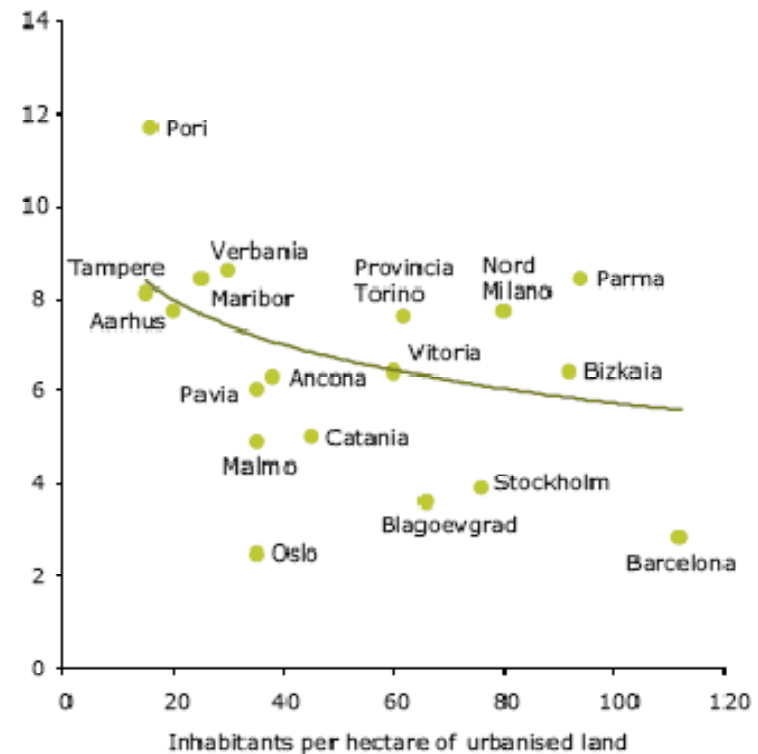
... in Europe, 1990-2000



Energy consumption per capita (1 000 millions of joules)



Total CO₂ emissions per capita (tonnes)



Consumption practices

- Household consumption represents 60 % of EU GDP and households are responsible of about 50% of CO₂ in the EU
- Local vs. global production/consumption
- Proximity shops vs. large supermarkets
- Social status (private car vs. smart phone)
- Green taxation
- Adequate information and awareness raising are not enough to change durably consumption patterns



Cultural approaches

- Core values (family relationships; health; living environment; money and financial situation; community and friends; work fulfillment; religious/spiritual life)
- Symbolic role of material possessions
- Level of education and understanding of societal changes and challenges (also in relation to new green jobs)
- Trends (green, bio, qualitative vs. quantitative, etc.)



Conclusions

- Greening the city is a much needed objective but **it must be embedded into a broader perspective** (EU Strategy 2020, developing information society, reducing vulnerability, etc.)
- **The idea that green growth can deliver us from the crisis is deeply problematic** as the decoupling between growth and ecological resource consumption cannot be absolute
- **Technology alone is not an option.** Efforts along the SET-Plan must be coupled with accompanying measures
- **Cost needed to move towards green cities is greatly variable** – not all cities will pick quick benefits

