URBAN EUROPE

Global Challenges – Local Solutions

Proposal for a Joint Programming Initiative

GPC Meeting
19 March 2010, Brussels

Society

Ageing

Segregation

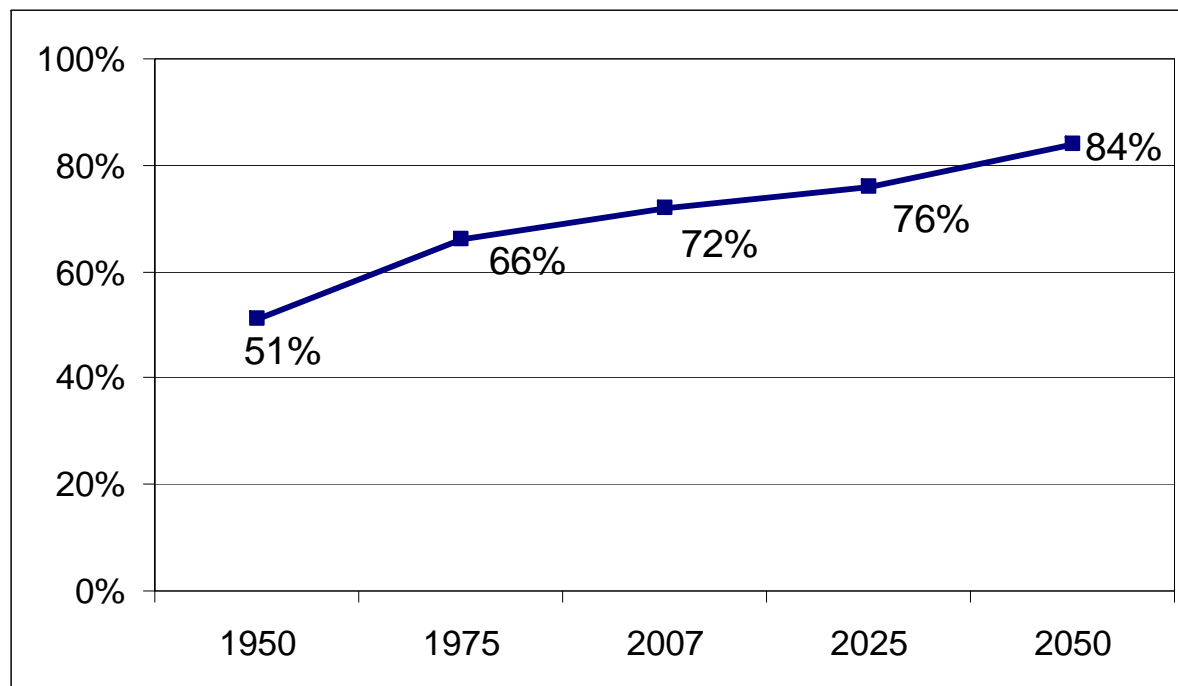**Economy**

Brain drain

Stagnation

Mobility

Congestion

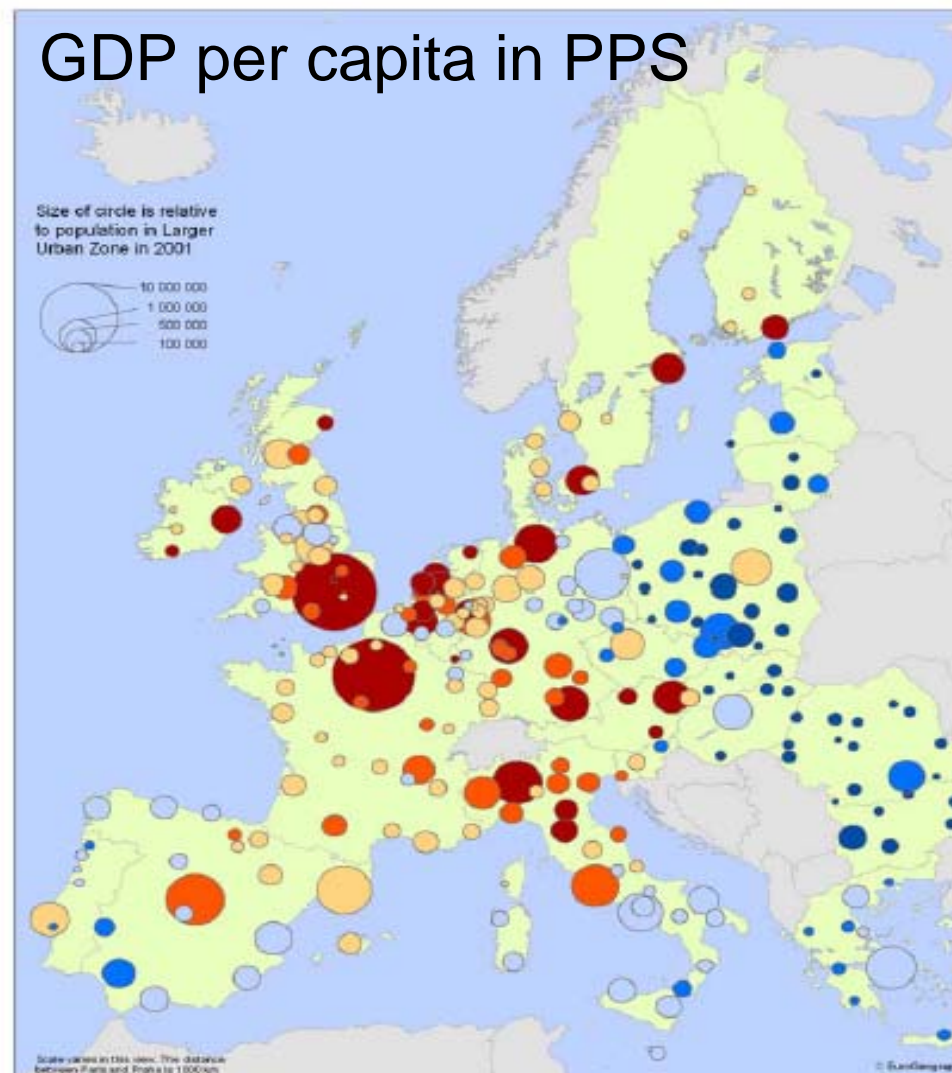Emission

Ecology

Climate change

Degradation

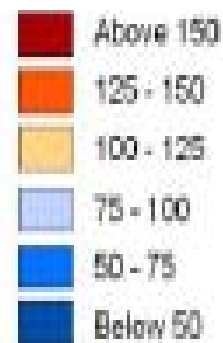## Trends in Urbanisation in Europe 1950-2050, UN 2009

→ International migration makes up 1/3 of urban growth

→ Rapidly ageing population and proportion of 60+

→ (Re) Emergence of problems as poverty, homelessness, crime

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GDP per capita in PPS

Size of circle is relative
to population in Larger
Urban Zone in 2001

10 000 000
1 000 000
500 000
100 000

Scale values in this view. The distance
between Paris and Praha is 1000 km.

→ Urban Areas are the centres of economic and innovative activities (80% of GDP, R&D)

→ Increasing global competition

→ Considerable disparities between and within urban areas

|	
■ (dark red)	Above 150
■ (orange)	125 - 150
■ (light orange)	100 - 125
■ (light blue)	75 - 100
■ (blue)	50 - 75
■ (dark blue)	Below 50

➔ Congestion in urban areas costs 100 billion Euro or 1% of the EU's GDP annually

➔ Urban areas - 40% of all CO_2 emissions of road transport

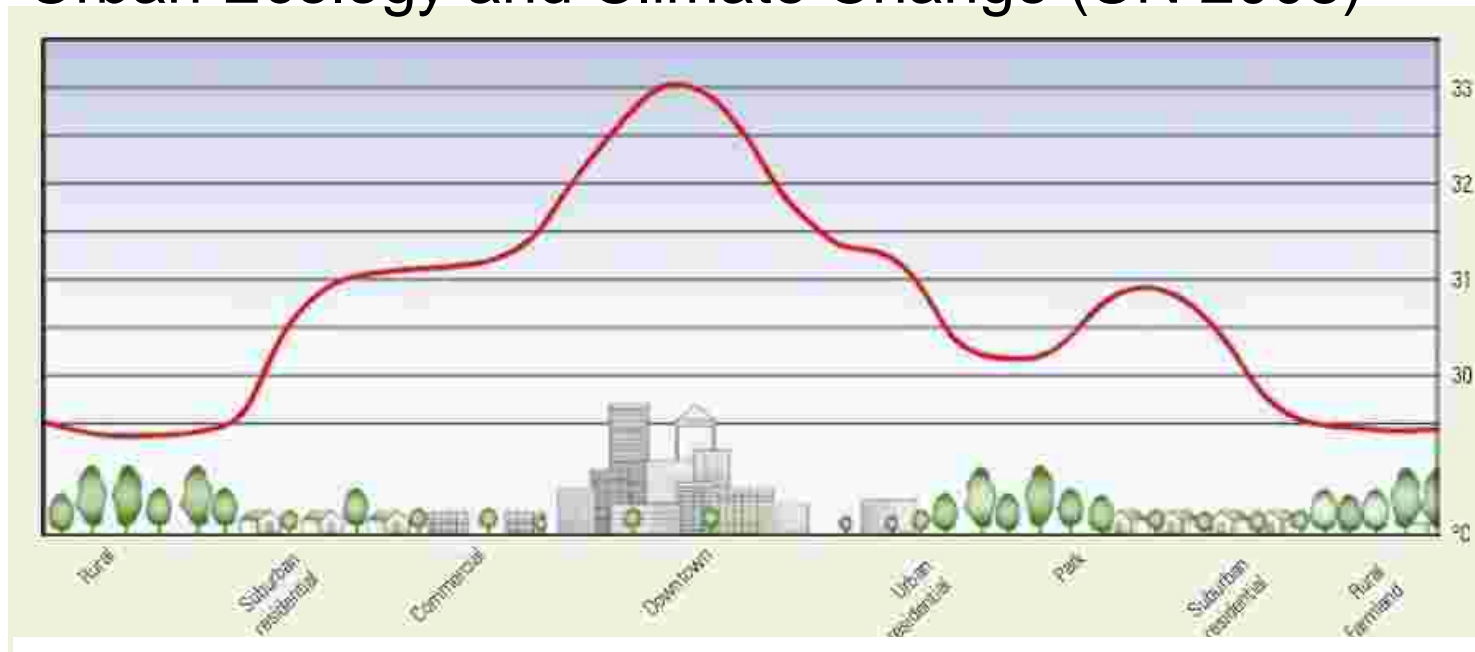➔ Road accidents: health effects, damage to vehicles, expenditure for police and emergency service
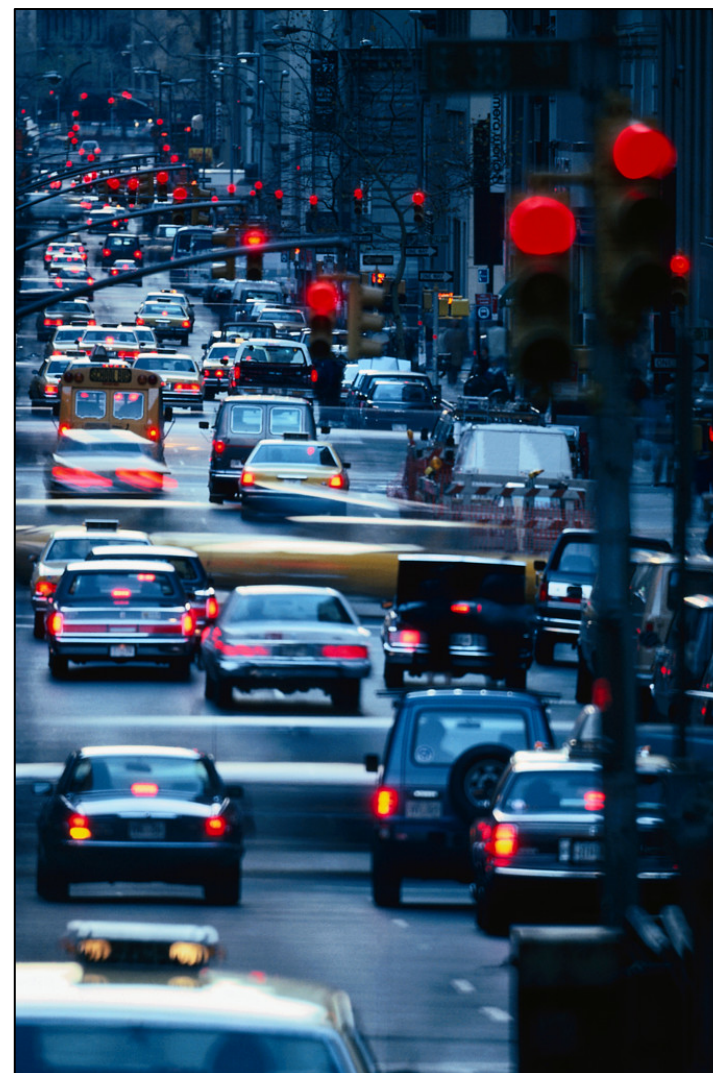
Urban Passenger Transport CO² per capita (UN 2008)
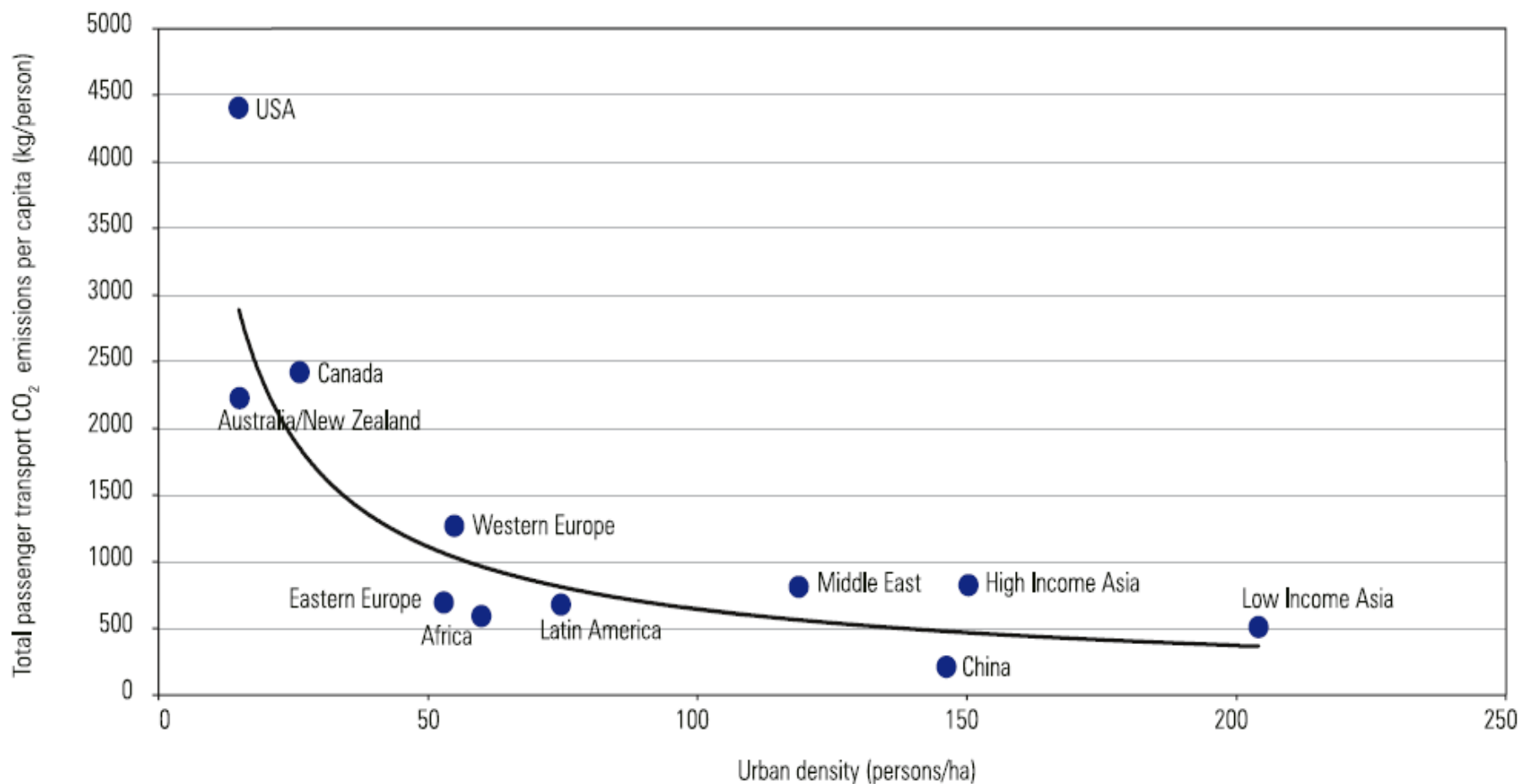
Urban Ecology and Climate Change (UN 2008)

→ Higher temperatures in urban areas - "heat island" effect

→ Direct effect on the energy consumed by cooling appliances

→ Peak electricity load increases 3-5% for a 1°C increase in temperature
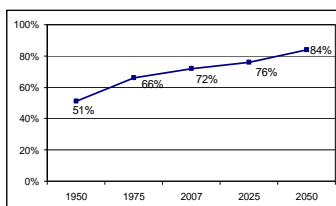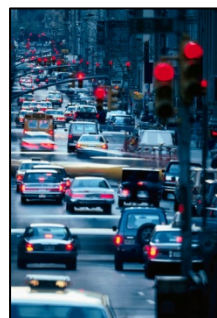
➔ **Social Cohesion and Integration**

➔ **Innovation Hubs and Living Labs**

➔ **Intelligent intra- and inter-urban Transport, Logistic and Communication Systems**
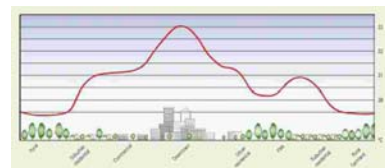
➔ **Sustainability and Minimization of Ecological Footprint**

Urban Europe – A Systemic Approach

New Governance models

Spatio-temporal urban planning concepts

Awareness Rising Instruments

Participatory Policy Development

New Urban Policies

Social Cohesion and Integration

Innovation Hubs and Living Labs
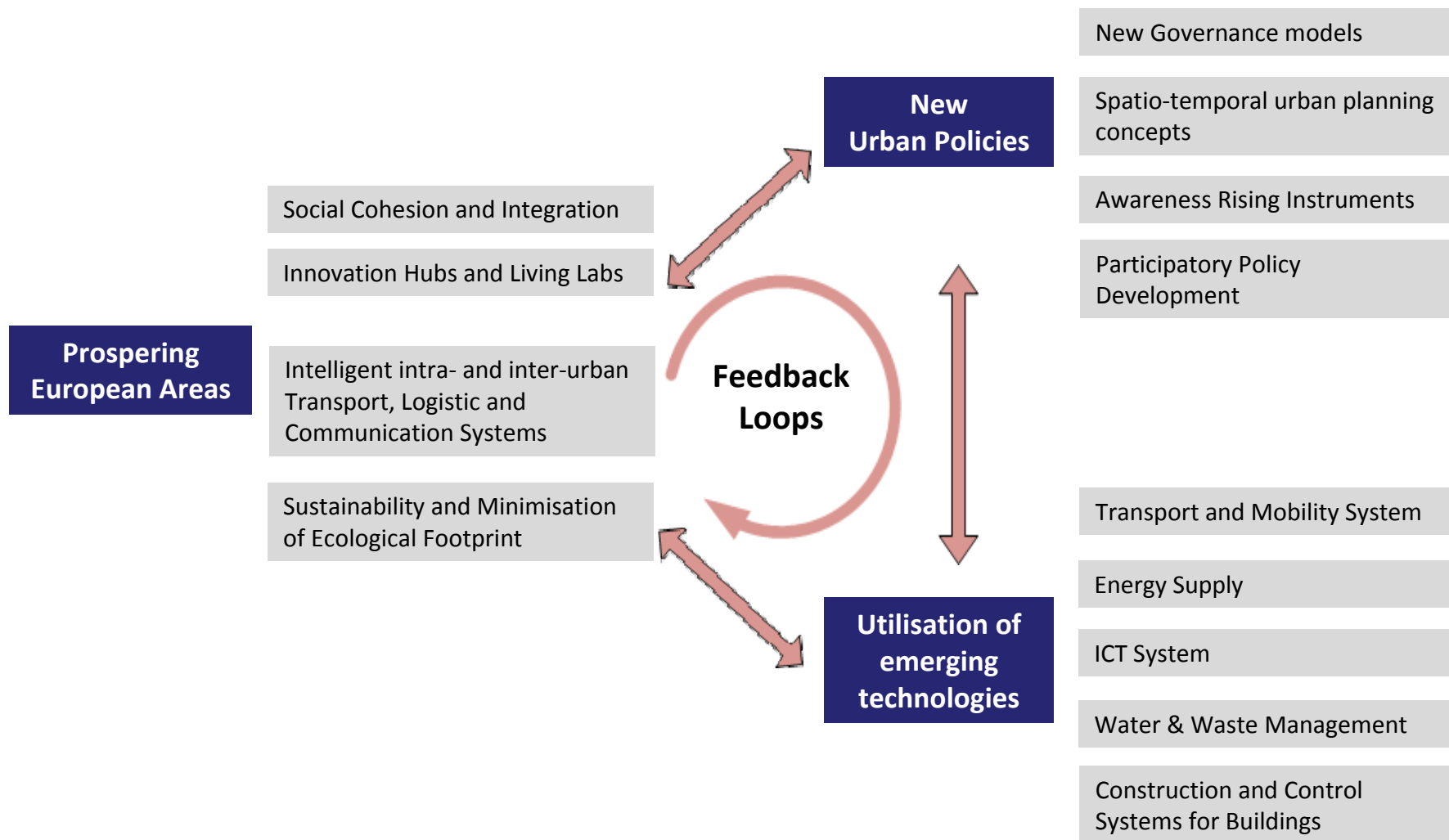
Prospering European Areas

Intelligent intra- and inter-urban Transport, Logistic and Communication Systems

Feedback Loops

Sustainability and Minimisation of Ecological Footprint

Utilisation of emerging technologies

Transport and Mobility System

Energy Supply

ICT System

Water & Waste Management

Construction and Control Systems for Buildings

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Module 1
Understanding Urban Systems

Urban Scenarios
Foresight Activities

Module 2
Implications for urban policies

Planning Processes
Roadmaps

Policy Initiatives for Technology Development

Transport
Energy
Innovation and Growth
Buildings and Construction

Module 3
Utilisation of new technologies and governance solutions

Benchmarking and Monitoring
Evaluation and Validation

Demonstration
Pilot Projects

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Module 1

Understanding urban systems

→ Develop **integrated models for simulation and optimisation** of urban development scenarios: operational methodologies for foresight experiments on urban issues

→ **Create and Integrate Data Bases:** as a basis for evidence-based policies. Utilise the wealth of data on urban and transport issues (e.g. Eurostat, Urban Audit)

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Module 2

Implications for urban policies in the 21st century

➔ **New planning, management and governance models** leading to "cities as service centres" and "cities of excellence"

➔ **Participatory Policy Approaches**

➔ Planning for and designing "**zero slums & deprived areas**"

➔ **Integration concepts** of social (and ethnic) groups

➔ **Spatio-temporal planning** for land use systems

Module 3

Utilisation of new technologies and governance solutions

➔ **Co-modal transportation systems** on local, regional and international levels: environmentally friendly, safe, sustainable, available

➔ **Zero tolerance of fatalities and injuries** (sensor web, web2.0)

➔ **Smart Grids, electric mobility** (i.e. electric vehicles, hybrid electric vehicles, plug-in hybrid electric vehicles, hydrogen/fuel cells)

➔ **Model-cities and demonstration projects**: e.g. Stockholm (eco-cities), Amsterdam (modal split), Vienna (eco-renovation), Mannheim (smart grids)

➔ **New housing and building concepts** (intelligent homes, energy efficient buildings, smart cities)

Helping to address grand challenges in an urban context and ensure liveability and inclusiveness of European urban areas

to Quality of Life

to European Competi-tiveness

to European Knowledge

Reinforcing European competitiveness – mobilising the advantages of European urban agglomerations and of new technologies in urban contexts

Developing and aligning strategically oriented research and human capital

Creating applicable and feasible Tools and Instruments for Policy Makers

Proposing countries (10)

Austria, The Netherlands, Finland, France, Ireland, Italy, Sweden, Switzerland, Turkey, Spain (to be confirmed)

Interested countries (9)

Belgium, Bulgaria, Denmark, Estonia, Malta, Norway, Romania, Slovenia, United Kingdom

Urban Europe – Getting involved

40 institutions and networks from 17 countries

➔ 7 September 2009, Brussels

➔ 1 October 2009, Vienna

➔ 17 February 2010, Vienna

➔ 3/4 March 2010, Brussels

Coordinated by

➔ Austrian Ministry of Science and Research

➔ Austrian Ministry of Transport, Innovation and Technology

➔ Dutch Ministry of Transport, Public Work and Water Management

Involved Initiatives

→ ERA-net "urban-net"

→ European Energy Research Alliance (EERA)

→ Trans European Transport Networks (TEN-T)

→ ERA-net "transport"

→ The Freight Logistics Package 2007

→ European Construction Technology Platform (ECTP)
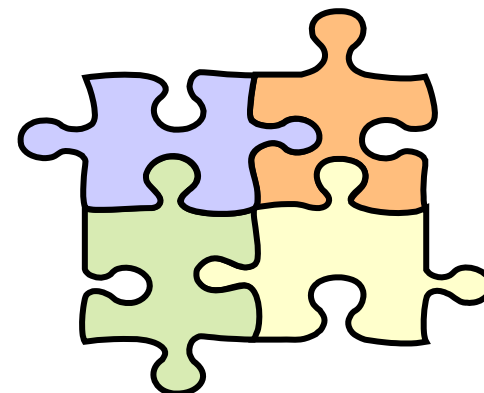
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