Stephan Reiss-Schmidt

European Metropolitan Regions in Transformation:
Sustainable Development Strategies -
the Munich Case
1. Europe - a Continent of Cities
2. Future Challenges
3. Principles of Sustainable Urban Development
4. The Munich Case
5. Lessons learnt
Europe – a continent of cities

Four out of five Europeans live in towns and cities
Social and economic cohesion
- Clusters of competition
- Polycentric urban system
- Trans-European Networks
- Cooperative process - territorial governance

Territorial Agenda of the European Union 2007

Europe – a continent of cities
Europe – continent of cities

Leipzig Charta on Sustainable European Cities 2007

- European cities are **valuable** and irreplaceable economic, social and cultural **assets**
- **Integrated urban development policy** - establish a national framework

**Toledo Declaration 22.06.2010**

**TOLEDO REFERENCE DOCUMENT ON INTEGRATED URBAN REGENERATION**

- Special attention for deprived neighbourhoods: upgrading physical environment, strengthening local economy, proactive education and training policies, efficient and affordable urban transport
Europe – a continent of cities

London: good metropolitan governance

Key Diagram

London: good metropolitan governance

Stephan Reiss-Schmidt: European Metropolitan Regions in Transformation – Sustainable Development Strategies, the Munich Case
IX. Euskal Hiria Kongresua, Donostia 15./16.11.2010
Europe – a continent of cities

Le Grand Paris: visions for the future

Le Grand Paris (s)
Europe – a continent of cities

Grande Milano: The City of the City – Green Rays – EXPO 2015

MI-LU: 75 km green vision as territorial enhancement strategy.

Stephan Reiss-Schmidt: European Metropolitan Regions in Transformation – Sustainable Development Strategies, the Munich Case
IX. Euskal Hiria Kongresua, Donostia 15./16.11.2010
Europe – a continent of cities

Metropoolregio
Amsterdam:
Project areas and
city marketing

I amsterdam®
Territorial cohesion:
3 guiding development models in Germany

Innovation and growth: 10 Metropolitan Regions
Accessibility and providing public services
Protection of resources and cultural landscapes

Europe – a continent of cities

Stephan Reiss-Schmidt: European Metropolitan Regions in Transformation – Sustainable Development Strategies, the Munich Case
IX. Euskal Hiria Kongresua, Donostia 15./16.11.2010
1. Europe - a Continent of Cities
2. Future Challenges
3. Principles of Sustainable Urban Development
4. The Munich Case
5. Lessons learnt
Future Challenges

- **Global knowledge economy** - competition of cities, new drivers of spatial development, privatisation of public services
- **Metropolisation** - networks of cities, from local to regional
- **Acceleration** - quick and unpredictable changes
- **Climate change and “peak oil”** – mitigation and adaptation
- **Social and demographic change, migration** - risks of depopulation, ageing, social segregation
- **Governance and cooperation** - from top down to bottom up
Future Challenges

Temperature scenario 2100: average increase +2 to +6 °C

Winter

Summer
Germany 2025:

Growing and shrinking cities and regions
Challenges for spatial planning

- Public benefit
- Regulation
- Integrated strategies
- Spatial Planning
- Private projects
- Sector plans
- Private interest
1. Europe - a Continent of Cities
2. Future Challenges
3. Principles of Sustainable Urban Development
4. The Munich Case
5. Lessons Learnt
Sustainability - long term balance of needs and resources

**ECONOMIC PROSPERITY**
*Creation of workplaces and income by creativity, innovation and investment*

**SOCIAL INTEGRATION**
*Assure social peace and spatial balance of city and quarters*

**QUALITY OF LIFE**
*Assure the ecological and esthetical quality of the city as an human environment*
Greener regions and cities: regional cultural landscapes, green belts and networks, parks, urban gardening and agriculture
Inner development:
compact, dense and energy efficient, short distances...

Car free mobility:
public, bicycle, feet
Principles of Sustainable Urban Development

Post – fossile, renewable energy: sun, wind, water, bio-gas, geothermal energy
Principles of Sustainable Urban Development

More efficient use of energy: new and existing buildings, traffic, industry, water and waste water treatment...

50% of the energy consumption and CO2 emissions in Germany result from the construction and use of buildings

20% result from traffic.
Floor space per capita in Germany
+ 186% in 56 years—Are there limits of growth?

15 m²
1950

43 m²
2006

55 m²
2030

Floor space per capita 2005
Bavaria: 43,3 m²
Munich: 38,8 m²
Hamburg: 38,9 m²
1. Europe - a Continent of Cities
2. Future Challenges
3. Principles of Sustainable Urban Development
4. The Munich Case
5. Lessons learnt
Munich European Metropolitan Region:
6 Mio. inhabitants,
25‘500 sqkm
2 million employees
BIP 200 billion €
Munich City Region
2.6 mio. inhabitants
5'200 sqkm
185 cities and municipalities

City of Munich
1.35 mio. inhabitants
310 sqkm
Munich Region:
Scenarios for the spatial structure of a growing region
Integrated development concept

**PERSPECTIVE MUNICH**

Key strategies

- **Identity and liveability** – listed buildings, historic patterns, urban design (“Baukultur”) as a resource…

- **Social inclusive planning** - housing, education, health…

- **Inner development, urban renewal** - compact and polycentric, mixed use, smart growth…

- **Green networks, parks and landscapes** - qualification of public spaces, urban agriculture, preservation of natural resources - soil, flora/fauna, water, air quality…

- **Climate proof development** - “carbon free city” and adaptation strategies…

- **Sustainable mobility** - feet, bicycle, public transport, e-mobility…
Inner development – long term regional settlement strategy

Conversion

Qualified Density

Definition and quality of urban fringe

Regional cooperation
The Munich Case

Compact, urban, green
Munich Region: Green belt as connecting element

Space for urban agriculture and urban gardening ("Krautgärten" – "herbal gardens"

Space for recreation

Space for natural habitats

Space for renewable energies
AGROPOLIS: Urban agriculture in Munich
Re-naturalization of River Isar

8 km, 28 mio.€ investment for extending the bed from 50 to 90 m, better flood protection, better water quality, new habitats, recreation, leisure …
Olympic Park of 1972 – Munich: Candidate City 2018

- Successful use as leisure and sports park after Olympic Games 1972: 4 mio. visitors annually.
- Extraordinary landscaping and architecture, listed buildings and ensemble – architecture as an image-factor.
- Sustainable development respecting the existing qualities by enlargement of the park, better orientation and accessibility.
- Visual concept, maintaining concept, renovation of stadium and hall, replacement of ice – and bicycle arenas.
- Energy efficient (“plus energy”) Olympic Village.
- Environmental concept/program is part of the sustainable application.
The Munich Case

**Compact, urban, green**

**Trade Fair City Riem**
Conversion of former airport
560 hectares
15’000 inhab., 13’000 empl.
The Munich Case

Central railway lands re-urbanisation

Former trade fair area

Former AGFA-factory
Former Prinz-Eugen-Barracks: 1’600 new dwellings

Competition 1st price:
GSP Grüner, Schnell und Partner mit Rainer Schmidt, Landschaftsarchitekt München
Short distance mobility by bicycle and feet
Management of parking in the inner city
Public transit development

**S-Bahnnetz**
- S-Bahn
- Haltepunkt

**U-Bahnnetz**
- U-Bahn
- Haltestelle

**Straßenbahnnetz**
- Straßenbahn
- Haltestelle

**Optionale Maßnahmen**
- Korridor für Netzergänzung
- Haltepunkt

**New Tram 23**
PM Guideline Ecology - Climate Protection 2008

- Inter institutional and inter disciplinary working group
- 5 fields of action:
  1. Energy supply
  2. Energy demand of buildings
  3. Urban development & mobility
  4. Land use of open spaces & natural environment
  5. Consumer attitudes, life styles & health

- Restrictions and conflicts
- Aims and guidelines
- Implementation strategies
- Model projects
Aims for CO2 reduction till 2030:

- Reduction of carbon **every five years by 10%**
- Reduction by **50% till 2030** (since 1990)
- Carbon emission per capita 2030: **3.2 tons**

**Stadtwerke München** (municipal utilities company) aims to produce by **2025** enough electricity from **renewable energy** sources to cover **100%** of Munich’s demands.
Ackermannbogen
Solar heat storage combined with district heating

POLIS-Project (EU funded by Intelligent Energy Europe IEE)


- *Partner cities*: Vitoria-Gasteiz, Lisbon, Lyon, Malmö, Paris, Munich
- *Aims by 2030*: 7% share of electricity consumption with solar photovoltaic energy
  3% share of total heat demand through solar thermic heat.
- Preparation of a *POLIS-SOLAR Guidebook* for solar urban planning.
- Test of the *POLIS-SOLAR Guidebook* in a pilot project.
1. Europe - a Continent of Cities
2. Future Challenges
3. Principles of Sustainable Urban Development
4. The Munich Case
5. Lessons learnt
The spatial and social transformation of metropolitan regions and cities in Europe face new challenges: globalisation, climate change, social and demographic changes, new forms of governance etc.

All over Europe we witness a process of re-urbanisation on the one hand and a shrinking population in peripheral regions on the other. Strategies for territorial cohesion are needed on the European, national and regional level to guarantee adequate accessibility and services also outside cities and metropolitan regions.

For a sustainable territorial development, cities and metropolitan regions (networks of cities) are not a problem, but part of the solution. The compact, walkable/cyclable, mixed and socially inclusive “European City” is the best model for sustainable territorial development.

The metropolitan and urban renaissance gives the opportunity for “smart growth” with high energy efficiency, less car traffic and pollution and without sprawl.
5. To be climate proof and liveable, compact and dense metropolitan regions and cities need a backbone of green open spaces: On the regional level cultural landscapes and landscape parks as habitats, for leisure, for renewable energies and not at least for near-to-market agricultural production; on the urban level green belts and corridors, interconnected parks and pocket parks, green walls and roofs.

6. The classical tools of spatial planning, sector policies and hierarchical decisions are not longer suitable for meeting the future needs of sustainable territorial transformation. We need comprehensive, integrated strategies and cooperative, communicative planning processes.

7. Strategies for a sustainable territorial and urban development will not be successful without sustainable lifestyles and low carbon consume patterns of people.
Thank you for your attention!