



Cities of tomorrow

Challenges, visions, ways forward



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Preface

More than two thirds of the European population lives in urban areas. Cities are places where both problems emerge and solutions are found. They are fertile ground for science and technology, for culture and innovation, for individual and collective creativity, and for mitigating the impact of climate change. However, cities are also places where problems such as unemployment, segregation and poverty are concentrated.

We need to better understand the challenges that different European cities will face in the years ahead. This is why I decided to bring together a number of urban experts and representatives of European cities to think about the future. This report is the outcome of that reflection.

It raises awareness of the possible future impacts of a range of trends, such as demographic decline and social polarisation, and the vulnerability of different types of cities. It also highlights opportunities and the key role cities can play in achieving EU objectives – especially in the implementation of the Europe 2020 strategy. It presents some inspirational models and visions. It also confirms the importance of an integrated approach to urban development.

The 'Cities of tomorrow' reflection process will provide inspiration for policy-makers and practitioners involved in urban development, whether at local, regional, national or European level.

Looking ahead and developing visions of the cities of tomorrow is becoming increasingly important at all levels. The development of our cities will determine the future of Europe.

Johannes Hahn,

Member of the European Commission in charge of Regional Policy

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Executive summary

Cities are key to the sustainable development of the European Union

- Europe is one of the most urbanised continents in the world.
 Today, more than two thirds of the European population lives in urban areas and this share continues to grow. The development of our cities will determine the future economic, social and territorial development of the European Union.
- Cities play a crucial role as engines of the economy, as places
 of connectivity, creativity and innovation, and as centres
 of services for their surrounding areas. Due to their density, cities
 offer a huge potential for energy savings and a move towards
 a carbon-neutral economy. Cities are, however, also places where
 problems such as unemployment, segregation and poverty are
 concentrated. Cities are, therefore, essential for the successful
 implementation of Europe 2020.
- The administrative boundaries of cities no longer reflect the physical, social, economic, cultural or environmental reality of urban development and new forms of flexible governance are needed.
- In terms of aims, objectives and values, there is a shared vision of the European city of tomorrow as:
 - a place of advanced social progress with a high degree of social cohesion, socially-balanced housing as well as social, health and 'education for all' services;
 - a platform for democracy, cultural dialogue and diversity;
 - a place of green, ecological or environmental regeneration;
 - a place of attraction and an engine of economic growth.
- Cities play a key role in Europe's territorial development.
 There is a consensus on the key principles of future European urban and territorial development which should:
 - be based on balanced economic growth and territorial organisation of activities, with a polycentric urban structure;
 - build on strong metropolitan regions and other urban areas that can provide good accessibility to services of general economic interest;
 - be characterised by a compact settlement structure with limited urban sprawl;
 - enjoy a high level of environmental protection and quality in and around cities.

The European model of sustainable urban development is under threat

- Demographic change gives rise to a series of challenges that differ from one city to another, such as ageing populations, shrinking cities or intense processes of suburbanisation.
- Europe is no longer in a situation of continuous economic growth and many cities, especially non-capital cities in Central and Eastern Europe, but also old industrial cities in Western Europe, face the serious threat of economic stagnation or decline.
- Our economies in their current form are unable to provide jobs for all – weakening links between economic growth, employment and social progress have pushed a larger share of the population out of the labour market or towards low-skilled and low-wage service sector jobs.
- Growing income disparities and the poor getting poorer

 in some neighbourhoods, local populations suffer from a concentration of inequalities in terms of poor housing, low-quality education, unemployment, and difficulties or inabilities to access certain services (health, transport, ICT).
- Social polarisation and segregation are increasing the recent economic crisis has further amplified the effects of market processes and the gradual retreat of the welfare state in most European countries. In even the richest of our cities, social and spatial segregation are growing problems.
- Spatial segregation processes as an effect of social polarisation
 make it increasingly difficult for low-income or marginalised groups to find decent housing at affordable prices.
- An increasing number of 'society dropouts' may lead to a development of closed sub-cultures with fundamentally hostile attitudes to mainstream society in many cities.
- Urban sprawl and the spread of low-density settlements is one
 of the main threats to sustainable territorial development; public
 services are more costly and difficult to provide, natural resources
 are overexploited, public transport networks are insufficient and
 car reliance and congestion in and around cities are heavy.
- Urban ecosystems are under pressure urban sprawl and soilsealing threaten biodiversity and increase the risk of both flooding and water scarcity.

There are opportunities to turn the threats into positive challenges

- European cities follow different development trajectories and their diversity has to be exploited. Competitiveness in the global economy has to be combined with sustainable local economies by anchoring key competences and resources in the local economic tissue and supporting social participation and innovation.
- Creating a resilient and inclusive economy the present economic development model, in which economic growth does not equate to more jobs, raises challenges: to ensure a decent life for those left outside the labour market and to engage them in society.
- The potential of socio-economic, cultural, generational and ethnic diversity must be further exploited as a source of innovation. Cities of tomorrow have to be both elderly-friendly and family-friendly, as well as places of tolerance and respect.
- Combating spatial exclusion and energy poverty with better housing is key to not only making a city and its agglomeration more attractive and liveable, but also making it more eco-friendly and competitive.
- Making cities 'green and healthy' goes far beyond simply reducing CO₂ emissions. A holistic approach to environmental and energy issues has to be adopted, as the many components of the natural ecosystem are interwoven with those of the social, economic, cultural and political urban system in a unique manner.
- Thriving and dynamic small and medium-sized cities can play an important role in the well-being not only of their own inhabitants but also of the surrounding rural populations. They are essential for avoiding rural depopulation and urban drift and for promoting balanced territorial development.
- A sustainable city must have attractive open public spaces and promote sustainable, inclusive and healthy mobility. Non-car mobility has to become more attractive and multimodal public transport systems favoured.

New forms of governance are essential to respond to these urban challenges

- Cities of tomorrow have to adopt a holistic model of sustainable urban development
 - Deal with challenges in an integrated, holistic way;
 - Match place- and people-based approaches;
 - Combine formal government structures with flexible informal governance structures that correspond to the scale at which the challenges exist;
 - Develop governance systems capable of building shared visions reconciling competing objectives and conflicting development models;
 - Cooperate in order to ensure coherent spatial development and an efficient use of resources.
- Governance systems need to be adapted to evolving circumstances and take into account various territorial (e.g. supra-urban as well as infra-urban) and temporal scales.
- Cities have to work across sectors and not let 'mono-sectoral' visions set the agenda of what urban life should be like.
- Horizontal and vertical coordination is required as cities have to work with other governance levels and reinforce their cooperation and networking with other cities in order to share investments and services which are required at a larger territorial scale.
- New governance modes based on citizens' empowerment, participation of all relevant stakeholders and innovative use of social capital are needed.
- In the context of weakened links between economic growth and social progress, social innovation offers an opportunity to widen the public space for civic engagement, creativity, innovation and cohesion.
- Foresight is a specially relevant tool for managing transitions, overcoming conflicts and contradictions between objectives, and developing a better understanding of realities, capacities and objectives.

Table of contents

Pre	eface	Ш				
Coi	ntributors	IV				
Exe	ecutive summary	VI				
1.	Towards a European vision of the city of tomorrow					
	1.1. Introduction					
	1.2. What do we mean by cities?	1				
	1.3. The growing importance of cities	2				
	1.3.1. Cities play a key role in economic growth	2				
	1.3.2. Cities contribute both to problems and to solutions	5				
	1.4. The European policy context	7				
	1.4.1. The 'Acquis Urbain'	7				
	1.4.2. The Territorial Agenda	8				
	1.5. Towards a shared European vision of urban development	10				
	1.5.1. Can we agree upon a shared vision?	10				
	1.5.2. A European vision of the Cities of tomorrow	10				
	1.5.3. A European vision of the territorial development of cities	12				
	1.6. Conclusions – shared European urban development objectives	12				
2.	A European urban development model under threat					
	2.1. Diagnosis: demographic decline	15				
	2.2. Diagnosis: economic development and competitiveness under threat	18				
	2.2.1. European cities follow very different development trajectories	18				
	2.2.2. A skill base under threat	19				
	2.2.3. Cities facing the crisis	21				
	2.2.4. Competition as a zero-sum game	22				
	2.3. Diagnosis: a growing social polarisation	22				
	2.3.1. Spatial segregation and housing	24				
	2.3.2. An increasing number of social dropouts					
	2.4. Diagnosis – depletion of natural resources					
	2.4.1. Urban sprawl and land consumption	26				
	2.4.2. Urban ecosystems under pressure	27				
	2.5. A diverse governance system	29				
	2.6. Conclusions – a challenging future for the Cities of tomorrow	30				
3.	The main challenges for the Cities of tomorrow					
	3.1. Introduction – what can we say about future challenges?	33				
	3.2. The diverse, cohesive and attractive city	34				
	3.2.1. The potential of diversity	34				
	3.2.2. Turning diversity into a dynamic asset	35				
	3.2.3. Ensuring a city for all – the cohesive city	36				
	3.2.4. Eradicating energy poverty and spatial exclusion	37				
	3.2.5. Developing social innovation	38				
	3.2.6. Adapting the city's economic and social life to an ageing population	39				
	3.2.7. Attracting the young and making room for children	40				

	3.3.	The green and healthy city	42				
		3.3.1. A holistic approach to environmental issues and energy efficiency	42				
		3.3.2. Making mobility sustainable, inclusive and healthy	45				
		3.3.3. A sustainable city with attractive open public spaces	48				
	3.4.	Creating a resilient and inclusive economy	49				
		3.4.1. Managing transitions towards a viable local economy	49				
		3.4.2. Stimulating job creation, entrepreneurship and a broad local skill-base	50				
		3.4.3. Developing social capital	52				
		3.4.4. Using technology to foster collective intelligence and innovation	52				
		3.4.5. Linking to the global economy – cities as hubs for global networks	52				
		3.4.6. The connectivity challenge	55				
	3.5.	A polycentric urban Europe with balanced territorial development	55				
		3.5.1. A harmonious development of the city with its surrounding region	55				
		3.5.2. Promoting the diversity and authenticity of cities	57				
	3.6.	Towards a more holistic model of sustainable city development	60				
	3.0.	3.6.1. Towards a holistic, integrated model of sustainable urban development	60				
		3.6.2. Overcoming conflicts and contradictions	60				
		3.6.3. A better understanding of realities, capacities and objectives	61				
			01				
4.	Gov	overnance — how to respond to the challenges					
	4.1.	Introduction – from government to governance	65				
	4.2.	An integrated approach to urban development and governance	65				
	4.3.	New models of territorial governance	68				
		4.3.1. New urban realities	68				
		4.3.2. The increasing importance of the city at regional or metropolitan level	68				
		4.3.3. The need for flexible multi-scalar governance	71				
	4.4.	Building capacity for long-term visioning and strategic planning	72				
		4.4.1. The need for a solid knowledge base	74				
		4.4.2. Foresight as a participative governance tool to manage complexity	76				
	4.5.	Collective mobilisation around a European urban development model	81				
		4.5.1. Resident mobilisation	81				
		4.5.2. Local community-led development approaches	81				
		4.5.3. Need for capacity building to ensure full empowerment	84				
	4.6.	Cooperation between cities is key to sustainable European urban development	85				
	4.7.	Conclusions – a strengthening of the European urban development model	86				
		4.7.1. Governance considerations for the Cities of tomorrow	86				
		4.7.2. Towards socially innovative, inclusive and integrated multi-scalar governance	88				
_							
Co	nclus	sions	91				
۸r	nexe		94				
ΛI							
		pter 1 - Annex 1	94				
Chapter 1 - Annex 2			95				
		pter 2 - Annex 1	96				
		pter 4 - Annex 1	97				
		pter 4 - Annex 2	98				
	Cha	pter 4 - Annex 3	99				
Lis	st of f	igures, maps and tables	10				
		•					

1. Towards a European vision of the city of tomorrow



1.1. Introduction

'Our cities possess unique cultural and architectural qualities, strong forces of social inclusion and exceptional possibilities for economic development. They are centres of knowledge and sources of growth and innovation. At the same time, however, they suffer from demographic problems, social inequality, social exclusion of specific population groups, a lack of affordable and suitable housing, and environmental problems.'

Cities play a key role in the lives of most Europeans. Not only does a majority of the population live in cities, but cities also play a key role in the social and economic development of all European territories. It seems almost paradoxical that there is no common definition for 'urban' or even 'city', and that the European Union has no explicit policy competence in urban development. However, in this chapter we demonstrate not only the importance of cities, but also the crucial role that Europe has to play in their future. There is, in fact, an explicit European model of urban development.

The 'European model of the city' is a fascinating issue. On the one hand, it captures essential features of European cultural history, and it is deeply rooted in the past and, hence, related to the identity question. On the other, it captures essential aspects of the political vision of the European Union and, hence, of the future as envisaged by the underlying society.²

Before arriving at the European model of urban development, we briefly discuss alternative administrative and functional definitions of cities, and point to the importance of understanding urban issues in a territorial context. We also stress the increasing significance of cities, especially in meeting the objectives of the Europe 2020 strategy, as well as those set out in the Treaty, i.e. the promotion of economic, social and territorial cohesion.

Finally, we describe European policy context and introduce the European model of urban development, a shared European vision of the Cities of tomorrow and a shared European vision of the territorial development of cities.

1.2. What do we mean by cities?

There are many definitions of a city. 'City' can refer to an administrative unit or a certain population density. A distinction is sometimes made between towns and cities – the former are smaller (e.g. between 10000 and 50000 inhabitants) and the latter larger (above 50000 inhabitants). 'City' can also refer more generally to perceptions of an urban way of life and specific cultural or social features, as well as functional places of economic activity and exchange.

'City' may also refer to two different realities: the *de jure* city – the administrative city – and the *de facto* city – the larger socio-economic agglomeration. The *de jure* city corresponds to a large extent to the historic city with its clear borders for trade and defence and a well-defined city centre. The *de facto* city corresponds to physical or socio-economic realities which have been approached through either a morphological or a functional definition. For analytical purposes, a city definition based on a minimum density and number of inhabitants has been developed jointly by the European Commission and the OECD. It is presented in the Annex.

A Morphological Urban Area (MUA) depicts the continuity of the built-up space with a defined level of density. A Functional Urban Area (FUA)³ can be described by its labour market basin and by the mobility patterns of commuters, and includes the wider urban system of nearby towns and villages that are highly economically and socially dependent on a major urban centre.⁴ For example, the administrative city of London has a population of 7.4 million, its MUA holds 8.3 million and its FUA 13.7 million residents.

¹ Leipzig Charter on Sustainable European Cities (Agreed on the occasion of the Informal Ministerial Meeting on Urban Development and Territorial Cohesion in Leipzig on 24/25 May 2007).

² Calafati, Antonio, Cities of tomorrow issue paper, December 2010.

³ An alternative but similar concept is 'metropolitan areas' – cf. Opinion of European Economic and Social Committee, European metropolitan areas: socio-economic implications for Europe's future, rapporteur: Joost van Iersel, April 2007.

Tosics, Iván, Cities of tomorrow issue paper, January 2011 – reference to ESPON 1.4.3 study (ESPON, 2007).

Katowice has a relatively small administrative city population of 320000, while its MUA population is sevenfold in size, i.e. 2.3 million. The FUA of Lille is 11 times larger than its administrative city – 2.6 million compared to 230000.5

FUAs may be monocentric or polycentric (i.e. corresponding to networks of tightly linked cities or agglomerations with no dominating centre). Neither Morphological nor Functional Urban Areas are stable entities; as the urban landscape and economic patterns evolve, so do densification and mobility patterns.

Other concepts and approaches exist to describe and define *de facto* cities. Whatever the favoured concept, it is clear that the reality of the *de facto* city has expanded far beyond the *de jure* city and that it is at this level that urban policy must find its long-term perspective.

With the expansion of the *de facto* cities, the delimitation of urban and rural has become less clear or even lost its sense. "The boundary between the city and the countryside is disappearing while the rural and the urban have melted into a new *rurban* condition". This is reinforced where nearby overlapping FUAs form large complex urban systems, as is the case in Northern England, the Benelux or the Ruhr area.

There are striking differences between Member States in the way that cities function and are governed. In some countries, there are no particular city-specific administrative units, while in others, cities have unique administrative rights and responsibilities.

In this report we take a pragmatic stance and use the term 'cities' to define urban agglomerations in general, as well as the administrative units governing them. From a policy perspective it is important to understand the territorial scale of urban issues, which may range from neighbourhood or administrative city level to a larger FUA or even beyond. An urban problem may have very local symptoms but require a wider territorial solution.

The relevant governance level may, therefore, vary from local to European level, or be a combination of several tiers. In other words, urban policy needs to be understood and to operate in a multi-scalar context.

By 'Cities of tomorrow' we, therefore, refer to future urban agglomerations, cities and towns in a territorial context.

1.3. The growing importance of cities

In the last century, Europe transformed itself from a largely rural to a predominantly urban continent. It is estimated that around 70% of the EU population – approximately 350 million people – live in urban agglomerations of more than 5000 inhabitants. Although the speed of transformation has slowed down, the share of the urban population continues to grow.⁷

Europe is also characterised by a more polycentric and less concentrated urban structure compared to, for instance, the USA or China. There are 23 cities of more than 1 million inhabitants and 345 cities of more than 100000 inhabitants in the European Union, representing around 143 million people. Only 7% of the EU population live in cities of over 5 million inhabitants compared to 25% in the USA. In addition, 56% of the European urban population – around 38% of the total European population – live in small and medium-sized cities and towns of between 5000 and 100000 inhabitants.⁸

1.3.1. Cities play a key role in economic growth

The concentration of consumers, workers and businesses in a place or area, together with the formal and informal institutions that make an agglomeration 'thick' and cohesive, has the potential to produce externalities and increasing returns to scale. Sixty-seven per cent of Europe's GDP is generated in metropolitan regions, ⁹ while their

⁵ Tosics, Iván, op. cit., see table in Annex.

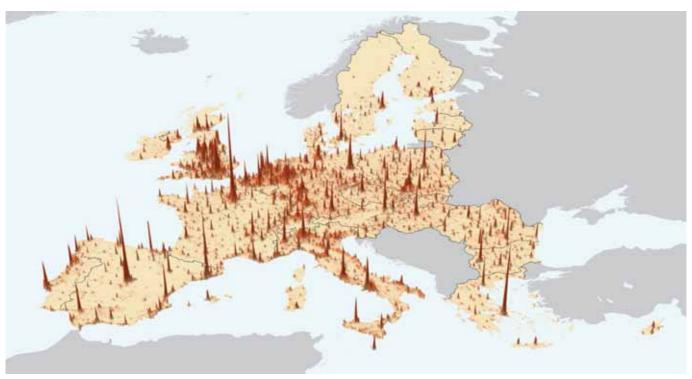
⁵ Allingham, Peter and Raahauge, Kirsten Marie, 'Introduction: Post City Represented' in 'Knowledge, technology and policy', Volume 21, number 6, Springer 2008.

^{7 10%} continued increase of urban population up to 2050, in World Urbanisation Prospects: The 2009 Revision, United Nations, Department of Economic and Social Affairs, Population Division, 2010.

⁸ Figures are based on a definition of cities and towns in terms of density (see Annex 2 – Chapter 1, and Table 1 below).

Metropolitan regions are defined as 'larger urban zones' with more than 250 000 inhabitants (Source: DG REGIO).

Map 1 Population density in Europe, 2001



Note: Colours and peak heights represent population density by 1 km² raster cells. Sources: Eurostat, JRC, EFGS, REGIO-GIS

Table 1 Defining cities according to density of the population

Population Class	Number of cities *		Population	
	absolute	in %	absolute	in %
rural population			154125040	32.1
towns and suburbs	•		156398720	32.6
50 000 – 100 000	387	52.9	26 690 068	5.6
100 000 – 250 000	224	30.6	35 708 402	7.4
250 000 – 500 000	62	8.5	21 213 956	4.4
500 000 – 1 000 000	36	4.9	27 041 874	5.6
> 1 000 000	23	3.1	59 292 080	12.3
Total	732	100.0	480 470 140	100.0

Note: Based on a population distribution by 1 km² raster cells.¹º Cities above 50 000 inhabitants are defined as clusters of grid cells of at least 1500 inhabitants/km². Areas outside the urban agglomerations are defined as suburbs or towns if they are located in urban clusters of raster cells with a density above 300 inhabitants/km² and a total cluster population of at least 5 000 inhabitants.¹¹ Rural areas are the remaining areas.¹² All figures are estimates of the 2001 population of the EU-27. Sources: European Commission (JRC, EFGS, DG REGIO).

French overseas territories, the Azores and Madeira are not included in these figures due to unavailability of data.

The cluster definition used in the urban/rural classification of NUTS 3 regions:

http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-HA-10-001-15/EN/ KS-HA-10-001-15-EN.PDF.

'Metro cores' are raster clusters, and often represent only part of the territory of a LAU 2 unit. Any city definition based on local administrative areas tends to include populations living outside the cities, but inside the administrative boundaries of the entity. Hence, the same city defined in terms of LAU 2 boundaries will often have a bigger population figure than its raster-core equivalent (although occasionally the opposite can happen as well).

population only represents fifty-nine per cent of the total European population. A comparison of European cities' economic performance also indicates that the major cities are doing better than the rest. ¹³ However, there is marked difference in performance between capital and non-capital cities. It is hard to distinguish the effects of agglomeration alone from the positive externalities of being a capital city and centre of both public and private administrations. There is also an even bigger difference between Western and Eastern non-capital cities that cannot be explained by size alone. A concentration of activity is neither a necessary nor a sufficient condition for high growth.

Agglomeration economies have come back into policy fashion after some decades, focusing attention on the general availability and diversity of resources in a location with a high density of different activities.¹⁴ However, current research explains little about how exactly these come into play, or about the critical thresholds of different elements, making the concept difficult to operationalise.

It has been suggested that agglomeration effects have limits and that the negative externalities that can result from agglomeration¹⁵ – such as traffic congestion, price increases and a lack of affordable housing, pollution, urban sprawl, rising costs of urban infrastructure, social tensions and higher crime rates – may outweigh the benefits. Apart from the direct economic costs of a decrease in the efficiency of the economy, there is also the additional cost of a degraded environment, health problems and a reduced quality of life. According to the OECD, the relationship between income and population size becomes

The importance of small and medium-sized cities¹⁶

The importance of small and medium-sized cities should not be underestimated. A large part of the urban population live in small or medium-sized cities spread across the continent. These cities play a role in the well-being and livelihood not only of their own inhabitants but also of the rural populations surrounding them. They are centres for public and private services, as well as for local and regional knowledge production, innovation and infrastructure.

Small and medium-sized cities often play a pivotal role within regional economies. They constitute the building blocks of urban regions and lend character and distinctiveness to their regional landscapes¹⁷. It has been argued that their growth and development structure in Western Europe constitutes the most balanced urban system in the world¹⁸.

The generic features of small and medium-sized cities – particularly their human scale, liveability, the conviviality of their neighbourhoods, and their geographical embeddedness and historical character – in many ways constitute an ideal of sustainable urbanism¹⁹.

Small and medium-sized cities are, therefore, essential for avoiding rural depopulation and urban drift, and are indispensable for the balanced regional development, cohesion and sustainability of the European territory.

- European Commission, Second 'State of European Cities Report', RWI, DIFU, NEA Transport research and training and PRAC, Brussels, December 2010, p. 75: 'It is remarkable that in most European countries there is an exceptional agglomeration of wealth in the capital city. This verifies the dominant and unique position of capitals in a (national) economic system. In eight European capitals, the GDP per head is more than double the national average. Not surprisingly, this applies to London and Paris, but also to the capitals of the EU-12 Member States such as Warsaw, Bratislava, Sofia, Bucharest, Prague, Budapest, Riga and Tallinn.'
- 'Agglomeration economies, the benefits that firms and workers enjoy as a result of proximity, make it likely that output density will increase more than proportionately with employment or population density.' Reshaping Economic Geography, World Development Report 2009, p. 85.
- 15 Barca, Fabrizio, An agenda for a reformed Cohesion Policy A place-based approach to meeting European Union challenges and expectation, independent report, April 2009 http://ec.europa.eu/regional_policy/policy/future/pdf/report_barca_v0306.pdf.
- 16 References based on Mahsud, A. Z. K., Moulaert, F., *Prospective Urbaine Exploring Urban Futures in European Cities*, (background paper and questionnaire, Urban Futures workshop November 9th 2010, Leuven).
- 17 Knox, Paul L. and Mayer, Heike, Small Town Sustainability: Economic, Social, and Environmental Innovation, Birkhauser Verlag, Basel 2009.
- 18 The Role of Small and Medium-Sized Towns (SMESTO), final report, ESPON 1.4.1, 2006; ref. to Sassen, S., Cities in a world economy, second edition, Sociology for a new century, London, New Delhi, 2000.
- 19 Farr, D., Sustainable Urbanism: Urban Design with Nature, John Wiley & Sons, New Jersey, 2008.

negative at around 6-7 million, suggesting diseconomies of agglomeration due to congestion and other related costs.²⁰

1.3.2. Cities contribute both to problems and to solutions

Cities are places of high concentration of problems. Although cities are generators of growth, the highest unemployment rates are found in cities. Globalisation has led to a loss of jobs – especially in the manufacturing sector – and this has been amplified by the economic crisis. Many cities face a significant loss of inclusive power and cohesion and an increase in exclusion, segregation and polarisation. Increasing immigration combined with loss of jobs has resulted in problems of integration and increasing racist and xenophobic attitudes, which has amplified these problems.

It is clear that European cities merit special interest and that the future of our cities will shape the future of Europe. For example, cities are key players in the reduction of CO_2 emissions and the fight against climate change. Energy consumption in urban areas – mostly in transport and housing – is responsible for a large share of CO_2 emissions. According to worldwide estimations, 21 about two thirds of final energy demand is linked to urban consumptions and up to 70% of CO_2 emissions are generated in cities. 22 The urban way of life is both part of the problem and part of the solution.

In Europe, CO₂ emission per person is much lower in urban areas compared to non-urban areas.²³ The density of urban areas allows for more energy-efficient forms of housing, transport and service provision. Consequently, measures to address climate change may be more efficient and cost-effective in big and compact cities than in less densely built space. The impact of measures to reduce CO₂ emissions taken in a single big metropolis like London may have a great effect.

²⁰ OECD Territorial Reviews: Competitive Cities in the Global Economy, Paris, 2006, quoted in An agenda for a reformed Cohesion Policy (see above).

²¹ There are various estimations of urban consumption of energy and related emissions. According to the World Energy Outlook (November 2008) http://www.worldenergyoutlook.org/index.asp, much of the world's energy – an estimated 7 908 M tonnes of oil equivalent in 2006 – is consumed in cities. Cities today house around half of the world's population but account for two thirds of global energy use. City residents consume more coal, gas and electricity than the global average, but less oil. Because of their larger consumption of fossil fuels, cities emit 76% of the world's energy-related CO₂. However, according to D. Satterthwaite (International Institute of Environment and Development, UK), cities contribute much less to greenhouse gas (GHG) emissions than assumed, particularly in poorer countries (*Environment and Urbanisation*, September 2008).

²² It is difficult to give a precise measure of CO₂ emissions as some figures are estimates on the basis of urban consumption of energy produced elsewhere.

A rural resident would consume an average of 4.9 tonnes of oil equivalent/year in Europe while a city resident would consume 3.5 tonnes of oil equivalent. Source: IEA, 2008 and World Energy Outlook, 2008, International Energy Agency, Geneva.

Cities' contribution to Europe 2020²⁴

Cities are expected to play a key role in the implementation of Europe 2020 and its seven flagship initiatives.

Smart Growth: Cities concentrate the largest proportion of the population with higher education. They are at the forefront in implementing innovation strategies. Innovation indicators such as patent intensity demonstrate that there is a higher innovation activity in cities than in countries as a whole. Innovation output is particularly high in the very large agglomerations²⁵. The three flagship projects – the 'Digital Agenda for Europe'26, the 'Innovation Union'27 and 'Youth on the Move'28 – address a series of urban challenges such as: exploitation of the full potential of information and communication technology for better health care, a cleaner environment and easier access to public services; the development of innovation partnerships for smarter and cleaner urban mobility; the reduction of the number of early school leavers and the support for youth at risk, young entrepreneurs and self-employment.

Green Growth: Cities are both part of the problem and part of the solution. The promotion of green, compact and energy-efficient cities is a key contribution to green growth. Cities have an important role to play in implementing the agenda of the two flagship projects 'Resource-Efficient Europe'²⁹ and 'An Integrated industrial policy for the globalisation era'³⁰. These energy and industrial policies are based on strategic, integrated approaches, building inter alia on the clear support and involvement of local authorities, stakeholders and citizens.

Inclusive growth: Social exclusion and segregation are predominantly urban phenomena. Cities are the home of most jobs, but also have high unemployment rates. Cities can contribute to inclusive growth, notably in combating social polarisation and poverty, avoiding the segregation of ethnic groups and addressing the issues of ageing. The European Platform against Poverty and Social Exclusion³¹ sets out to reach the EU target of reducing poverty and social exclusion by at least 20 million by 2020. It will help to identify best practices and promote mutual learning between municipalities. An additional flagship initiative, 'An Agenda for new skills and jobs'³², has been launched to reach the EU employment rate target for women and men of 75% for the 20–64-year-old age group by 2020.



1.4. European policy context

Urban planning per se is not a European policy competence. However, economic, social and territorial cohesion all have a strong urban dimension. As the vast majority of Europeans live in or depend on cities, their developments cannot be isolated from a wider European policy framework. The EU has had a growing impact on the development of cities over recent decades, notably through cohesion policy.

1.4.1. The 'Acquis Urbain'

An on-going intergovernmental process of more than two decades, coupled with the practical experiences gained through the URBAN pilot projects and two rounds of URBAN Community Initiatives,³³ have led to an explicit European consensus on the principles of urban development, the 'Acquis Urbain'.

Successive EU Council Presidencies have recognised the relevance of urban issues and urban development policies at all levels of government. In particular, a series of informal ministerial meetings on urban development – in Lille 2000, Rotterdam 2004, Bristol 2005, Leipzig 2007, Marseille 2008 and Toledo 2010 – have shaped common European objectives and principles for urban development. These meetings have helped to forge a culture of cooperation on urban affairs between Member States, the European Commission, the European Parliament, the Committee of the Regions and other European Institutions, as well as urban stakeholders like the Council of European Municipalities and Regions (CEMR) and EUROCITIES.

The 2007 Leipzig Charter on Sustainable European Cities has been the chief outcome of this process. It stresses the importance of an integrated approach to urban development and a focus on deprived neighbourhoods in order to remedy vicious circles of exclusion and deprivation. In 2010 this was taken further with the Toledo Declaration, which not only underlines the need for an integrated approach in urban development, but also promotes a common understanding of it. The Toledo Declaration effectively links the Leipzig Charter to the objectives of Europe 2020.³⁴ Europe 2020 has seven flagship initiatives in which both the EU and national authorities will coordinate their efforts.

The political process has been mirrored on the ground by the support for urban development from the European Regional Development Fund (ERDF), notably via the Urban Pilot Projects (1989-99) and the URBAN and URBAN II Community Initiatives (1994–2006). These EU initiatives focused on four core objectives: (i) strengthening economic prosperity and employment in towns and cities; (ii) promoting equality, social inclusion and regeneration in urban areas; (iii) protecting and improving the urban environment to achieve local and global sustainability; and (iv) contributing to good urban governance and local empowerment. The URBAN Community Initiatives demonstrated the virtues of the integrated approach, focusing on both soft and hard investments. They also showed that the involvement and ownership of projects of stakeholders, including citizens, was an important success factor. Another success factor was the relatively high share of per capita investment, i.e. targeted investments with a sufficient critical mass.

- 24 http://ec.europa.eu/europe2020/index_en.htm
- 25 Second 'State of European cities report', op. cit.
- 26 Communication from the Commission to the Council and Parliament, A digital agenda for Europe, Brussels, COM(2010) 245 final/2.
- 27 Europe 2020 Flagship Initiative 'Innovation Union', European Commission COM(2010) 546 final.
- 28 Communication from the Commission, Youth on the move An initiative to unleash the potential of young people to achieve smart, sustainable and inclusive growth in the European Union, Brussels, COM(2010) 477 final.
- 29 Communication from the Commission, A resource-efficient Europe Flagship initiative under the Europe 2020 Strategy, Brussels, COM(2011) 21 final.
- 30 Communication from the Commission, *An integrated industrial policy for the globalisation era Putting competitiveness and sustainability at centre stage*, Brussels, COM(2010) 614.
- 31 Communication from the Commission, *The European Platform against Poverty and Social Exclusion: A European framework for social and territorial cohesion*, Brussels, COM(2010) 758 final.
- 32 Communication from the Commission, An Agenda for new skills and jobs: A European contribution towards full employment, Brussels, COM(2010) 682 final.
- 33 URBAN I (1994–99) and URBAN II (2000–06) were two Community Initiatives of the European Regional Development Fund (ERDF) focused on the sustainable integrated development of deprived urban districts.
- 34 cf. http://ec.europa.eu/regional_policy/newsroom/pdf/201006_toledo_declaration_en.pdf.

The urban dimension has been mainstreamed in the current ERDF programming period, which has given all Member States and regions the possibility to design, programme and implement tailor-made, integrated development operations in their cities. City networking and exchange of urban integrated development experiences is being promoted by the URBACT programme (2002–13).³⁵

1.4.2. The Territorial Agenda

With the Lisbon Treaty, territorial cohesion was recognised as a key objective of the European Union. This resulted from a policy process that ran parallel to and was linked with that of urban development. The adoptions of the European Spatial Development Perspective³⁶ (ESDP) in 1999 and the Territorial Agenda of the European Union³⁷ (TAEU) and Leipzig Charter in 2007 have been significant milestones. The TAEU was revised in 2011 to better reflect European challenges and policy priorities – notably Europe 2020 – leading to the adoption of the Territorial Agenda of the European Union 2020 (TA2020). It builds on the principle that an integrated

and cross-sectoral approach is needed to transform the main territorial challenges of the European Union into potentials to ensure balanced, harmonious and sustainable territorial development.

TA2020 effectively links territorial cohesion with the Europe 2020 strategy. It provides strategic orientations for territorial development and stresses that most policies can be more efficient and can achieve synergies with other policies if the territorial dimension and territorial impacts are taken into account.

TA2020 promotes balanced, polycentric territorial development and the use of integrated development approaches in cities as well as rural and specific regions. It points to the need for territorial integration in cross-border and transnational functional regions and stresses the role of strong local economies in ensuring global competitiveness. It also highlights the importance of improving territorial connectivity for individuals, communities and enterprises, as well as managing and connecting the ecological, landscape and cultural values of regions.

³⁵ cf. http://urbact.eu

³⁶ cf. http://ec.europa.eu/regional_policy/sources/docoffic/official/reports/som_en.htm.

rd. http://www.eu-territorial-agenda.eu/Reference%20Documents/Territorial-Agenda-of-the-European-Union-Agreed-on-25-May-2007.pdf.

LEIPZIG – Building on the URBAN Community Initiative: consolidation of urban regeneration with decreasing subsidies³⁸

Leipzig, the second largest city in the eastern part of Germany, is a model for redevelopment.

During the 1990s, Leipzig lost much of its population, employment and industrial infrastructure. However, residents and the municipality prevented a total meltdown, introducing incentives to attract new residents and businesses. The population soon grew. European regional funds provided vital support to urban regeneration and housing stock restructuring, including the Wilhelminian buildings.

In the early 2000s, despite much effort from the municipality and residents and contact made with economic investors to undertake an integrated urban development strategy, poor conditions of housing stock and the presence of brownfield sites were still issues. The city's western part had been transformed through URBAN II, however, new subsidised programmes were needed for other parts.

With fewer subsidies, Leipzig officials are again adapting their strategy. Though housing and urban development remain priorities, the focus is more on other areas like school planning, culture, education and quality of social life. One proposal is to create a boat route linking the city's waterways with surrounding lakes.

Using its experience and knowledge of sustainable cities, Leipzig is leading an URBACT project, LC-FACIL, which aimed to contribute to the reference framework for European sustainable cities³⁹.



Following a call for tenders which was launched in the context of the "Cities of tomorrow" reflection process, the 'ACT Consultants' study centre has completed ten case studies in the following cities: Amsterdam, Barcelona, Brno, Florence, Gliwice, Leipzig, Newcastle, Plaine Commune, Seraing and Växjö. These were aimed at providing positive examples of successful urban policies and experiences in response to the challenges pinpointed by the experts.

^{39 &}lt;u>http://urbact.eu/en/projects/disadvantaged-neighbourhoods/lcfacil/homepage/</u>

1.5. Towards a shared European vision of urban development

1.5.1. Can we agree upon a shared vision?

A *vision* can be defined as a shared image of a desirable future described in precise terms. There is no single vision of *the* European model city. In fact there might be as many visions as there are Europeans. Many cities have developed, through more or less participative processes, their own visions of what they would like their future to look like. These visions are diverse as they build on different realities, different strengths, weaknesses, opportunities and threats, as well as different values.

To develop a European normative vision of the city of the future may seem like a futile exercise; cities must develop their own visions, engaging their inhabitants, organisations, administrations and other local resources and stakeholders. But Europe has a role to play in setting the framework, providing guiding principles and enabling the cities to shape their future. A vision could be described in terms of four main elements:

- its aims, i.e. the general goals perceived as an ideal that can be achieved;
- its major projects and their expected outcomes,
 which will plot the future path chosen by the city;
- a system of shared values⁴⁰, traditional and current values, that needs to be cultivated to unite and manage our differences, as well as 'qualities to be acquired' which will help to achieve the vision if supported collectively;
- a collective desire to achieve the objectives which must have the potential to be expressed symbolically.⁴¹

In each of these elements, Europe has a role to play. In terms of aims or objectives, as well as values, there is an explicit agreement on the character of the European city of the future and the principles on which an ideal European city should be based. The same goes for the principles of urban development in the European territory. These principles can

be found in the objectives of the Treaty, in the Charter of Fundamental Rights of the European Union, in the European Social Model and in the objectives of the Territorial Agenda. They reflect the values on which the EU was founded.

Furthermore, there is a consensus among the ministers responsible for urban development on more specific city objectives and values, how these objectives should be attained and the instrumental role cities can play in implementing Europe 2020. This has been achieved through a continuous intergovernmental process marked by the Bristol Accord, the Leipzig Charter and the Toledo Declaration.

1.5.2. A European vision of the Cities of tomorrow

The shared vision of the European City of tomorrow is one in which all dimensions of sustainable urban development are taken into account in an integrated way.

European Cities of tomorrow are places of advanced social progress:

- with a high quality of life and welfare in all communities and neighbourhoods of the city;
- with a high degree of social cohesion, balance and integration, security and stability in the city and its neighbourhoods, with small disparities within and among neighbourhoods and a low degree of spatial segregation and social marginalisation;
- with strong social justice, protection, welfare and social services, with no poverty, social exclusion or discrimination, and a decent existence for all, with good access to general services, preventive health care and medical treatment;
- with socially-balanced housing, and decent, healthy, suitable and affordable social housing adapted to new family and demographic patterns, with high architectural quality, diversity and identity;

⁴⁰ By value we mean a type of belief representing and leading to ideal modes of conduct.

⁴¹ Destatte, Philippe, contribution to Workshop 1 Cities of tomorrow – Urban challenges, Brussels, June 2010.

- with good education, vocational and continuing training opportunities, including for those living in deprived neighbourhoods;
- where the elderly can lead a life of dignity and independence and participate in social and cultural life, where neighbourhoods are attractive for both young and old people, where people with disabilities have independence, are socially and occupationally integrated and participate in community life, and where men and women are equal and the rights of the child are protected.

European Cities of tomorrow are platforms for democracy, cultural dialogue and diversity:

- with rich cultural and linguistic diversity, and a social and intercultural dialogue;
- where the rights to freedom of expression, of thought, conscience and religion, and the right to manifest religion or belief, in worship, teaching, practice and observance are respected;
- with good governance based on the principles of openness, participation, accountability, effectiveness, coherence and subsidiarity, where citizens have opportunities for social and democratic participation and are involved in the urban development together with other stakeholders.

European Cities of tomorrow are places of green, ecological or environmental regeneration:

- where the quality of the environment is protected, eco-efficiency is high and the ecological footprint small, where material resources and flows are managed in a sustainable way, and economic progress has been decoupled from the consumption of resources;
- with high energy efficiency and use of renewable energies, low carbon emissions, and resilience to the effects of climate change;
- with little urban sprawl and minimised land consumption, where greenfields and natural areas are left unexploited by the recycling of land and compact city planning;

- with sustainable, non-pollutant, accessible, efficient and affordable transport for all citizens at the urban, metropolitan and interurban scale with interlinking transport modes, where non-motorised mobility is favoured by good cycling and pedestrian infrastructure, and where transport needs have been reduced by the promotion of proximity and mixed-use schemes and the integrated planning of transport, housing, work areas, the environment and public spaces.
- European Cities of tomorrow are places of attraction and engines of economic growth:
- where creativity and innovation take place and knowledge is created, shared and diffused, excellence is stimulated with proactive innovation and educational policies and ongoing training for workers, and sophisticated information and communication technologies are used for education, employment, social services, health, safety, security and urban governance;
- with a high quality of life, high-quality architecture and high-quality functional user-oriented urban space, infrastructure and services, where cultural, economic, technological, social and ecological aspects are integrated in the planning and construction, where housing, employment, education, services and recreation are mixed, attracting knowledge-industry businesses, a qualified and creative workforce and tourism;
- with regenerated urban local economies, diversified local production systems, local labour market policies, and development and exploitation of endogenous economic forces in the neighbourhoods, which consume local green products and have short consumption circuits;
- where the heritage and architectural value of historic buildings and public spaces is exploited together with the development and improvement of the urban scene, landscape and place, and where local residents identify themselves with the urban environment.

1.5.3. A European vision of the territorial development of cities

The European Union aims to promote economic, social and territorial cohesion. The key role of cities in all aspects of cohesion is undeniable in terms of not only their internal but also their territorial development. Again, although the EU lacks a formal competence in spatial planning, there is a consensus on key principles which may form the basis of a shared European vision.

The future urban territorial development pattern

- reflects a sustainable development of Europe based on balanced economic growth and balanced territorial organisation with a polycentric urban structure;
- contains strong metropolitan regions and other strong urban areas, such as regional centres, especially outside the core areas of Europe, which provide good accessibility to services of general economic interest;
- is characterised by a compact settlement structure with limited urban sprawl through a strong control of land supply and speculative development;
- enjoys a high level of protection and quality of the environment around cities – nature, landscape, forestry, water resources, agricultural areas, etc. – and strong links and articulation between cities and their environments.

1.6. Conclusions – shared European urban development objectives

There is no denial of the importance of cities for our present and our future Europe. A large majority of the European population is urban. Cities play a crucial role as motors of the economy, as places of connectivity, creativity and innovation, and as service centres for their surrounding areas. Cities are also places where problems such as unemployment, segregation and poverty are concentrated. The development of our cities will determine the future

economic, social and territorial development of the European Union.

The European Union does not have a direct policy competence in urban and territorial development, but the last two decades have witnessed an increasing importance of the European level in both urban and territorial development. In this chapter we have demonstrated that there is an explicit European model of urban development that covers both the internal development of cities as well as their territorial development. The shared vision of the European model of urban development is one in which all dimensions of sustainable development are taken into account in an integrated way.

The European Cities of tomorrow are places of advanced social progress; they are platforms for democracy, cultural dialogue and diversity; they are places of green, ecological or environmental regeneration; and they are places of attraction and engines of economic growth.

The future European urban territorial development should reflect a sustainable development of Europe based on balanced economic growth and balanced territorial organisation with a polycentric urban structure; it should contain strong regional centres that provide good accessibility to services of general economic interest; it should be characterised by a compact settlement structure with limited urban sprawl; and it should enjoy a high level of protection and quality of the environment around cities.

However, there are many signs that the European model of urban development is under threat. As the urban population has increased, so has the pressure on land. Our present economies cannot provide jobs for all, and social problems associated with unemployment accumulate in cities. In even the richest of our cities, spatial segregation is a growing problem. Cities are ideally placed to promote the reduction of energy consumption and CO₂ emissions, but urban sprawl and congestion due to commuting is increasing in many of our cities. A series of challenges must be met collectively if we are to fulfil our serious ambition of truly sustainable and harmonious development of our cities. In the next three chapters, we will take a closer look at the threats, the visions and the governance challenges for the Cities of tomorrow.

2. A European urban development model under threat



The previous chapter pointed to the importance of cities for Europe's future development. It also demonstrated that there is an explicit European urban development model. In this chapter the focus is on the weaknesses of European cities and the threats to their prosperous and harmonious development. A diagnosis is made of European cities from a demographic, economic, social, environmental and governance point of view. The objective is not to establish a diagnosis of every single challenge that cities are facing, but to focus on major threats and weaknesses that have a significant impact on cities' development potential.

2.1. Diagnosis: demographic decline

European demographic trends give rise to a series of challenges that differ from one country to another and from one city to another. There is a general trend of ageing in the EU population. The large cohorts of the baby boom born immediately after the Second World War are now entering their sixties and are retiring. The number of people aged 60 and above in the EU is increasing by more than 2 million every year, roughly twice the rate observed until about three years ago. By 2014, the working-age population of 20–64-year-olds is projected to start shrinking. As fertility remains considerably below replacement rates, in most EU Member States the relatively small EU population growth still observed is mainly due to migration inflows.⁴² However, a detailed analysis at regional level reveals a more diverse picture of demographic patterns.

Demography is more than birth rates and life expectancies. Demographic trends are determined not only by birth rates and life expectancies, but also by mobility and migration. The finer the unit of analysis, the more important mobility and migration become. A relatively stable demographic trend in a Member State may hide important variations between its cities, or between cities and rural areas. In Germany for instance, population evolution between 1991 and 2004 in different cities varied between 10% growth and 23% shrinkage.⁴³

In the early post-war period, the demographic dynamism across Europe allowed for abundant young inflows to cities. According to the UN, the European urban population grew by 90% between 1950 and 2009, while the total population grew by only 34%. Population flows not only compensated for the ageing of the native population but in several cities resulted in the rejuvenation of the greater urban area. These domestic or intra-EU flows are set to progressively decline for mainly demographic and economic reasons. Nevertheless, the UN still projects an increase of the urban population in Europe of just below 10% in the 2009–50 period, while the European population as a whole is predicted to decrease from around 2025.⁴⁴

⁴² The 2008 projections prepared by Eurostat.

⁴³ Mäding, Heinrich, presentation on demography in Workshop 1 Cities of tomorrow – Urban challenges Brussels, June 2010.

⁴ United Nations, Department of Economic and Social Affairs, Population Division, *World Urbanisation Prospects:* The 2009 Revision, 2010.

Diverse demographic changes in Europe⁴⁵

Whereas population as a whole has been growing in Northern, Western and Southern Europe, Central Europe has experienced stagnation or decline. Some Central European countries (Czech Republic, Slovakia, Slovenia) reported a balanced overall population growth between 2001 and 2004, whereas core cities decreased in population. In Romania, population losses in cities were lower than in the country as a whole. A more differentiated picture can be seen in other countries (Bulgaria, Hungary, Poland), where some cities have lost population to a greater extent than in the countries as a whole, while other cities have experienced little population decline or have even grown. In regions which lag behind, the outer zones of cities gained, while core cities lost population, but in a number of exceptions (notably Hungary and Romania), the situation was reversed. These trends are also supported by more recent annual data provided by the Urban Audit.

Population Change 2001–04 by city type⁴⁶, (in %)



Source: European Commission, 'Second State of European Cities' Report

There is continued growth in major cities and a continued process of migration towards major EU cities such as Paris, London, Madrid, Barcelona, Athens, Vienna and Berlin. As the rural surplus of people has declined in most Member States – except for Poland and Romania – the immigrant share of urban inflows has grown. In many EU cities the number of inhabitants with foreign backgrounds now exceeds 20%⁴⁷ of those under 25 years old. Projections at city level indicate that the share of people with foreign backgrounds will further increase since many Member States, especially the UK, Ireland and the Mediterranean

countries, have received large waves of young immigrants over the last 15 years.

The economic and social dimensions of demographic change are as important as demographic trends themselves. Cities will face different challenges depending on the composition and evolution of their population structure in terms of age, household composition, share of immigrants, education and socio-economic situation, etc., especially in relation to evolving economic circumstances.

⁴⁵ European Commission, Second State of European Cities Report', op.cit.

^{(1) &}quot;Principal Metropolises" consist of 52 very large cities, including capitals with an average of >1000000 inhabitants. These are the most dynamic cities in Europe in terms of innovation and entrepreneurship. (2) "Regional Centres" comprise 151 cities from all parts of Western Europe with an average population of around 290000. These cities are not as dynamic as the principal metropolises but are above national averages. (3) "Smaller Centres" comprise 44 cities, mainly from Western Europe and mostly outside its economic core zones, with less dynamic economics but with a high share of highly qualified working-age residents. (4) "Towns and Cities of the Lagging Regions" consist of 82 smaller cities from economically lagging regions in Central and Southern Europe, which have higher unemployment, lower GDP per head but a higher share of manufacturing.

⁴⁷ Analysis of Urban Audit 2001 and 2004 data collection; data from the CLIP network of cities.

Three types of European city in terms of socio-economic and demographic change⁴⁸:

Economically dynamic cities which experience strong population increases through the inflow of both highly skilled and less qualified migrants attracted by the cities' sustained economic power and wealth. These are mainly larger Western Europe cities closely connected to the world economy that provide a favourable environment for innovation and economic activity together with attractive living conditions. The biggest challenge for these cities is to operate proper integration strategies for the less qualified migrants.

Cities with a strong economic background and stagnating or gradually shrinking populations. Most of the small and medium-sized European cities will be in this category. In these cities, the gradual shrinkage of a city does not necessarily cause serious difficulties, and it may even be an advantage as the density of the urban environment decreases. The challenge for these cities is to create flexible urban strategies that can accommodate both upward and downward population changes, as well as changes in socio-economic composition.

Cities within urban areas of complex shrinkage, where both demographic and economic decline can be experienced. These urban areas are mostly located in the Central and Eastern part of the EU (in the Eastern part of Germany and the Eastern regions of Poland, Hungary, Slovakia, Romania



and Bulgaria), however, some peripheral areas of Western Europe are also affected (e.g. Southern Italy, Northern England, Northern Scandinavia, etc.). These cities need to focus on strategies to redefine and renew their economic basis as the shrinkage may induce a negative spiral of declining local tax revenues, lower demand for goods and services, loss of jobs, reduced supply of labour and lower investment, resulting in an overall loss of attractiveness. In addition, the decline in population leads to vacant flats, shops and office space that in turn reduce the capital value of buildings. Fewer users of public infrastructure may lead to rising costs per head or may even cause the closing of schools, libraries, etc."⁴⁹

Cities will have to manage growing cultural diversity. The number of people with foreign backgrounds within the younger age cohorts (< 25) already today exceeds 20% in many EU cities. Projections at city level indicate that the share of people with foreign backgrounds will increase, since many Member States, e.g. the United Kingdom, Ireland and all the Mediterranean countries, have received large waves of young immigrants over

the past 15 years. In addition, Europe will have to rely more on migrants to balance its shrinking active population than it did in the past. A zero-immigration scenario would lead to approximately 15 million fewer active people in 2020 compared to 2010.⁵⁰

A dramatic increase in very old people is an important aspect of the ageing population. The number of those aged 80

⁴⁸ Impact of the European demographic trends on regional and urban development synthetic report drafted in the context of the Hungarian Presidency of the European Union, Budapest 2011.

⁴⁹ Mäding, Heinrich, Presentation on demography in Workshop 1 'Cities of tomorrow: urban challenges', Brussels, June 2010.

⁵⁰ Eurostat: demographic projections Europop 2008.

The cost of ageing in Germany⁵¹

Out of about 11 million households with at least one person over 65 years old, 2.5 million households have to cope with mobility handicaps, a number which will increase to 2.7 million in 2013. Half of these households are single households, compared to a general average of 43%. But only 7% of households are living in accessible

obstacle-free apartments. Over two thirds of the people in need of care (1.54 million) are cared for at home. Since 2005 the number of people in need of care has increased by almost 6% or 118 000 people. In the coming years, almost EUR 40 billion will have to be invested in measures for structural adaptations (removal of obstacles in a flat, improvement of accessibility), with additional expenses of EUR 18 billion for age-adapted living standards.

and above will sharply increase, doubling every 25 years. In the next 30 years, this age group will represent more than 10% of the population in many EU cities.

Intra-urban dynamics, i.e. the relative decline or growth of core or inner cities compared to their larger functional areas, are as important to consider and understand as overall growth or decline. Most cities in Europe, especially in Central, Eastern and Southern Europe, have witnessed a process of suburbanisation with faster growth outside of city centres, whilst the situation is the opposite in cities in especially the UK, but also Germany, Austria and Northern Italy, where the core cities have grown faster than their suburbs. By contrast, in Eastern Europe, with a few exceptions (e.g. Warsaw and Prague), cities are characterised by a decline of their population coupled with an intense process of suburbanisation.⁵²

2.2. Diagnosis: economic development and competitiveness under threat

Europe is no longer in a situation of continuous economic and demographic growth. The decline or disappearance of traditional manufacturing industries has led to the loss of skilled manufacturing jobs and a mismatch between labour market supply and demand. With increasing immigration and mobility, pressures on national welfare systems and more vulnerable labour markets, European cities face

increasing social and economic polarisation, both within and between them. The recent financial and economic crisis – whose negative effects have yet to completely unfold – has left many European cities in a poor state, accelerating the polarisation process and putting the European urban development model to the test.

2.2.1. European cities follow very different development trajectories

The economic development of a city is highly pathdependent and is affected very much by its previous history of economic specialisation and institutional development. Each European city follows its own individual development trajectory. These trajectories can be more or less sensitive to external influences and shocks – depending on cities' resilience and resistance to external events – and are also altered by public policy interventions.

The diversity of European cities in terms of size, demographic mix, as well as economic, social and cultural heritage, gives them very different possibilities for changing their development trajectory. However, as competition increases, cities have tried to improve their respective position by developing and attracting economic activities by establishing strategic visions, endeavouring to involve key economic players, improving the quality of life for professionals, and developing centres of creativity, etc.

According to an expert commission set up in December 2008 by the German Association for Housing, Urban and Spatial Development – supported by the Federal Ministry of Transport, Building and Urban Development.

⁵² ESPON FOCI Final Scientific Report, Chapter 2, op.cit.

Nevertheless, many studies have shown that the economic growth of cities is frequently embedded in national economic systems and is often strongly related to the development of the latter. Seventy-four per cent of the differences in growth (in GDP) between individual cities in Europe is accounted for by differences between the growth rates of different countries, and just twenty-six per cent by the differences between growth rates of cities in the same country.⁵³ There is, however, a marked difference between large cities' growth in EU-12 and EU-15. The largest cities in EU-15 Member States grew marginally faster than cities as a whole within their countries in the period 1995-2001 and grew at about the same rate in the 2001-06 period. However, the largest cities in the EU-12 Member States grew significantly faster in both periods.⁵⁴

2.2.2. A skill base under threat

The evolution of the vast majority of European cities' skill bases has been dependent on the changing organisation of industrial production and the increasing service content of both inputs and outputs, ranging from research and development to maintenance, much of which relies on a qualified workforce. The loss of manufacturing jobs has not only reduced the demand for low-skilled labour, but also affected demand for high-skilled jobs.

A considerable portion of the high-level services that cities have tried to develop in recent decades has been related to the financial sector, including the legal and accounting services that feed into it. The financial sector has been considered a key part of the knowledge economy, but its utility for economies as a whole has been increasingly called into question by the financial and economic crisis.

The loss of manufacturing jobs is difficult to compensate with the creation of new, more highly skilled and competitive jobs. The transition to a more qualified labour force is difficult, as the low-skilled unemployed, especially

the long-term unemployed, face serious difficulties in upgrading their skills and reintegrating into the labour market. Moreover, the present growth model, with its decoupling of economic growth from employment, has led to a larger share of the population being either pushed out of the labour market or having to accept low-wage jobs in the non-qualified service sectors. For instance, the evolution of jobs in Belgium between 1991 and 2001 shows a net gain of skilled jobs of around nearly 60 000, but these new jobs are outweighed by the massive loss of 230 000 manual jobs. Cities like Liège and Charleroi have experienced net losses in both categories of jobs, although the proportion of skilled jobs has increased.⁵⁵

The public sector in many European countries is reducing budgets through direct layoffs and increased reliance on the private sector. In some cities with a high proportion of public sector jobs, this may cause serious problems if there is no private sector demand.

ESPON–FOCI, final report, p. 44; GDP is measured in purchasing power standard.

⁵⁴ ESPON–FOCI final report, pp. 44–5.

Van Hamme, Gilles, Wertz, Isaline and Biot, Valérie, 'Economic growth devoid of social progress: the situation in Brussels' in *Brussels Studies* (<u>www.brusselsstudies.be</u>) issue 48, 28 March 2011. Based on 1991 population census; 2001 Socioeconomic Survey; INS (National Statistical Institute).

GLIWICE – Using regional funds to support local SMEs and economic revitalisation of the city

With 192 000 inhabitants, Gliwice is the second largest city in the Upper Silesian industrial region, one of the main industrial zones of Poland. Following the initial difficult years of political and institutional restructuring following transition towards market economy, Gliwice managed to turn things around and today is in a strong position.

It has managed to attract large companies to the area, including Opel, NGK Ceramics, Mecalux and Roca. However, support is also vital for SMEs, representing 99% of enterprises in Gliwice, and knowledge-based activities, notably the Technical University and research centres. The municipality, its agencies (Local Development Agency, NGO centre), the Silesian Association of Support for Enterprises and other bodies (Technology Park,

Chamber of Commerce, etc.) are working together to ensure this support continues. Their activities focus on training and advisory programmes for target groups (unemployed, NGOs, young people, etc.) and also physical investment projects (abandoned mine reconstruction, Technology Park construction, etc.).

As an example of a city that relies heavily on EU funds, Gliwice illustrates the various sides of this funding. The general aim of the city – to address the priorities and demands established by the EU – tends to favour standardised projects rather than tailored projects based on local assessments. Thus, close coordination in areas such as programme monitoring and impact analysis is needed at city level.



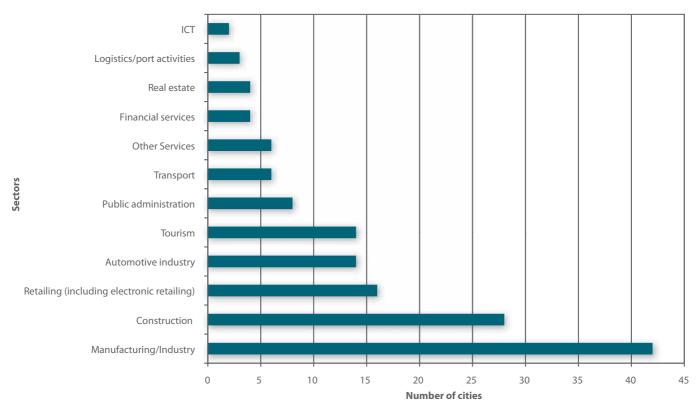
2.2.3. Cities facing the crisis

The volatility of international business – as harshly experienced by many cities during the crisis – makes cities that strongly rely on foreign direct investment vulnerable to changes in international competition. The same goes for cities dependant on single sectors, especially traditional manufacturing or raw-material-based industries. Among the most vulnerable are those cities dependent on a mono-sector manufacturing base in decline. They are challenged by a need to restructure and diversify their economic base while facing out-migration and a loss of financial capacity. Delocalisation of manufacturing has led to a loss of skilled jobs and the destruction of human capital – a negative spiral trajectory. Outsourcing of the manufacturing of specific components has had similar negative consequences, with a loss of tacit production knowledge and the replacement of skilled production work by low-skilled assembly work.⁵⁶

Many cities, especially in Central and Eastern European countries, including the former East Germany, started experiencing delocalisation and shrinking populations in the mid-1990s. Increasing pressure on European cities brought by globalisation and European integration in the past two decades has led to a polarisation of urban performance, which has been aggravated by the enlargement process. Central and Eastern European cities have faced the additional challenge of increased competition while radically transforming their economies and their economies' institutional foundations. This adjustment process is proving extremely difficult, especially for cities not benefitting from foreign direct investments. The ensuing significant decrease of public finance has led to emergency situations in many of these cities, with decaying infrastructure, high unemployment, deserted inner areas and growing segregation.

Figure 1 Job losses in cities due to the economic crisis

Main sectors affected by unemployment increase



Source: Cities and the economic crisis – A survey on the impact of the economic crisis and the responses of URBACT II cities, April 2010

The negative effects of the recent financial and economic crisis, in particular the fiscal crisis, with reduced public budgets and austerity policies combined with the rising need for social expenditure, have brought an additional number of cities (especially in Southern Europe) closer to a similar situation. It may be that we have not yet seen the worst of the crisis in many of those cities, as many cities' economies rely heavily on the manufacturing sector, which has been one of the worst hit by the crisis (see Fig. 1 on previous page).⁵⁷

2.2.4. Competition as a zero-sum game

Links between cities in Europe are considerably more extensive than those on other continents.⁵⁸ Over the past few decades, cities in Europe have generally developed together and when they have fallen into crisis, they have done so briefly. In the future, due to increasing competition, it appears likely that there will be not only winners, but a considerable number of losers who will fall into a more fundamental crisis due to the cumulative causation involved.

Competition between cities in attracting firms or highly skilled individuals can also be a zero- or negative-sum game, in which cities compete for finite human and monetary resources within the European space by undercutting each other. A low-tax strategy may not only reduce capacities to improve infrastructure, develop high-quality public services and improve living conditions for the city itself, but also undermine nearby cities' fiscal policies. Overly expansive policies aimed at attracting investments or human resources may only be partly successful because of nearby competition, and fail to generate enough outcomes to be sustainable over a longer period.

2.3. Diagnosis: a growing social polarisation

European cities have traditionally been characterised by less segregation and less social and spatial polarisation compared to, for instance, US cities. This has been especially true for cities in countries with strong welfare systems. However, there are many signs that polarisation and segregation are increasing. The economic crisis has further amplified the effects of globalisation and the gradual retreat of the welfare state in most European countries.

Although average living standards have increased over time, there are signs not only of growing income disparities but also of the poor getting poorer. In some places, local populations suffer from a concentration of inequalities: poor housing, low-quality education, unemployment, and difficulties or inabilities to access some services (health, transport, ICT). Reduced public finances in many cities have led to restricted cyclical policies which aggravate these issues further. With fewer labour market opportunities, there is a risk of increasing intolerance and polarisation between those who contribute and those who benefit from social allocations.

The situation is very varied in Europe, and some cities have been worse hit than others, not least the Central and Eastern European countries, in which political restructuring has led to new patterns of social and spatial segregation. The wealthier cities of Western Europe also face the challenge of rising segregation and polarisation. Based on data from the EU Survey on Income and Living Conditions (EU-SILC), it has been shown that there is a higher share of severely materially-deprived individuals in the urban population compared to the rest of the population in the EU-15 Member States (see Annex 1 – Chapter 2). In Belgium for instance, there is increased income inequality in cities and those with the lowest incomes are actually getting poorer.⁵⁹

Calafati, Antonio, issue paper, Cities of tomorrow, Brussels, December 2010.

⁵⁸ ESPON–FOCI, final report.

Source: IGEAT, Growth and Social Exclusion project for the Belgian Federal scientific policy, draft final report; cities are approximated by NUTS 3.

AMSTERDAM – Rethinking diversity policy to strengthen social cohesion and tackle the risk of segregation

Like most large European cities, Amsterdam is facing a social cohesion challenge. While other cities focus on the integration of migrants, Amsterdam is more open, dealing with all minorities equally, including migrants and other underprivileged or discriminated groups.

Amsterdam has seen two migration flows in recent times: from former colonies, mainly Suriname, Antillean islands like Aruba, Curaçao, St Martin and the Moluccas, and from other countries; both driven by economic deprivation and/or political repression.

National policies on ethnic minorities are seen as generally tolerant, Amsterdam being a flagship for these policies. But city authorities have now shifted from a 'minority policy' to 'citizenship policy' approach focused

on dealing with individuals. One consequence is that people acting more independently of their ethnic group may weaken internal group cohesion.

To address this and also the challenge of growing racism and xenophobia, the city authorities are promoting the participation of and cooperation with all inhabitants and taking action to de-legitimise and oppose racism and discrimination. The city of Amsterdam, more than any other Dutch city, has undertaken positive action in support of ethnic minorities, including immigrants from non-western countries and refugees. The action has included mechanisms aimed at recruiting non-Dutch people or Dutch people with foreign roots to work in public services (currently 22% of staff; with a new target of 27%).



In this photo collage Fatima Elatik, the local councillor takes the floor. She is shown surrounded by the women, the 'regentesses', who controlled the municipal government in the XVIIth century. This is a reference to the spirit of Amsterdam's golden age, which is still very much alive in the city. Fatima Elatik is of Moroccan origin and highly active in the field of diversity policy.

Polarisation is a question not only of rich and poor, but also of cultural, social and ethnic diversity. Globalisation has led to an accelerated circulation of people, commodities, capital, identities and images, as well as an increased mobility of ideologies, economic principles, policies and lifestyles. The widespread use of social ICT applications, e.g. Facebook, has given new meanings to space and place. There has been a shift from a class-based modern society to a fragmented postmodern urban society with many different groups living side by side, sometimes without interaction.

The very concept of social cohesion is being put to the test by these developments. Simultaneously, there can be very strong cohesion within particular groups or communities in an urban setting, but intolerance and even violence between them. Such cohesion is constrictive, oppressive and exclusive, and it inhibits social mobility. Social cohesion must, therefore, be considered at different scales and territorial levels, and its possible negative elements must be understood and countered. It needs to be built on universal values, such as sharing public places and services, rather than historical values linked to national, religious or ethnic identities.

In some situations, the poorest parts of the population have been left behind or been put at risk of lagging because of policies designed to increase the attractiveness of cities which focus on upgrading city centres, building new eco-neighbourhoods, business parks or shopping centres, thus increasing social and spatial segregation. One example is energy poverty; with rising energy prices, those most in need of energy efficiency investments are those that cannot afford them or cannot benefit from tax incentives. Accessibility to services, including public transport, as well as culture, also tend to be less developed in the least attractive parts of urban areas, aggravating the exclusion and isolation of the poorest. The increasing reliance on private initiatives and charitable organisations to alleviate poverty-related problems raises questions about

transparency and democracy, as many of the organisations involved are faith-based or have their own political agenda.

2.3.1. Spatial segregation and housing

Good housing conditions are key to making a city and its agglomeration attractive and liveable. However, in many cities, spatial segregation processes – as an effect of social polarisation – make it increasingly difficult for people with low incomes or from marginalised groups to find decent housing at affordable prices.

In Romania for example, more than 900 000 people have between 3 and 3.5 square metres – the equivalent of one bed and half a table – to live on.⁶⁰ Social integration strategies based on education and training may work in situations of relative poverty but do not function in such situations of extreme poverty and segregation: 'it is impossible to learn mathematics in a nice school and go back to the shack, sharing the only bed with four other brothers'.⁶¹

Socio-economic and demographic trends have an impact on spatial settlement structures, which will exacerbate social polarisation, reinforcing links between specific socio-economic groups and specific housing conditions and locations. This is an issue not only for those living in precarious conditions but also for those facing either a decrease in their revenues or a strong increase in market prices for housing. They may include, for example, people who have lost their jobs, single parents, retired people, as well as an increasing number of young people due to the impact of the economic crisis on the job market.

The gentrification of city centres and the rising cost of housing make it increasingly difficult for a number of people to find decent or affordable housing where they grew up. In France, the share of housing costs in household budgets has grown from 10% in 1960 to 30% in 2010,

⁶⁰ Data drawn from the 2002 Census in Berescu, Catalin & Celac, Mariana, *Housing and Extreme Poverty. The Roma Communities Case*, UAUIM. Bucharest. 2006.

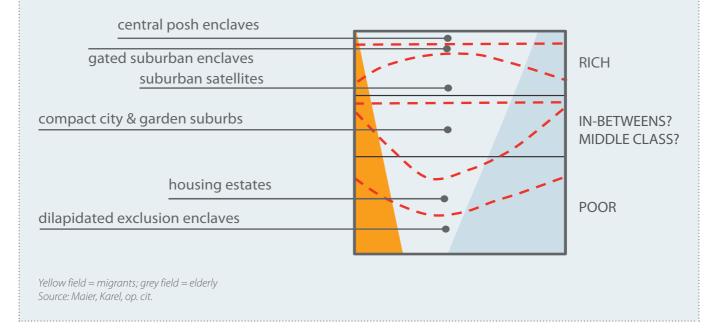
⁶¹ Berescu, Catalin, Workshop 1 *Cities of tomorrow – Urban challenges*, Brussels, June 2010.

Socio-demographic evolutions in the Czech Republic between 1990 and 2010⁶²

The spatial imprint of social polarisation follows partly the spatial pattern of Western European city regions but with some specific features. The housing estates which accommodate a remarkably large percentage of the national population – 30% in the Czech Republic – have changed from mostly middle-class young family housing in the 1960s to 1980s, into residences for elderly people and, increasingly, for migrants and

other transitory populations. Exclusion enclaves have emerged, especially in old working-class districts and housing estates in declining old industrial regions. At the same time, gentrification is changing certain attractive historical cores as well as certain selected inner-city districts.

The wealthy settle in upmarket inner city areas and suburban locations while the poor – including a majority of migrants and elderly people – increasingly settle in housing estates and dilapidated exclusion enclaves.



and represents as much as 37% for newcomers to the housing market.⁶³ In the period 1994–2005, housing costs in the EU-15 increased from just under 25% of disposable income to just over 28% – a rise of almost 4 percentage points. The increase, however, was slightly larger for those in the bottom quintile of the income distribution – from just over 29% of income to almost 34%.⁶⁴

2.3.2. An increasing number of social dropouts

The growing complexity of political decisions and the apparent increase in global private interests' influence have led to a situation where politics seem to have become subordinate to economic interests. Consequently, 'there is a growing perception that democratic elections seem to lose importance (no matter who will be elected policies will be approximately the same) pushing citizens into a more and

Maier, Karel, Workshop 1 *Cities of tomorrow – Urban challenges*, Brussels, June 2010.

^{63 &#}x27;Le coût du logement', Informations sociales No 155, CNAF, Paris, 2009.

⁶⁴ The Social Situation in the European Union 2009, Eurostat, 2010, http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KE-AG-10-001/EN/KE-AG-10-001-EN.PDF.

more passive role'.⁶⁵ Recent urban riots and mobilisation against local politicians' decisions are signs that local residents are increasingly dissatisfied with this situation.

There are also a growing number of people who do not feel as though they belong to the community in which they live. Cities will have to cope with a high number of social dropouts. One example of this trend is the sense of 'no future' shared by a large section of unemployed youths, and which may result in urban violence. Cities facing economic decline will have great difficulties facilitating socioeconomic insertion given the lack of jobs and reduced public budgets. A growing share of the unemployed is at risk of becoming marginalised, and there is a danger that the cities will see a 'development of closed subcultures with fundamentally hostile attitudes to mainstream society, governed by different ideologies and social codes ranging from religious (or quasi-religious) to gangsterism (and overlaps between these)'.66

2.4. Diagnosis – depletion of natural resources

2.4.1. Urban sprawl and land consumption

Urban sprawl is a specific form of land take, resulting from the spread of low-density settlements, and is one of the main challenges that cities face.⁶⁷ Urban sprawl concerns cities' attractiveness, their resource efficiency, their transport infrastructure and the location of public and private services. What is more, it is very difficult to control, as the land being consumed by sprawl often lies outside the cities' administrative areas. Weak planning regulation or its enforcement are commonplace in many European countries, leaving room for private interest to steer developments with a short-term profit logic in which

common public goods are not valued. The European Environment Agency has expressed serious concerns about the development of urban sprawl in the EU, and land use has grown in importance as a European concern.⁶⁸

Several factors may explain the ongoing development of urban sprawl. Many people are settling in peri-urban areas because they can find better quality housing with more living surface per capita. There is still a large difference in the average living area per person between cities in the EU-15 and cities in the EU-12: 15 m² per person is average in Romanian cities, compared to 36 m² per person in Italian cities and 40 m² in German cities.⁶⁹ Out-migration from the city centre to the peri-urban areas may also result from a demand for a greener, more attractive and family-friendly environment.

The development of urban sprawl is closely linked to spatial segregation. For example, the increased gentrification of urban centres drives people to look for more affordable housing further from the city centre, while the middle and upper classes stay in the core city, and vice versa, with wealthy social classes leaving poor and run-down city centres. Urban sprawl is also related to the more extreme cases of spatial segregation in the form of a growing number of gated communities within and outside cities.

Privatisation in Central and Eastern European Member States has led to private housing estate companies building massively in peri-urban areas with few constraints on architectural quality, land use or possible master plans. These different factors may explain why urban sprawl is in progress around both growing and shrinking cities. ⁷⁰ Urban sprawl is also caused by non-coordinated commercial zoning of land in peri-urban areas due to fragmented local government and planning systems, with each local municipality trying to maximise its local revenues. ⁷¹

⁶⁵ Tosics, Iván, issue paper, Cities of tomorrow, Brussels, January 2011.

⁶⁶ Hall, Sir Peter, contribution to Cities of tomorrow, Brussels, April 2010.

⁶⁷ Cf. URBACT project LUMASEC (Land Use Management for Sustainable European Cities) http://urbact.eu/en/projects/metropolitan-governance/lumasec/homepage/

The European Environment State and Outlook 2010 – Land Use (SOER 2010), European Environmental Agency, Copenhagen 2010 [http://www.eea.europa.eu/soer/europe/land-use]

⁶⁹ Urban Audit data 2001 and 2004.

⁷⁰ Bauer, A., Röhl, D., Haase, D., and Schwarz, N., 'Leipzig – between growth and shrinkage' in Pauleit, S., Bell, S., and Aalbers, C., (eds), Peri-Urban Futures: Land Use and Sustainability, Springer, Berlin, 2011.

⁷¹ Tosics, I. (2011): Sustainable land use in peri-urban areas: government, planning and financial instruments: In: Pauleit, S., Bell, S., and Aalbers, C., (eds), Peri-Urban Futures: Land Use and Sustainability, Berlin: Springer.

Urban sprawl has many negative consequences.⁷²

Urban sprawl makes it difficult to organise services: health care for the elderly, primary and secondary education for the youngest, etc. This leads to an increased risk of social isolation. As sprawl often takes place outside local administrative areas, the tax base financing public services may not coincide with the territorial distribution of the users.

Urban sprawl results in increased energy consumption and congestion. There is an increased use of private cars in places where sprawl makes it too difficult and costly to implement good public transport due to low population density. Road infrastructure upgrades then become the only way to reduce travel time and improve accessibility, which in turn contributes to further urban sprawl in a vicious cycle.

Urban sprawl leads to spatial segregation and social exclusion. The distance to basic services such as education, health and social services, and the lack of satisfactory public transport to homes and work and education places make people more and more car-dependant. Urban sprawl, therefore, excludes people who cannot afford to own or use a car, and who do not have the alternative of walking, cycling or taking public transport.

Urban sprawl contributes to the loss of agricultural land and the increasing percentage of soil sealing, resulting in increasing risks of flood in urban areas. This consumption of agricultural land is foreseen to continue in all parts of Europe.⁷³

Urban sprawl is behind the loss of biodiversity and the overexploitation of natural resources. Infrastructure development and urban sprawl results in a continued expansion of artificial surfaces across Europe at the expense of agro-ecosystems, grasslands and wetlands.⁷⁴ Our current

rate of natural-resource exploitation is steadily reducing biodiversity and degrading ecosystems, and, therefore, threatens urban and rural territories' sustainability.⁷⁵

Urban sprawl contributes to the economic decline of the traditional city centre. Functional mix has always been a characteristic of city centres. In fragmenting living and working spaces and in pushing companies or research centres outside city centres, urban sprawl may negatively impact on the economic dynamics of city centres.

2.4.2. Urban ecosystems under pressure

In many ways, cities offer solutions for a more sustainable way of life, but despite improvements in air and water quality, as well as efforts to mitigate and adapt to climate change, European cities still face a number of environmental challenges. As engines of growth and generators of wealth, cities are also drivers of consumption and use of material resources.

The density and compactness of cities reduce energy needs for heating and mobility, and offer possibilities for more efficient land use. But density in itself raises important questions about the environment's capacity to accommodate the concentration of waste and pollution brought by density. Natural ecocycles, especially those for water, are being disrupted by a lack of natural soil and wetlands. The scarcity of land within cities creates pressure for an uncontrolled expansion outside the city cores driven by price rather than environmental considerations. Waste generation leads to land being used for landfills. The concentration of fine particles in the air has adverse effects on health. Noise pollution is amplified by concentrations of activities, in particular transport, and the use of hard, sound-reflecting materials, causing health problems.⁷⁶

⁷² Thematic sub-group under the Territorial Cohesion and Urban Matters Workgroup, Final Report on Urban and Development Sprawl, July 2010.

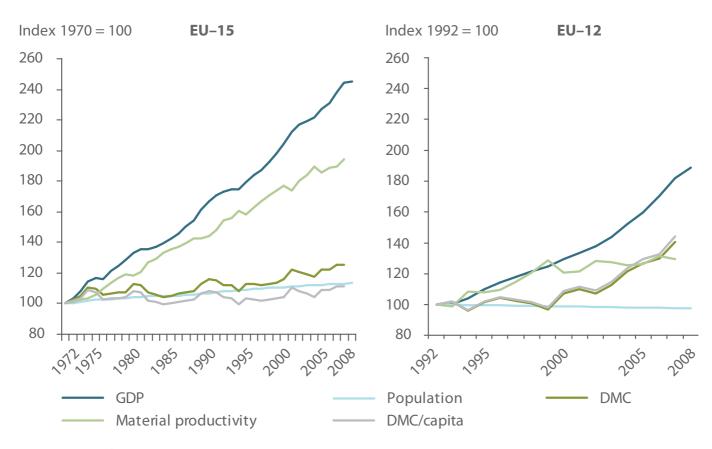
⁷³ A consortium of institutes working on strategies and development of sustainability assessment tools for urban–rural linkages, the PLUREL project (Peri-urban Land Use Relationships) <u>www.plurel.net.</u>

Hetween 2000 and 2006, agro-ecosystems, grasslands and wetlands respectively lost 0.9%, 1.2% and 2.7%. During the same period, there has been an 8% increase of artificial surfaces in Europe. Corine Land Cover Inventory, EEA, 2010.

⁷⁵ http://www.eea.europa.eu/publications/eu-2010-biodiversity-baseline/flyer-european-biodiversity-baseline-2014.

⁷⁶ European Environment Agency, *The European Environment – State and Outlook 2010*, Urban Environment, Copenhagen, 2010.

Figure 2 Trends in the use of material resources in the EU-15 and in the recently acceded EU-12 countries compared with GDP and population (EEA, 2010a)



DMC: Direct Material Consumption.

Why is the depletion of natural resources a concern for Europe?⁷⁷

In general, lost natural ecosystems and soil degradation damage a wide range of ecosystem services, including carbon and water cycling, and provision of food and fibre. Food and water security is a key concern here. The fragility of global food systems has become apparent over recent years. Driven by recurring food and economic crises throughout 2006 to 2009, the number of undernourished people in the world rose

to more than one billion in 2009. The proportion of undernourished people in developing countries, which was previously declining, has also risen in the past few years (FAO, 2009). Ultimately these trends may lead to regional conflicts and social instability. Potential impacts on Europe include changes in the abundance of species, climate change, increased demand for and degradation of domestic resources (such as food and timber), and environment-induced immigration from developing countries.

Furopean Environment Agency, *The European Environment – State and Outlook 2010*, http://www.eea.europa.eu/soer/europe-and-the-world/megatrends/decreasing-stocks-of-natural-resources.

A global depletion of natural resources leads to a global competition for resources. The future competitiveness and vulnerability of European cities are dictated by the cities' ability to shift to a less resource-intensive production and way of life, with less waste generation and increased recycling. Water is already periodically a scarce resource in many European cities, and water scarcity will increase with global warming. In addition, the reduction of wetlands, natural sinks and unsealed soil, in combination with the expansion of cities along ancient sea or riverbeds or their location along coastlines or river banks, dramatically increases the risk of flooding as climate change kicks in.

2.5. A diverse governance system

The manner in which cities are governed varies greatly across the Member States: the numbers of administrative tiers or government levels range from two to four⁷⁸; the average population size of the lowest tier (communes or municipalities) ranges from less than 2000 to over 150000. Although four-government-tier countries usually have a higher number of municipalities – e.g. well over 36000 in France, 12000 in Germany and 8000 in Italy and in Spain – the United Kingdom, also a four-government-tier country, has only 406 municipalities.⁷⁹ In some countries, additional intermediary structures, such as groupings of first-tier government, have been set up to facilitate joint planning and action around strategic issues or joint infrastructure.

The number of government tiers does not give any indication of the influence of the municipal level within the

national government system. Powerful local administrations are those which exercise a high level of political autonomy and control over their budget by local taxation. 80 High tax autonomy alone does not equal high political autonomy, which depends on whether large spending posts with little room for manoeuvre – such as education and health services – are financed locally or by a higher tier of government. In some countries, (major) cities are given a specific status that brings additional resources and responsibilities⁸¹.

Many Member States have undergone a decentralisation trend during the last thirty years, but decentralisation has in many cases been used as a means for higher government tiers to cut budgets, and increased local responsibilities have not been followed by the related resources. Decentralisation is associated with higher accountability, flexibility and efficiency, but too high a degree of decentralisation may not be suitable for more complex tasks and investments which need substantial financial resources or territorial coordination. There is also an additional risk of over-bureaucracy and corruption.⁸²

The differences in regulatory and funding powers give cities very different possibilities for acting on the pressing issues on which their attractiveness and economic and social developments depend, even if they do not have formal responsibility for them. Cities' own resources in terms of human resources for urban and strategic planning vary greatly across Europe. Housing is one of the most important questions for cities, but not all cities have competencies in this area.

⁷⁸ Two-government-tier countries (one central, one sub-national): Bulgaria, Cyprus, Estonia, Finland, Lithuania, Luxembourg, Malta and Slovenia; three-government-tier countries: Austria, the Czech Republic, Denmark, Greece, Hungary, Ireland, Latvia, the Netherlands, Portugal, Romania, Slovakia and Sweden; four-government-tier countries: Belgium, France, Germany, Italy, Poland, Spain and the United Kingdom.

⁷⁹ Figures provided by the Council of European Municipalities and Regions, on the basis of data from their member associations.

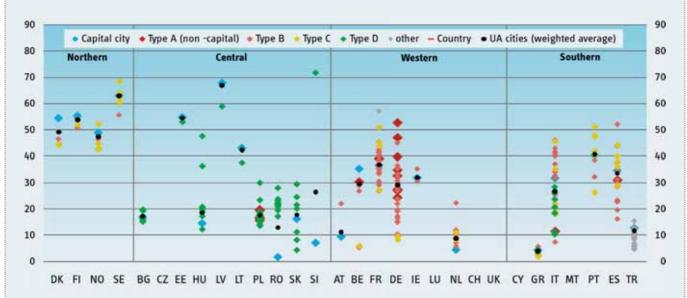
⁸⁰ Second 'State of European Cities Report', op. cit.

⁸¹ Second 'State of European Cities Report', op. cit.

⁸² Second 'State of European Cities Report', op. cit.

Figure 3 Proportion of city income derived from local taxation

By country, macro-region and city type, 2004 (in %)



Note: Type A = "Principal Metropolises"; Type B = "Regional Centres"; Type C = "Smaller Centres"; Type D = "Towns and Cities of the Lagging Regions" (see section 2.1 for explanation; here the type A category has been subdivided into capital cities and non-capital cities).

Cities in the Nordic (Denmark, Finland, Sweden and Norway) and Baltic (Estonia, Latvia and Lithuania) countries depend more on local taxation (ranging from 40% to 70%) than cities in other parts of Europe; Swedish cities derive the largest share of income from local taxation. Variation between countries in Central

and Western Europe is much more pronounced, with local taxation rates ranging between 0% and more than 70%. Western European countries exhibit a relatively heterogeneous pattern, ranging from 5% to 55%. Among the Southern Member and Non-Member States, Greek and Turkish cities only derive a small share of their income from local taxation (under 10% in Greece and under 20% in Turkey), while in Italian, Spanish and Portuguese cities the local share is higher and there is greater variation between cities.

Source: European Commission 'State of European Cities' Report 2010

2.6. Conclusions – a challenging future for the Cities of tomorrow

The European model of urban development is based on economic, social and territorial cohesion and sustainability. A diagnosis of the state and outlook of European cities points to a number of threats to the European model of the city as presented in Chapter 1.

The negative effects of globalisation, downward demographic trends and the economic crisis threaten economic, social and territorial cohesion. We are witnessing

increased socio-economic polarisation and segregation. There is a marked risk that the increased diversity of the European urban population will lead to social fragmentation. Governance systems that have not evolved as quickly as governance needs, coupled with the growing role of private economic interests, may lead to increased urban sprawl, non-sustainable use of natural resources and energy, and increased spatial segregation.

The territorial dimensions of urban development cannot be ignored. The success of cities in adapting to new economic circumstances is not only an internal matter for the cities themselves but also a concern for the rural areas surrounding them. When we take into account the diversity of cities' situations in Europe, from global innovation hubs to abandoned manufacturing sites, it is clear that cities face very different realities and challenges. If we want to keep the European urban development model alive, it is vital that cities in crisis manage the transition to more sustainable development trajectories. We need policies for cities in crisis as well as policies for successful cities, otherwise we risk seeing a two-speed Europe with huge negative social, economic and environmental consequences.

Although the outlook for many cities may appear gloomy, there are also opportunities to turn the major problems into more positive challenges. This demands that cities manage the transition to new development models that are green as well as inclusive and economically sustainable. Competitiveness in the global economy has to be reconciled with sustainable local economies, which demand an anchoring of key competences and resources in the local economic tissue. Social and spatial segregation have to be countered. Governance systems need to be adapted to evolving circumstances and include a territorial approach. Public services and city strategies need to adapt to diverse situations of shrinking budgets and populations, or growing migration, or economic growth which leaves an increasing number of people behind.

3. The Main Challenges for the Cities of tomorrow



3.1. Introduction – what can we say about future challenges?

A *challenge* is a 'task or situation that tests someone's abilities'.⁸³ 'Challenge' is often used as a euphemism for 'problem', but problems become challenges only if they are reformulated into a more or less daunting task. The same problem may give rise to different challenges – e.g. if a fire is the problem, the challenge might be either how to escape the fire or how to extinguish it. The same challenge may also address several problems, so for example if the challenge is ensuring sustainable urban mobility, the problems addressed may include obesity and health problems, segregation and exclusion, traffic congestion, etc.

The *future* is what is still to come. In that sense it can be anything from now to eternity. For our purposes, the future is related to the nature and timescale of the challenges and the possible strategies for addressing them. The challenge of reducing greenhouse gas emissions has one time horizon, the mitigation of the negative effects of climate change another.

The challenges faced by the Cities of tomorrow are those that we believe will be the most influential in a long-term perspective that goes beyond this decade. The future that interests us is the one that goes beyond the immediate and beyond the normal planning horizon, where many possible futures open out.

Without the ability to both predict the future and understand the specific situations of every single European city, we cannot be precise about our cities' most important future challenges. It would require the ability to foresee disruptive events and wild cards. For example, the recent upheaval in the Arab world came as a complete surprise to most Member States' governments and illustrates the way unpredictable events, or chains of events, can have far-reaching consequences that dramatically change a given situation or alter a development trajectory.

That said, many drivers behind the main challenges evolve in a stable and more or less predictable way. For instance, the ageing of the EU population may be projected with accuracy over a long period; globalisation will continue to exercise a strong influence on the location of firms and the evolution of the labour market; and the simulations and models of climate change and its effects are becoming increasingly precise. Therefore, it is possible, if not to predict, then to at least have a good understanding of the types of challenges our cities will face.

This chapter focuses on what experts consider to be the major challenges that cities have to address to achieve a desirable future. Our ambition is to be neither exhaustive in terms of challenges for the Cities of tomorrow, nor speculative and focus on challenges that may materialise in the unknowable future; we simply want to raise awareness of the type of challenges cities are, and will be, facing, and that will have a strong influence on their future.

Challenges cannot be addressed individually; their interrelations and contradictions need to be properly understood. Challenges can rarely be isolated from each other and treated independently, as they are interrelated, often with seemingly contradictory objectives. For instance, the challenge of turning cities carbon-neutral must also be understood through a social inclusion perspective, where green technology needs to be accessible for all if we want to avoid energy poverty and exclusion.

We would also like to draw attention to the way challenges are formulated and the type of governance frameworks that are put in place to address them. A challenge is never neutral. The way it is formulated reflects values and priorities.

Challenges need to be formulated to align with our overall objective of sustainable territorial development in liveable cities all across Europe. Our overall objective, or our value base, is the European model of urban development presented in Chapter 1 (see section 1.5). This should be reflected in the way challenges are formulated.

The challenges for the Cities of tomorrow are not problems to be solved but opportunities to be exploited. Chapter two presented a diagnosis of the threats and weaknesses of European cities. In this chapter we point to the potential strengths and opportunities in European cities and we present scenarios for our Cities of tomorrow which are both desirable and possible.

3.2. The diverse, cohesive and attractive city

3.2.1. The potential of diversity

Increasing immigration flows, an ageing population, a multiplication of real and virtual communities, and increasing economic, social and spatial segregation may lead to fragmentation of cities with isolated local communities, a loss of social cohesion and the formation of ghettos of all forms, both rich and poor. The challenge for the Cities of tomorrow lies in breaking the segregation and turning the diversity into a creative force for innovation, growth and well-being.

Socio-economic, ethnic and cultural diversity may have positive effects on social cohesion, economic performance and social mobility. Much depends on the perspective on diversity, and whether we regard the city as a cluster of problems or as a place of freedom and creativity. The urban

population – especially migrants – must not be looked on as a burden and source of deficit but as an opportunity. There is a positive correlation between the proportion of foreigners and urban economic wealth,⁸⁴ which may be explained both by immigrants' attraction to economically wealthy cities, and by the economic opportunities created by diversity.

Although successful integration is very dependent on national policies and regulation, cities have a key role to play in countering the negative effects and stimulating the positive effects to fully exploit the potential creativity and innovation that may stem from diversity. There are strong links to be exploited between the diversity and social and territorial cohesion of a city and its economic competitiveness and attractiveness. Cooperation across ethnic, socio-professional and socio-cultural boundaries, as well as across territorial boundaries within cities, needs to be encouraged. Social initiatives are needed to improve social relations and improve access to the potential opportunities of a diverse city.

Diversity is about culture, identity, history and heritage. People form the core of cities; cities need to be designed for all citizens and not just for the elite, for the tourists, or for the investors. People should be regarded as the key city asset and not as a demographic or social problem.⁸⁵

⁸⁴ Second 'State of European Cities Report', pp.15–16.

Boraine, Andrew, Presentation of Cities of tomorrow, March 2011.

A vision of the diverse city86

The main principle on which the diverse city is based, is not only the Socratic 'Gnothi seauton' ('know thyself') which was inscribed in the pronaos of the Temple of Apollo at Delphi, but also 'know each other'. We need to work on strategies for mutual knowledge between all cultures present in the city: European and non-European cultures, middle-class and working-class culture (and poverty cultures, which are not necessarily 'poor cultures'), 'high' and 'low' culture, and especially specific youth cultures.

In the diverse city, there are no ghettos or gated communities, and there is no strict delimitation of territories according to different cultural or ethnic origins. Diverse cities look like Montreal at the end of the twentieth century with its many 'ethnic villages' – neighbourhoods with symbols of cultural identity (restaurants, grocery shops). In some other cities, there is a cultural and ethnic mix and dwellings reflecting different cultures⁸⁷, while cultural diversity is reflected by public places and by shops that are, if not owned, then operated by people from all over the globe. In any of those shops, you may find a range of products that reflect different habits (cooking, dressing) and lifestyles.

In a diverse city, public spaces become meeting places in the broadest sense: from just observing each other to physical meetings, interaction and communication and further, to forums where questions affecting the way the city spends its budget can be discussed openly as people have their say in public budgeting exercises.

In a diverse city, solidarity is organised not only top-down – through imposing a middle-of-the-road cultural framework or through a generalised system of CCTV – but also, and even more, bottom-up, by facilitating and stimulating common projects for urban dwellers. This shift would also reduce the need for vertical social control, and old forms of horizontal social control could be restored. Information and communication technologies play an important role as people use them to express their creativity and to communicate about their culture; in some extreme cases, 'to make sure that we're talking with each other in a way that heals, not in a way that wounds' (speech by President Obama in Tucson).

In a diverse city, the different spatial and social perspectives that people have are respected. In the eyes of city dwellers, there is no such thing as one city: it resembles a kaleidoscope of views. The city is perceived differently by different people and they will use the 'urban fabric' accordingly. They will differ in their selection of places to avoid (because they are considered unsafe or ugly), places to prefer (cafés, shops, public spaces, museums), or trajectories to follow (to reach their destination and/or because of the presence of those preferred spots).

3.2.2. Turning diversity into a dynamic asset

Immigration and diversity are sources of wealth creation. Immigration and immigrants or ethnic minorities such as Roma people are often used to fuel political divisions. In times of crisis they are blamed for causing a drain on local tax resources,

stealing jobs from the locals, undercutting wages, bringing criminality and insecurity to neighbourhoods, etc. Their key role in stimulating growth is easily forgotten.⁸⁸ It is important to realise the potential value of each and every group and how they contribute to urban growth, i.e. to build wealth on different communities' cultural assets and differences.

⁸⁶ Builds on the presentation and inputs by Jan Vranken (Antwerp University).

⁸⁷ For example, the Roma houses with their very unique architectural style, cf. presentation by Berescu, Catalin, Workshop 1 *Cities of tomorrow – Urban challenges*, Brussels, June 2010.

^{1 (}In 2008, 36.4% of the [New York] city's population and 42% of its work force were immigrants. According to a recent report by the state controller, New York City immigrants accounted for \$ 215 billion in economic activity in 2008, 32% of the gross city product (GCP). Immigration's contribution to the GCP increased by 61% from 2000 to 2008, indicating a high workforce participation rate and growth in wages. Immigrants are also starting a greater share of new businesses than native-born residents, revitalising commercial districts in every city neighbourhood.' Article by E.R. Fuchs, Columbia University, in Crain's New York Business, Feb. 8–14, 2010.

Some cities are already turning growing diversity into a driver for growth and social progress. The Open Cities URBACT project⁸⁷ aims to develop strategies to attract and integrate qualified migrants. However, cities hit by economic crisis may have difficulties in pursuing such strategies, especially if their population considers migration not as an asset but as a risk for local employment. *The diverse city is an attractive city*. Diversity is not just about ethnic or geographic origin; it is also about social diversity and different cultural expressions.

is welcome and their integrity is respected. The question of poorer or more affordable neighbourhoods must be seen in the context of diversity and inclusion. Overly homogenous neighbourhoods may not welcome alternative lifestyles and may be detrimental to creativity. Diversity needs be stimulated in a context of interaction and respect and some cities apply social mix strategies, for example tenure interventions in the housing sector.

3.2.3. Ensuring a city for all – the cohesive city

The cohesive city is not necessarily a city with complete equality and a homogenous population, but a city where everybody To evolve from tolerance to respect – from cohesion within the group to cohesion within the larger city and society – is one of the major challenges that the Cities of tomorrow face.

'Perhaps the most important question for the future of European cities is the following: how are cohesion and

A vision of the creative city

Living art and culture are clearly visible in the creative city. There is a rich and diverse cultural supply offered by both established art institutions and grass-roots artistic groups and movements.

Culture is the way inhabitants 'live' their city: their use of public spaces, street art, gastronomy, community events, festivals – these are all assets that contribute to a lively cultural life. It manifests itself in various forms, from creative use of public spaces to distinct urban furniture and street lighting. Cultural expression is encouraged.

Within the creative city, culture is mainstreamed into the provision of public services. Distinct urban design and labelling systems help identify places. The dominance of messages from the private sector (advertisements) is counterbalanced and replaced by the increased visibility of public and community amenities and services. Such visibility may benefit from unified urban orientation systems. Urban legends and stories, which are all place-specific and help to 'make' a place, are also visualised by statuettes, messages or signs on the asphalt.



In the creative city, entrepreneurship by newcomers will be encouraged not only as an economic resource but also as a cultural challenge, represented in social events, and in a constant political and cultural effort to weave links not only within communities, but also with the rest of the world.

exclusion, polarisation and diversity related to tolerance and respect between the people and groups that are living in, working in, and visiting our cities? We define tolerance as the absence of conflicts between individuals and groups, and respect as a concept that relates to a more active attitude with a much more positive connotation than tolerance. Do, for example, more social contacts between individuals of different social groups also imply that these individuals will develop a different perspective on these groups (less stereotyped, more tolerance or perhaps even respect)?⁹⁰

The fight against deprivation must not jeopardise diversity and social mobility. Cities have to achieve a fine balance between eradicating poverty and deprivation and providing affordable housing and neighbourhoods that can accommodate alternative lifestyles. There is a need to avoid stigmatising deprived neighbourhoods and also to understand their functional role as transitional spaces for newcomers, for young people and for other less affluent groups that cannot afford to live in cities' more wealthy areas. A big challenge for urban policy is to ensure this function

of transitional space, without letting neighbourhoods turn into dead-end streets with no social mobility and no cohesion with the rest of the city. This question is important for the integration of newcomers, for the possibility of young people born in the city finding their own first dwellings and for the cultural and social diversity of the city.

3.2.4. Eradicating energy poverty and spatial exclusion

Ninety per cent of social housing consists of buildings in need of refurbishment. These buildings often have low energy efficiency with many tenants living in fuel poverty. Better energy efficiency is key to alleviating the poverty of the most vulnerable, while increasing the quality of life for all citizens. Cities are faced with the challenge of upgrading existing housing stock and finding the most adequate solutions, while knowing that systems will evolve. Solutions, therefore, need to be flexible, cost-effective and sustainable. Energy efficiency may play a particular role in cities of

The importance of social and public housing

Public support schemes for housing are prominent in many cities. 'Integrated strategies to address housing exclusion and homelessness have an important role to play in post-crisis policies, with a view to build cohesive and environmentally sustainable societies [...] Concentrations of housing exclusion and homelessness can only be addressed through housing and urban regeneration programmes to promote sustainable communities and social mix.'91 In most Member States, municipalities are responsible for implementing social housing programmes to ensure access to adequate housing for all. In some countries, such as Sweden and Austria, the size of the municipal housing stock is significant (21% and 14% of the national housing stock respectively). In France, a law obliges municipalities with more than 3500 inhabitants to provide at least 20% social housing.92



⁹⁰ Vranken, Jan, issue paper, Brussels, 2010.

¹ European Commission, Joint Report on Social Protection and Social Inclusion, 2010. http://ec.europa.eu/social/main.jsp?catld=757&langld=en.

⁹² CECODHAS, contribution to *Cities of tomorrow*, June 2010, and CECODHAS Housing Europe, *Review of Housing Systems in the EU*, 2011, forthcoming.

EU-12 Member States where there are still a number of large housing estates with very high energy consumption. In some countries, flats have been privatised, resulting in a lack of effective collective management and very few or no resources for renovation.

The modernisation of physical space is a necessary but insufficient condition for guaranteeing quality of life and neighbourhoods and cities with long-term sustainability. Other physical investments are as important for fighting exclusion as those directed towards energy efficiency. Accessibility to public transport and services and the availability and quality of public spaces and shopping areas, are other very important factors for inclusion and quality of life.

To avoid lock-in effects and social immobility, it is crucial to ensure that everyone, especially the very young, has access to good quality education. The main social problems in our cities are less related to income level than to unequal resources and capabilities. Education keeps citizens engaged in society and public life and also acts as a counterforce to a sort of populism. Cities often make a great effort to attract and retain talented people from other parts of the world, but it could be more inclusive and cost-effective to develop the talents that already exist in these cities. In addition, strategies to attract investments by supplying cheap labour can only give a short-term advantage; in the longer-term, advantages need to build on qualifications, skills and innovation.

3.2.5. Developing social innovation

Creativity and innovation are part of the standard toolbox of a city that is attractive and competitive. However, the concept of a 'creative milieu' is sometimes restricted to specific social groups: workers from the knowledge

or leisure industries, artists, etc. But in the context of economic and financial crisis, social innovation offers an opportunity to widen the public space for creativity and innovation.

'The scope for social innovation is particularly large at the moment when many existing institutions are showing signs of strain and when many social problems such as social cohesion, job creation, inner-city decay and youth unemployment seem resistant to orthodox solutions.'93

Social innovation can refer both to social processes of innovation and to innovation with a social goal. It is both a tool to empower and mobilise people's creativity and an outcome of their action. Social innovation addresses social demands that are traditionally not taken care of by the market or existing institutions, and may be directed towards vulnerable groups in society. Social innovation is a wide concept that can take many different forms: grassroots projects such as new educational pathways for children or youth from disadvantaged groups; projects aimed at making life better for targeted groups; projects addressing societal changes; or systemic, enabling innovation, such as micro-credits.⁹⁴

To foster inclusion, cities will have to develop social schemes to mobilise marginalised groups. For example, with schemes such as the 'Community Self Build Agency'95 in the UK, cities may provide opportunities for long-term unemployed people to be empowered through collective work and activity-based networking. Such initiatives can be stepping stones for further educational pathways and for engagement in economic activities.

Funding for social innovation projects may be difficult, as the social return on investment is difficult to account for in direct financial terms by comparison with pure business projects or hard investments. Projects are generally

⁹³ Mulgan, Geoff, and Landry, Charles, *The other invisible hand: Remaking charity for the 21st century*, 1995, quoted by Jan Vranken, issue paper, Brussels, 2010.

⁹⁴ Cf. Bureau of European Policy Advisers, Empowering people, driving change: Social innovation in the European Union, Brussels, May 2010.

Assisted by an architect, a group of people (around 15) builds a community house together. Most of these projects are directed towards long-term unemployed or other marginalised groups, such as drug addicts or alcoholics, with whom a type of social contract is set up. It links community needs (e.g. housing needs) with a reinsertion scheme (e.g. learning a trade). Through such projects, participants are empowered and may (re)-build confidence in their capacities and link up with the professional world.

small-scale in budget terms, but people-intensive. To properly exploit social innovation, cities face the challenge of rescaling governance and articulating social innovation projects and strategies with their overall investment strategies. One way of doing this is to focus attention on public opinion about urban amenities and on adjusting priorities according to recommended changes – even if they're not spectacular⁹⁶ – or to use wider participatory processes, such as participatory budgeting, foresights involving citizens, etc. The provision of some public funding (or the attraction of private funding) can serve as a catalyst to mobilise other resources (volunteering and participation) which have many positive spillovers into social, political and economic activities in cities.

3.2.6. Adapting the city's economic and social life to an ageing population

Most cities will face the challenge of adapting to the needs, demands and requirements of an ageing population. Even cities with a high share of young inhabitants will have elderly residents that live longer and are accustomed to high-quality social and cultural lives. A large share of the elderly population will need some form of daily care.

Ageing will affect cities in different ways according to the purchasing power, vitality and engagement of the elderly population in society. As with ethnic and cultural diversity, an ageing but socially, culturally and economically active population should not be seen as a disadvantage. While the combination of the purchasing power and consumption of the 50–65-year-olds is one of the strongest drivers of the economy, the over 65s demand more public resources. But cities with a high quality of life, especially in terms of climate, leisure and cultural and social services, have the potential to attract affluent retired people, who will contribute to a viable residential economy.

Less fortunate cities may face a combination of decreasing birth rates and an out-migration of the more active part of the population, resulting in a growing elderly population with limited economic resources. The challenge for cities with an increasingly large non-active population lies in their reduced tax-base, which must deal with an increased service demand. In the case of a shrinking population, local authorities will be confronted not only with a decline in their tax revenues, but also with the closure of shops and private services and increasingly vacant building stock. Neighbourhoods may risk turning into no man's lands, speeding up the withdrawal of private interests in a vicious circle.

In both cases, cities will have to meet a growing demand for social services, notably health. They will have to adapt public transport and improve accessibility to public places and housing. The very old will demand particular care, especially as the number of people affected by age-related neurological diseases has risen steeply. These demographic developments are not entirely negative for cities. The need for new and different forms of services and advanced health care will create business and job opportunities and scope for both social and more market-oriented innovation.

Beyond the direct development of services for an ageing population, there is also a need to look at the mix of the whole population. The Cities of tomorrow will have to not only ensure that the elderly are well integrated in society, but also be attractive in terms of quality of life and opportunities for young people, not least young families. The creation of conditions for inter-generational integration and exchange is crucial. The elderly could play important roles in benevolent sectors, for instance in supporting the inclusion of marginalised groups by helping out with extra schooling needs, dealing with administrations, helping newcomers to discover the city's cultural heritage, etc.

The role of the elderly in integrating migrants and marginalised groups could to some extent balance reduced public resources and be an effective tool in community building. It would also increase tolerance for immigration and respect for immigrants, paving the way for increasing immigration to supplement our ageing population.

A vision of a multi-generational metropolis 97

The new metropolis will be multi-generational. There will still be some clustering and differentiation of living by different age groups – students living in more affordable neighbourhoods but easily accessing the hot spots, the elderly organising collective life in more peripheral neighbourhoods, except for the most affluent. Multi-generational housing units will be found in city centres, in buildings with good technical

and social services, where seniors do benevolent work teaching or looking after the young.

Public cultural centres develop experiences of the local and of the whole world with the participation of the community. They are places for learning, imagining and experimenting with new technologies. These centres will be public spaces in their openness, like a theatre or a cinema or a café, but private/public partnership in ownership, like cultural institutions.'

3.2.7. Attracting the young and making room for children

A too narrow a focus on elderly people and their particular needs may have adverse effects on the attraction of younger people, discourage young people living in cities from having children or make families with children move to peri-urban areas. Even cities capable of attracting affluent retired people will have to attract younger people to ensure well-functioning services and more long-term sustainable prosperity.

A common pattern in many European cities is that young, often single, people move to cities but then move out to

peri-urban areas if they form a family and have children. A challenge for cities is to make it attractive for families with children to live in core cities. Good quality, easily accessible childcare and schools are obvious elements in a child-friendly city. Affordable and attractive housing suitable for family needs is also important, as are green areas and playgrounds and child-friendly streets. It must be easy for families to reconcile professional and private life, easy to bring children to childcare on the way to work, easy to buy and bring home food for a family, easy to take children to parks or cycle in the neighbourhood, etc. Such a child-oriented focus would be beneficial for elderly people and the overall attractiveness of cities. It could also be beneficial for overall fertility rates.

VÄXJÖ – Sustainable energy policies - part of a model for managing complex urban change

Växjö municipality in Southern Sweden has a dense and cohesive urban area (15 km2, 63 000 people) as well as a large rural area (1900 km2, 20 000 people), with population growth of 1-2% annually and an immigrant population of 18%.

Those responsible for addressing local challenges are the municipality of Växjö, the County of Kronoberg, the University of Växjö, businesses (some 8 000, mostly SMEs) and NGOs. They have notably responded to the challenge of sustainable energy policy through a long-term environmental strategy. This includes strategic documents written together with residents and public, private and academic partners, incorporating interrelated policies, aims, measures and success indicators. The key document,

from 2006, has been the extensive environmental programme. It contains an energy policy addressing local and global environmental challenges, and is structured into three sections: Living Life, Our Nature and Fossil-Free Fuel Växjö.

So far, carbon dioxide emissions per inhabitant have fallen by 35% in 10 years, alongside economic growth of 69% (2008). Measures have also included cleaning up Lake Trummen, building a fossil-free fuel district heating and cooling system, constructing multi-storey houses of wood, making buildings more energy efficient and planning eco-friendly traffic. Växjö believes its strategy could be used in similar or smaller size towns.



3.3. The green and healthy city

3.3.1. A holistic approach to environmental issues and energy efficiency

Cities are not just economic engines, they are unrivalled as providers of the basic ingredients for quality of life in all its senses: environmental, cultural and social. Cities have to manage a range of environmental issues, such as quality

of air and water, energy, waste and natural resources. In the future, cities may also have to secure food provision, especially in a context of shorter, more local, production–consumption chains.

A city is a place where the many components of the natural ecosystem are interwoven with those of the social, economic, cultural and political urban system in a unique manner. A major challenge for all cities is to reconcile economic

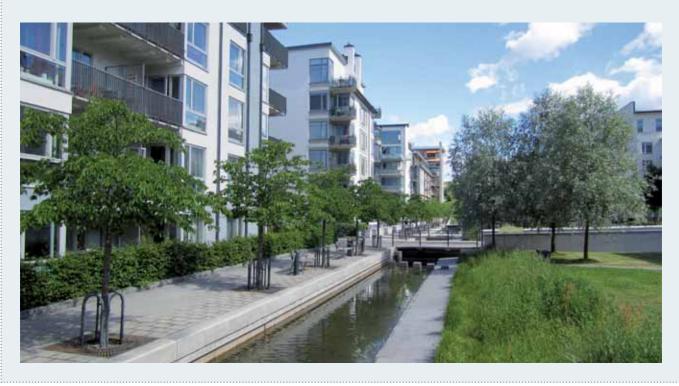
A vision of the compact and green city

'An important basis for efficient and sustainable use of resources is a compact settlement structure. This can be achieved by spatial and urban planning, which prevents urban sprawl by strong control of land supply and of speculative development. The strategy of mixing housing, employment, education, supply and recreational use in urban neighbourhoods has proved to be especially sustainable.' [The Leipzig Charter on Sustainable European Cities]⁹⁸

The compact and green city offers an interesting urban landscape, a healthy functional mix, and a good quality of architecture and design in its built environment

(public spaces, buildings and housing). It offers easy access to green areas and open space for everyone. It takes care of and makes use of its historical sites and monuments.

Since people no longer need to search for green areas outside the city, they have moved back to the centres and no longer need to go to work or to leisure facilities by car. As an alternative, they can easily hop on clean and convenient public transport, which works efficiently due to the higher concentration of potential clients. These savings in transport free up more public space, and make cities cleaner and quieter. Furthermore, it has prevented the countryside from suffering from urban sprawl, preserving it for agriculture, forestry and nature.



activities and growth with cultural, social and environmental considerations, as well as reconciling urban lifestyles with green constraints and opportunities. As focal points for consumption and innovation, cities can play a key role in shaping greener behaviour and consumption.

Cities' resilience also means a gradual retrofitting of the existing housing stock, taking into account environmental constraints such as mitigation of, and adaptation to, the impact of climate change. The affordability of housing costs in order to avoid migration flows towards suburban areas is also at stake.

'Green and healthy' go far beyond the reduction of CO₂ emissions. Climate change is an important factor motivating cities to become more resource efficient. Like all economic actors, cities will have to take responsibility for reducing CO₂ emissions. Cities are also in many ways best placed to act on the use and misuse of natural resources, and are set to play a key role in the implementation of the Europe 2020 strategy. The collective realisation of global climate targets will reduce the risks of severe flooding and droughts,

uncontrolled migration of climate refugees and other adverse effects of extreme weather conditions. However, the simple reduction of CO₂ emissions brings few direct benefits for cities.

For cities, the amelioration of the air quality, the reduction of traffic congestion, and the health of their inhabitants are much more direct benefits of greener practices. Fine-particle air pollution is associated with more than 455 000 premature deaths every year in the EU's 27 Member States.⁹⁹ A recent study of air quality in 25 major EU cities indicates that if the WHO's guidelines on this air pollution were carried out, life expectancy for those over 30 would increase by an average of 22 months, and over EUR 30 billion in health benefits could be realised each year.¹⁰⁰ Asthma and other respiratory problems could also be reduced, not least among the young.

Obesity is another major health problem in the Western world, as a range of obesity-related diseases cause premature deaths and rising health care costs. More nonmotorised mobility would not only reduce air pollution

A vision of sustainable consumption modes¹⁰¹

The city of the future is run by the 'energy subsidiary' principle. In 2050, cities are highly energy efficient. The low energy demand (heating, cooling and electricity) will mainly be supplied by diverse local and regional renewable energy sources as well as co-generation. Smart grids will ensure decentralised solutions.

New buildings do not consume fossil fuels; most of them produce electricity. They include facilities to park soft mobility vehicles like bikes. They come with a 'user guide', which is obligatory when letting any kind of building. Older buildings are refurbished and do not exceed a consumption of 50 kWh/m²/year. Fuel poverty has dramatically decreased.

New consumption patterns have been adopted in 2050. Convenience stores have relocated throughout the cities and malls have vanished from city outskirts. Weekly fruit and vegetable markets have experienced a boost. Specialised stores can be found in city centres, and much of the market for household equipment is found online. Logistics have been improved: mail delivery is purely electronic, but goods delivery has expanded while car use diminishes. Agricultural land is used to produce not only food, but also materials and energy. Meat production has decreased while vegetarian and low meat diets have increased.

⁹⁸ The *Leipzig Charter on Sustainable European Cities* is a key policy document in the field of urban development which has been proposed by the German Presidency and adopted by the Ministers in charge of urban planning [http://www.eu2007.de/en/News/download_docs/Mai/0524-N/075DokumentLeipzig Charta.pdf].

⁹⁹ Study by the European Topic Centre on Air and Climate Change (ETC/ACC), European Environment Agency (EEA).

¹⁰⁰ Aphekom research project funded jointly by the European Commission's Community Action in the Field of Public Health.

¹⁰¹ Energy Cities, Workshop 2 Cities of tomorrow – Visions and models, Brussels, October 2010.

but also reduce obesity and increase the general health and fitness of the population. Reduced congestion would also bring economic benefits by enabling a more efficient and productive use of time. Energy efficiency in buildings is directly related to social inclusion and the alleviation of energy poverty.

Environmental quality is part of an integrated approach to attractiveness and well-being. Increased energy efficiency reduces the economic and energy vulnerability of cities. The related innovations, technologies and services are important drivers for a greener local economy. A pedestrian and cycle-friendly city with clean air and water, plenty

of green spaces and high-quality built space is also an attractive city for people and for businesses.

Urban green growth requires both technological and social innovation strategies, which have to be designed in relation to the overall development of the urban space. Environmental issues cannot be dissociated from demographic, economic, social, cultural and aesthetic issues. Green and clean mobility needs to take into account the requirements of the elderly or families with young children, as well as the conditions for shops and small businesses. The use of renewable energy technologies, such as solar panels or wind power must respect the architectural

A vision of the green city¹⁰²

While our cities have maintained high urban densities, a dream is coming true: greenery is invading the cities and boosting life and urban ecology. Entire urban areas have become extensive networks of blue and green areas and corridors; green creeps over millions of square metres of roof area and climbs walls, exploiting every possible niche.

People love their 'urban biotope' and enjoy the variety of green and water areas, ranging from bigger parks and natural areas, to allotment gardens, pocket parks or potted plants on roof terraces. This environment offers a multitude of different uses and helps to keep people healthy – literally something for everybody. Parents play with their children on the many playgrounds, small and larger families meet for a barbeque in community gardens, the elderly watch the birds from a bench in a park close by and meet their friends, youngsters gather after school on grass plains or dip into the cool waters of the harbour to bathe, others exercise or go for a cycling tour along the green routes or take a boat trip along the stream. The pleasant and safe green areas have encouraged people to spend more time outside and boosted social life in the city. Most of these places are public ones, thus everybody benefits easily. Green life makes the city a pleasant and attractive place to live; people are proud of this and strongly identify with their city.

But there is more to enjoy and to benefit from; letting nature invade our cities has provided cities with many additional free services. This has often reduced the need for expensive technological solutions and has allowed cities to function in smarter ways. Green walls and roofs are not only attractive but insulate the buildings against cold and heat, which helps energy saving and thus reduces the ecological footprint of cities. Outside, trees provide shadow and fresh air, important when the future is likely to bring more heat waves to many European regions. Urban greenery lets people breathe. Trees and shrubs filter particles out of the air; dense vegetation lessens noise and hides visual nuisance. Green is ubiquitous in the Cities of tomorrow and asphalt and concrete are held back to the minimum. Plant roots penetrate the soil, and the surface water of heavy rainfall can readily penetrate the ground, thus preventing urban floods. Ponds and urban wetlands store further rainwater and make a costly upgrade of the sewage system needless. Some green areas and walls recycle even our grey water while looking attractive and offering habitats for wildlife.

and cultural heritage and the touristic potential of the city. Green neighbourhoods need to be affordable and allow a mix of functions and socio-economic groups so as to avoid spatial segregation. A necessary gradual retrofitting of the existing housing stock to reduce energy consumption and adapt it to new environmental conditions must not jeopardise the affordability of housing costs so as to avoid migration flows towards suburban areas.

3.3.2. Making mobility sustainable, inclusive and healthy

The development of sustainable mobility is a key challenge for the Cities of tomorrow. Sustainable mobility includes several dimensions and components: sustainable, energy-efficient and affordable public transport systems; a friendly environment for soft transport modes such as cycling and walking; easy access to all neighbourhoods, by foot, by bike, by public transport; local transport networks that need to be well connected to regional networks; peri-urban networks that need to be planned within the context of overall land-use and spatial development; and transport nodes that need to be well integrated with social, cultural and economic activities, including leisure. Mobility infrastructure must

be developed with a long-term perspective in which future needs and future urban, spatial and technological developments are considered.

Sustainable mobility must be part of an integrated approach. The reduction of congestion is important from a health point of view, but it is not only about reducing CO_2 emissions, pollution and noise – it is also about giving the citizens the possibility of re-conquering the city. Congestion is resource-inefficient; it consumes energy and creates unnecessary pollution, it is time consuming and it consumes space. It decreases the attractiveness and quality of the life 103 of a place. Roads with heavy traffic are effectively barriers that cut through cities, isolating neighbourhoods and making them unattractive.

Greener technology alone is not the solution: as vehicles slowly become more fuel-efficient and electric cars more affordable and adapted to consumer demands, there is a danger that car traffic will increase rather than decrease, so that at the local level, CO₂ emissions, pollution and noise may be reduced, but congestion will be a growing problem. On a global scale, high levels of CO₂ emissions will continue to be generated as long as electricity production is not entirely green.

A vision of the transformation of out-dated traffic infrastructure to public spaces¹⁰⁴

"What will mobility look like after peak oil in a post-oil society?

There will be a tremendous reduction of the individual car traffic inherited from the past. The younger generation does not see the car as the most wanted form of mobility any longer, and, maybe more importantly, no longer sees the car as a symbol of social status.

Spaces devoted to traffic in our car-dependent cities offer huge potential for re-densification or reclaiming traffic areas as public spaces. Will oversized and outdated traffic systems provide the structure for new green parks and public spaces, as happened in the nineteenth century when fortification walls were transformed into a catwalk for civic society?

The Highline in New York, an old elevated train track, has been permanently transformed into a linear park and has been recognised as a role model for future public space. In the Ruhr area, the A40 motorway was closed for one weekend as part of *Cultural Capital City RUHR 2010.*"

¹⁰⁴ Rettich, Stefan, Workshop 3 Cities of tomorrow – How to make it happen?, Brussels, December 2010.

Non-car mobility has to become more attractive. Cities are facing the challenge of changing the mobility habits and values of those living within the city as well as those commuting. This is not an easy task. Non-car mobility has to be made more attractive, while individual car traffic has to be made socially and economically less attractive.

Making non-car mobility more attractive requires *accessible public transport* – accessible within the city and within its labour market basin, but also accessible to the elderly, the disabled and parents with small children. It requires easily *accessible services*, whether public or private, whether social, economic or cultural. It requires *attractive public transport* that can provide a positive experience of mobility, and transport nodes which become places for leisure, shopping, meetings, culture and other forms of social exchange. It requires pedestrian and bicycle-friendly roads and paths.¹⁰⁵

Green or blue corridors may contribute to the renewal of urban space and increase the pleasure in going by foot, bike or boat, whether for leisure or commuting.

To make non-car mobility more attractive, cities have to effectively combine and integrate different mobility modes and facilitate the switch between walking, cycling, using trams, buses, trains, etc. Multimodality must be favoured and public transport be made more attractive; it should also be easy to switch from car to public transport. The increasing reliance on private actors to develop and run specific sections or modes of transport makes multimodality a challenging task for cities, especially in a wider territorial context. Harmonised tariff systems with single fares independent of transport modes need to be developed, and timetables need to be integrated and planned for multimodal use. Public transport can be made more attractive.



105 In the 2007–13 programming period of cohesion policy, nearly EUR 700 million has been allocated to cycle lanes. Though this figure concerns not only urban cycle lanes but also rural ones, it is a good indicator of the importance devoted to cycling in some cities. Cycling lanes are part of both integrated transport and urban development plans. In a city like Helsinki, cyclists can enjoy 1 120 km of cycle paths, over 700 km of which are paved.

BARCELONA – Linking territorial cohesion, sustainable urban transportation and the fight against spatial segregation

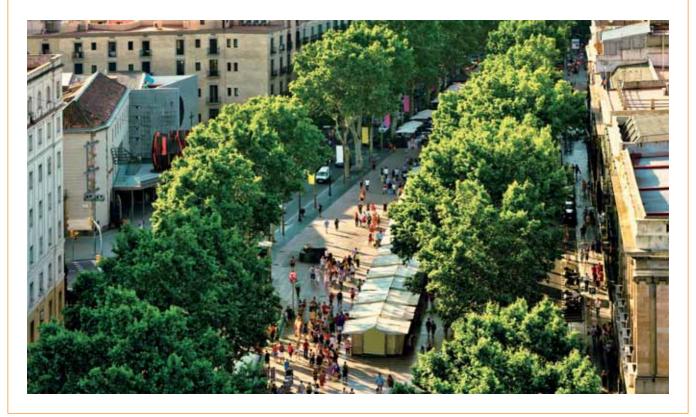
The Barcelona City Council and local metropolitan administrations recognise sustainable mobility as a fundamental and social right of all citizens, believing it necessary for social interaction and human relations. Over the last two decades, transport has been part of their social cohesion policies.

Barcelona's 101 km2 are home to 1638 000 residents (4992 000 in its greater metropolitan region). With 16217 inhabitants/km2, Barcelona is one of the most densely populated cities in Europe, thus mobility is a big challenge.¹⁰⁶

Efforts have looked to 'democratise' streets and public spaces, integrate mobility projects for clean and

sustainable urban transport, and share good practices for sustainable mobility. Barcelona illustrates what a European sustainable city can be like, with action taken to improve accessibility, affordability and efficiency of the public transport network, promote cycling, walking and other alternative forms of transport, and support the participation processes, the latter resulting in social demands and greater cooperation.

Barcelona's public bicycle service, Bicing, is an example of a successful and sustainable mobility programme which has been rapidly adopted by the targeted population. Its introduction shows a determined commitment to promote bicycle use as an affordable, efficient, sustainable and healthier mode of transport.



Some key figures illustrate the complexity of its transportation implications: the city has a road density of 6 000 cars per km² (whereas, for example, Madrid has 2 300 cars per km² and London 1 600 cars per km²). Barcelona is also the European city with most lanes of private traffic per km².

3.3.3. A sustainable city with attractive open public spaces

The quality and aesthetics of the built environment and of public spaces are important factors for a city's attractiveness. Well functioning and attractive public spaces and a generally aesthetic environment can act as symbols of a city and of living together, and may create a sense of ownership of the city by its population. In Germany, the 'Baukultur' political initiative has brought about an involvement of all stakeholders and economic actors, civil society and planners, in a debate about a better, more solid and sustainable culture of building our environment. This means a shift in planning, from a traditional top-down planning culture to a more bottom-up process based on the involvement of stakeholders and residents.¹⁰⁷

Ideally, public spaces should be multi-functional and multi-generational, be elderly-friendly and accommodate children, and be meeting places as well as serve specific functions, like libraries, playgrounds, education, etc.¹⁰⁸ A mixture of functions within buildings or public spaces may also facilitate communication, business opportunities and innovation. For instance, some universities offer space for ex-students to locate their start-up companies at their premises after graduation. Such enterprise-friendly environments not only facilitate students' transition to active life but also provide opportunities for cooperation between young entrepreneurs.

A vision of a no-growth city¹⁰⁹

"We used to say 'God created the countryside, man created the city'. We have been very successful in designing cities and modelling, managing and controlling our environments. The trouble is that there have been unpredicted consequences. The current visionary point of view relies on tools which are not meeting our objectives. For example, when we think about the future, we are fascinated by maps which are provided by satellite and by geographic information systems. In many aspects this is completely useless from the point of view of creating a good city, a good society. Some of the tools we have for constructing cities will potentially have bad consequences. The idea of managing the city to the extreme may make us completely unhappy.

Europe has an extraordinary advantage in many ways in the fact that our cities are not growing any more. The

greatest challenge is to achieve simplicity – de-engineer, de-commercialise, de-hierarchise, de-grow – while maintaining spirit, emotion and hope in the future.

Today, if you go to Athens, or to Sofia or other Bulgarian cities, you see something that is a copy of other experiences and it is very difficult to stop that process. People want to become international. They do not realise how good they are where they are. Bringing in this notion of 'do not grow' is not easy. One of the challenges we confront, particularly the one of sustainability, requires a change of lifestyle. This goes beyond switching off the light or not using water. This goes through a much more sophisticated and political process that will be very conflicted. The city governance role is to create conditions for changes in habits, lifestyle and modes of behaviour. It should lead to less aggressive and less greedy individual choices without falling into the trap of collectivist, centralised, inefficient and wasteful institutions and decision-making. [...]"

¹⁰⁷ Rettich, Stefan, op. cit.

¹⁰⁸ Already the case in Brussels where many regeneration projects have foreseen such 'shared spaces'.

¹⁰⁹ Zaimov, Martin, Workshop 2 Cities of tomorrow – Visions and models, Brussels, October 2010.

3.4. Creating a resilient and inclusive economy

We are no longer in a situation of continuous economic and demographic growth. The negative effects of the economic and financial crisis, especially the reduced public budgets and a rising need for social expenditure, have brought many cities closer to a similar situation, where they are faced with the challenge of redeveloping and diversifying their economies, of creating stronger links between the local economy and the global one and of becoming more attractive for a skilled and active workforce.

Even the cities that are doing better and have more competitive and diversified economies have problems with the structural unemployment of youths and groups who are less qualified and more marginalised. They are faced with the challenges of creating stronger links between economic and social development and reducing socio-economic polarisation.

The fact that all cities are very dependant on national economic policies and development patterns is a challenge

in itself. They thus have to be inventive in terms of policy and policy instruments, and focus resources where they can be best deployed.

3.4.1. Managing transitions towards a viable local economy

To what extent are cities capable of changing the direction of their development trajectory or even moving to another one? First, the determinants of the trajectories must be identified based on understanding the city's development potential. When considering this potential, it is not sufficient to understand only the performances of the public and private sectors – these have accounting systems and are measurable by conventional indicators – but also to include collective goods and positive externalities, i.e. nonmonetary complementary sources of well-being. Together they generate an urban surplus.

If a decoupling of economic and social development and increasing polarisation within cities are to be avoided, new paradigms of economic development are needed that will emphasise the domestic urban economy. Such an economy

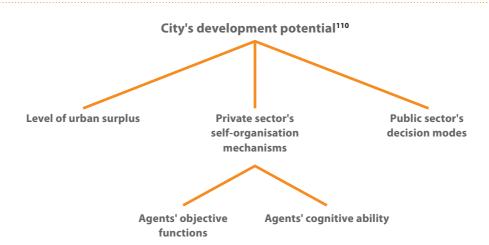


Figure 4 Understanding a city's development potential

Source: Calafati, Antonio, op. cit.

¹¹⁰ Calafati, Antonio, op. cit. 'When assessing the development potential of European cities, three spheres have to be examined:
(1) the amount of urban surplus; (2) the private sector's self-organisation mechanisms and (3) the public sector's decision modes.
Insufficient "development potential" may be rooted in one or more of these spheres and to assess its precise origin from a regional, national or European perspective is not a minor task.'

would not depend solely on export-oriented sectors but build to a higher degree on development of endogenous resources.

One of the crucial issues for the diversification of the local economy is the extent of economic surplus from current economic activities, how it is distributed, and the governance mechanisms affecting how it is fed back into the city's further development. In addition, collective goods, i.e. public goods or goods that are not exchanged in the market but are self-produced and exchanged within small groups such as a family, club or social network or association, are of great importance, and are always underplayed in economic analyses that focus on GDP alone. These play a crucial role in quality of life and are often significant in economic development.

The manner in which urban surplus is generated and allocated greatly affects cities' development potential. Not only private and public sectors, but also households themselves are part of this allocation process. The Cities of tomorrow must not only understand the city's development potential, but also find innovative ways of exploiting it and directing it towards shared objectives and ownership of strategies.

Cities have to develop more varied and sensitive indicators to better understand problems and the potential inherent in the local economy and its resources. They must also mobilise stakeholders and citizens in collective and participative planning and visioning exercises. Foresight and other strategic planning tools can play a key role in this.

3.4.2. Stimulating job creation, entrepreneurship and a broad local skill-base

Cities face major problems in converting or changing their development trajectory. It may be wishful thinking to expect that a tourism-based service industry will be able to replace the manufacturing sector.¹¹¹ A too strong a focus on competitiveness may risk favouring only investments in central parts of cities. Business development through direct investments may also rely on an external qualified workforce and fail to create job opportunities for local people.¹¹² There is a specific risk of decoupling the local economy and society from the global economy, leaving parts of the population untouched by these investments and left out of the economy.

Using foresight to manage economic transitions

Economic transition is a key objective of many forward-looking or planning exercises in European cities. Two types of economic transition logic can be identified:

 the classic one, which sees cities of the former Western industrial basins and of Central and Eastern Europe in the process of coping with the recent or less recent decline of their industrial capabilities. Many strategies exist in this field: cultural investments (Metz, Liège, Lens, Bilbao and Emscher Park), industrial consolidation (Valenciennes, Turin, Barcelona), transition towards innovative tertiary systems (Linz, Belfast, Leeds), technological pathways in partnership with universities (Manchester, Lausanne), and investment in a performing transport infrastructure (Charleroi);

the post-financial-crisis reflection, which is starting
to assess the limitations of a strategy solely focused
on financial and immaterial services, or depending
on economic factors with little regional or national
command. In this type of reflection, the nature of
the required transition is often presented as smart,
green, sustainable, intelligent, etc. It goes along
with concepts of residential economy, quality of
development, open innovation, and technological
facilities.

Source: Destrée Institute

¹¹¹ Even if 'avoiding wishful thinking' according to which tourism or development of services would allow all cities to develop a new competitive model [Calafati, op.cit.].

¹¹² Example of *Plaine Commune*: Large creation of new jobs but not for the local population (skills mismatch & weak links with local economy).

The manufacturing sector will remain important for many cities, but delocalisation will persist with globalisation, and the erosion of the European manufacturing base will continue. But service sectors also face delocalisation and are dependent on a strong manufacturing base. It becomes crucial for cities to adapt their workforce to new job opportunities, while also upgrading the manufacturing sector as much as possible for a more diversified economic base.

To diversify their economies, cities will have to support innovation at all levels, creating a favourable entrepreneurial environment while at the same time addressing employment, education and social issues to avoid marginalisation of vulnerable groups. This cannot be done overnight, but is a long-term process, especially when moving from a mono-sector economy.

'We have to highlight the social position, prestige and public image of the people creating jobs. Policies to support

entrepreneurial activity are part of city governments' responsibilities.'113

The present economic development model in which economic growth does not equate to more jobs raises the challenge of not only ensuring a decent life for those outside the labour market, but also engaging them in society. An increasing number of young people have grown up in jobless households. Those who either leave school without proper skills or do not find a job when leaving school tend to be drawn into a vicious circle of inactivity. In Rotterdam, following the impact of the economic crisis, the municipality has set up a specific programme to address this problem. The basic idea is 'keep them busy'. Training for young people is negotiated with employers in sectors with employment opportunities. Those for whom neither work nor training opportunities can be found are being pushed into community work.¹¹⁴

Liverpool – linking opportunity and need¹¹⁵

In 2009 Liverpool adopted a 15-year strategy to become 'a thriving international city' by 2024. All the major public, private, and voluntary sector organisations in the city were involved in developing the strategy and are committed to the city and its people becoming Competitive, Connected, Distinctive, Thriving (neighbourhoods) and Healthy. http://www.liverpoolfirst.org.uk/what-we-do/vision-for-liverpool

To be competitive, the city needs 'a sustainable business sector and strong knowledge economy, supported by a workforce drawn from citizens with competitive levels of aptitude and skills'. This is a real challenge, as Liverpool has 'major concentrations of worklessness', and in some neighbourhoods, 'not working' is a way of life.

Over the past 10 years, initiatives aimed at giving people in need opportunities to enter into education, training or employment have, therefore, been introduced. Examples include: using empty shop premises to provide job and training advice; organising advice sessions for parents taking children to kindergarten/nursery; helping 'problem families' identified by social housing providers; support, advice and funding for entrepreneurs and start-ups; and driving a minivan down a street, knocking on doors to see if anyone wants help.

Some 10000 residents from deprived neighbourhoods have already been helped into employment – but more remains to be done and ongoing support (including ERDF and ESF) is still required.

¹¹³ Kayser, Tomasz, Deputy Mayor of Poznań, Workshop 2 Cities of tomorrow – Visions and models, Brussels, October 2010.

^{&#}x27;From statistics, we know that many people – if they are out of work for too long – will have additional difficulties in working again.

[...] We hope that the economy will improve in two to three years, providing employment prospects'. Giuseppe Raaphorst,
City of Rotterdam, Round table on impact of crisis on cities, URBACT Conference, 1 December 2010.

¹¹⁵ Eyres, Martin, contribution to Workshop 2 Cities of tomorrow — Visions and models, Brussels, October 2010.

3.4.3. Developing social capital

'Previously we believed that we especially needed investment capital, later we realised that human capital was more important, now we understand that the most important is the social capital.'116

The development of social capital is crucial for the development of diversified and knowledge-intensive local economies. Social capital relates not only to education and skills, but also to the ability of people to trust each other, to be willing to cooperate, to engage in social networks and dialogues, as well as to be pro-active regarding challenges and sharing common goals. Social capital is vital for the development of entrepreneurship and small business creation.

Social capital is also a necessary ingredient in the exploitation of local capacities and the development of the very local and more informal parts of the economy. It can help raise the quality of local consumption and demand, and drive development towards a more knowledge-intensive economy. It can also be a driver of social innovation, while social innovation can be an important tool in fostering social capital. Social capital is, therefore, a key factor of city attractiveness.

3.4.4. Using technology to foster collective intelligence and innovation

Information and communication technologies (ICT) and specific urban technologies have the potential to bring solutions to many of the urban challenges. These range from hard technological solutions in the field of urban energy efficiency, renewable energy, transport, safety, etc., to soft solutions for social interaction, citizens' participation or global management systems for city administrations.

City managers must avoid the pitfalls of sectoral visions built on technology alone. The systemic dimension of problems and the high level of future uncertainty demand a refined understanding of the challenges and the possible technological responses within a wider societal context.¹¹⁷ An interesting trend is the use of pre-commercial procurement procedures that can help to make public procurement more innovative, systemic and holistic.¹¹⁸ A real challenge lies in engaging people in an active codesign of technologies in a social context that could result in social *and* technological innovation.

3.4.5. Linking to the global economy – cities as hubs for global networks

A city is not only a 'space of place', but with the rise of global interactivity it increasingly becomes a 'space of flows'. Cities can be regarded as nodes in global networks of multinational firms. Some European cities play more prominent roles as hubs. They not only have stronger business links to other European and non-European cities, but are also positioned higher in the hierarchy of these networks in terms of control of decisions and investment flows. Through their firms, these cities have the advantage of a stronger and more direct connectivity with global financial and technological centres. 120

In most cases, a city's size is an indicator of its hierarchical position in these global networks, although smaller cities may also be well placed when they are host to headquarters of major firms. However, there is a marked difference between the Northern and Western parts of Europe and the Central and Eastern parts. Companies in Central and Eastern Europe tend to have lower hierarchical and less central positions in global networks, even if they are based in capital cities. This is a structural weakness that leaves the host cities more exposed to changes in global demand.

¹¹⁶ Kayser, Tomasz, Deputy Mayor of Poznań, contribution to Workshop 2 Cities of tomorrow — Visions and models, Brussels, October 2010.

¹¹⁷ The increasing use of technologies to ensure our security is also a factor of anxiety and does not necessarily address the problem of a negative perception of urban safety. Some cities also try to improve the social links between people in order to reinforce solidarity. For example, events such as 'Neighbours' Days' allow people to meet each other and then rely more on each other, which contributes to a feeling of safety and trust in a given neighbourhood.

^{118 &}lt;a href="http://ec.europa.eu/information_society/tl/research/priv_invest/pcp/index_en.htm">http://ec.europa.eu/information_society/tl/research/priv_invest/pcp/index_en.htm.

¹¹⁹ Castells, Manuel, The Informational City, Blackwell Publishers, 1989.

¹²⁰ Based on an analysis of the location of the 3000 biggest multinational firms and their subsidiaries by ESPON-FOCI.

A city's position in global networks is highly pathdependent and often anchored through positive historical circumstances, long-term private and public investments, location-based skills etc., making them difficult to replicate or modify. A key challenge for cities is to understand the role their firms play in international networks and how their positions may be strengthened. Good connectivity is of primary importance for this – connectivity to markets and to technological and financial resources, but also connectivity to cultural trends.

A vision of living social labs supporting social innovation¹²¹

A shortage of public finances, demographic shrinking, etc. will demand innovative and radically new approaches to societal problems. Social living labs would permit us to simultaneously address multiple challenges – e.g. ageing, inclusion, food supply, greening of the city – and would transform those most concerned from objects to subjects, or from being a part of the problem to being a part of the solution.

Living labs build on four main elements: co-creation, exploration, experimentation and evaluation. A living *social* lab would take these steps further, framing them

in a bigger process involving mobilisation, capacity building, visioning and monitoring. A social living lab would be a way to develop participative democracy, providing a platform where public interest can be defined in more concrete ways. It would also support the notion of a 'negotiated city', permitting negotiation between apparently opposing values and vision.

To function, living social labs require a mobilisation of citizens and stakeholders and the opportunity to define objectives, shape content and process and be part of implementation. It also requires a revised and more inclusive vision of the knowledge society and the encouragement of knowledge alliances.



¹²¹ Vision derived from the notion of a 'Living lab' which can be defined as a 'user-centred, open-innovation ecosystem, often operating in a territorial context (e.g. city, agglomeration, region), in which user-driven innovation is fully integrated in the co-creative process of new services, products and societal infrastructures' http://ec.europa.eu/information_society/activities/livinglabs/index_en.htm.

BRNO – Upgrading the international status of the city and its region by attracting highly qualified people and activities

Brno city itself has 370 000 inhabitants, the wider metropolitan zone 520 000. Brno is a traditional industrial city, but since 1990 it has seen major transformation; in 2011, the tertiary sector dominates the local economy. Brno also has international status potential, given its Central Europe location, its many universities and research centres, and its capacity to host R&D development. Brno's challenges are to develop its innovative economies and international R&D functions and make them sustainable.

To address these, the city is starting to attract highly qualified people through different research and grant programmes. In 2002, the South Moravian region formulated its Regional Innovation Strategy, with the

aim of being among the top fifty innovative regions in Europe by 2013. ERDF funding represents 58% of the total budget. The related action plan stresses the importance of cooperation between the city, region and universities. The policy has resulted in the creation of a solid network of actors, all working towards the same goals.

Sustainability remains the biggest challenge, as research facility infrastructure development is limited, and larger urban infrastructure is still lacking (e.g. rail, road and air). Attracting people and activities also raises important issues for future action: developing an integration policy for newcomers, increasing benefits for local students and convincing locals about the programmes' long-term benefits.



3.4.6. The connectivity challenge

The connectivity of Europe's cities is a key element in creating balanced territorial development. Many European cities benefit from good connectivity by air or rail with other major European cities, allowing for business day trips with full-day meeting possibilities. Such cities have good 'contactability.' This is the case for most Western European cities and the capital cities of Central and Eastern Europe. However, for non-capital cities in the latter group there is a low level of contactability with cities in other European countries. Rail links are still mainly national, and cross-border train-connectivity is low even for relatively short distances. A major future challenge for these cities lies in increasing contactability in a sustainable way, e.g. with a possible focus on high-speed rail rather than air connections, especially given the scale and nature of such investment beyond the control of individual cities.

3.5. A polycentric urban Europe with balanced territorial development

The European model is based on a balanced polycentric urban structure, which allows the entire European territory to

develop. Cities play a key role as centres for services, business and culture for their surrounding areas. The development of cities is key for the viability and development of their surrounding rural areas. But cities' development gives rise to several territorial challenges at different geographic scales, from the relationship between the cities and their peri-urban areas to the relationship between cities and the territorial development of the EU as a whole.

3.5.1. A harmonious development of the city with its surrounding region

The interplay between urban centres and their surrounding regional rural space is a serious challenge, together with the resilience and vulnerability of the natural resources in that peri-urban space. Large cities need vast hinterlands, and conflicts over resources and their use may arise with other cities or agricultural users. Ecosystems may come under pressure by the over-intensive and weakly regulated use of the soil, by demographic or market pressures, e.g. intensive agro-food production for a global market rather than for a shorter producer–consumer circuit with diversified local production.

A vision of urban development without sprawl¹²³

To reduce urban sprawl, Cities of tomorrow improve the compactness and attractiveness of city centres in terms of quality of life, price-affordable housing, and family friendliness – encouraging households with young children to settle within cites. They provide services and infrastructures for public transport, which encourages further densification of already dense areas.

Cities of tomorrow develop polycentric spatial patterns to relieve the pressure on their bigger central agglomerations. They plan green belts and green corridors within cities and in their periphery as structuring elements for green mobility (walking and cycling lanes).

Cities of tomorrow implement strong planning policies together with supporting measures, such as fiscal incentives or land pricing. They develop tools for dynamic monitoring of land use, as well as for comparative evaluation of land use in other European cities and urban areas. This is being prompted by the requirement for an integrated land-use plan (including Strategic Environmental Assessment, in line with EU regulations) to receive European funding.

¹²² ESPON-FOCI report, Brussels, 2010. 'Contactability' is defined as the possibility of a single day business trip (by rail, by air or by a combination of rail and air) with 6 hours available at destination and within the time windows 6am-10pm and 5am-11pm, under a door-to-door approach.

¹²³ Thematic sub-group under the Territorial Cohesion and Urban Matters Workgroup, Final Report on Urban and Development Sprawl, July 2010.

Urban sprawl is hard to reverse. However, it may be controlled, directed, coordinated and minimised. 'This is especially important in the transition countries that have not been able to sufficiently coordinate metropolitan growth'. 124

The city and its surrounding region must be analysed in terms of density of habitat and workplaces, and these densities must be reinforced and well connected to transport nodes. In certain cases, up to 80% of people working in a city live outside it. In other cases, people living outside cities must bring their children to schools in the city or go there for health, social or cultural services. It is, therefore, meaningless to plan mobility in a city without taking into account the mobility patterns of those living in the greater urban functional area as well as the flow of goods to and from the city.

The planning and management of public transport at the level of functional urban areas involve partnership and collaboration between all the local authorities concerned and raise specific challenges of cooperation, coordination and financing. Many Eastern European cities have very well developed metropolitan tramway networks. Certain experts point to the renovation and upgrading of these networks as a top priority, as they present a unique opportunity to develop low-carbon mobility at a large territorial scale. But – given the metropolitan scale of these networks and the cost of such upgrading – there is a huge governance challenge in implementing such a renovation across the municipal structures concerned.

A vision of a sustainable urban inwards growth 125

Form, sustainability, and territories of intervention

The Cities of tomorrow will stop growing outwards and instead grow inwards in various forms of redensification. There will be clustered cities with multiple centres and various forms of neighbourhoods. Sustainability needs re-densification; densification needs social agreements; social agreements need social innovation. Different social classes and generations have to be willing to live together again – on an even denser territory. Old neighbourhoods need to be adapted for new families, for multiple generations and for an increasingly multi-cultural and multi-ethnic society.

Post-war mass housing settlements and early suburban detached house neighbourhoods are pre-destined for re-densification. The monotonous and monofunctional satellite towns will undergo an urbanisation process with a more colourful, socially mixed and multi-functional outcome. The early areas of suburban

detached houses are demographically old-aged, and the change from the old generation to the next one is a huge opportunity for such interventions. Later, the huge suburban fields of the 1990s will be ready for re-appropriation and re-densification.

New Public Space and New Social Institutions: Catalysts of social invention and renewal

Public spaces and new social institutions will form one of the pillars of this process. These spaces and institutions should address the current population as well as the new settlers: public domains to get to know each other and platforms for exchange and respect. Neighbourhood-adapted forms of education and knowledge sharing are the second pillar of this social cohesion strategy. New forms of district libraries (e.g. IDEA stores London, UK), new forms of schools (e.g. Westminster Academy, London) will help to improve integration of low-skilled and low-educated people. In shrinking areas, such projects and spaces can serve as a social glue (e.g. Open Air Library, Magdeburg, Germany).

¹²⁴ Gorzelak, Grzegorz, Warsaw University, *Cities of tomorrow – Contributions from experts*, Brussels 2010.

¹²⁵ Rettich, Stefan, Workshop 3 Cities of tomorrow – How to make it happen? Brussels, December 2010.

Planning, Participation and Communication

Planning will be an open and flexible process, where all stakeholders and citizens have the same rights and importance. Existing users and economic and social networks will play a major role in this public debate about the future. New forms of real participation will be developed. There will be formats without thresholds, where all people, including those with lower education standards, feel comfortable and are able to participate. Communication, not only verbal, will play a major role in this contemporary and new type of planning. Temporary interventions and testing fields of future solutions will be an important communication tool with the broader public.

Temporality

Can we afford to leave buildings abandoned in overcrowded cities for reasons of speculation? And what shall we do with abandoned buildings in areas with shrinking population? In both cases temporary use is a solution. In the first, the building stock can be used more efficiently, and entrepreneurs and creative people might profit from temporarily reduced rents while the

owners can profit from the recognition of a building in use. In the second case, temporality can be used as a strategy to direct and to focus developments of revitalisation on certain areas. In both cases, temporary use is a basis for new forms of social cohesion and local economic networks.

A new relationship between Town and Country

In the last century the relationship between town and country became imbalanced. The countryside was mainly seen as a potential site for suburbanisation and industrial agriculture. With sustainable development, this relationship could change: the wide landscape areas offer space for windmills and biomass production; the countryside, once an essential supplier of food, could become a green supplier of energy. Regional production of food will also come into vogue again, with rising prices for fuel and transportation. Bio-food will first be produced for public facilities of the cities like schools, kindergartens, municipal canteens, etc. and later most of the city food will once more be regional.

Source: Rettich, Stefan, op.cit.

3.5.2. Promoting the diversity and authenticity of cities

Cities' attractiveness is as much about the quality of life they offer as their competitiveness. Cities compete not only to attract enterprises but also to attract talent. While vibrant cities in the core zones of the European economy attract many migrants from within and beyond national borders, peripheral cities have modest or non-existent inflows from other regions and countries. It is naturally a key priority for peripheral cities to provide favourable conditions that keep economically active inhabitants in the region. 126

To compete, cities brand themselves as 'green', 'creative' or 'cultural' cities. Attractiveness builds on the quality of education, cultural and aesthetic assets, good sport and leisure opportunities, environmental assets and cleanliness of air and water, as well as social life and urban safety.

Attractiveness is a result of sustainable and integrated urban development: sound urban planning; sustainable urban transport; all-age-friendly policies; affordable housing; good public services, clean air, clean water, green spaces, etc. A functional integrated approach to urban development will also have to take into account all

aspects of life. For example, urban public transport has to serve leisure journeys as well as work commutes, and the adaptation of transport infrastructures to future age patterns can generate new services for an active elderly class.

An attractive city has a creativity that reaches beyond narrow cultural aspects to the wider processes of creative action, social innovation, organisational learning, and the building of 'urban intelligence'. Such processes can be applied to economic activity, public governance, social structures and cultural expression.¹²⁷

There is no standard recipe for creating attractiveness. The large diversity among cities is an asset for Europe and allows cities to shape their own unique attractiveness. Cities have to build on their past to prepare the future. Some cities build on their specific traditions of production, on their architectural or cultural heritage as well as on their local and regional knowledge base. The specific attractiveness of a given city has to be seen in the context of a forward-looking scenario as an element of a broader urban transition.

The cities that perform best in terms of attractiveness are those on a rising development path. They have more financial resources and more space to manage public and private creative investments that go beyond basic needs. However, there are also successful examples of cities where the transformation of former brownfield sites into cultural and creative neighbourhoods and the renovation of city centres have balanced negative developments.

FLORENCE – Private actors as motors in revitalising the local economy and manufacturing traditions based on cultural heritage

Florence has 368 901 inhabitants (2009 data) and sits at the centre of a metropolitan area of 618 990. Florence is known for tourism as well as its manufacturing and arts and crafts activities, notably art restoration. Nevertheless, there are signs of a decline in the city's economic and urban stability: fewer tourists and manufacturing plants, more empty buildings and growing competition from other cultural cities in Italy and Europe. The city's main challenge is, therefore, to re-establish itself on the international stage.

The challenge is already being taken up by Confindustra, the trade union confederation of Italian commercial and industrial enterprises, backed by the CNA association representing local SMEs. The consortium organised the nine-day Florens2010 – *International Week on Cultural Heritage and Landscape* in November 2010, offering cultural events, exhibitions, fairs and a conference to the 90 000 who visited. The strategy was to promote Florence as a new capital of cultural heritage restoration.

This strategy is in line with the urban development strategy recently adopted by Florence, which includes plans to create an innovative economic cluster, the 'Technological District on Cultural Heritage'.



3.6. Towards a more holistic model of sustainable city development

3.6.1. Towards a holistic, integrated model of sustainable urban development

Our cities are facing a series of challenges that – taken separately – are demanding in their own right. Diversity needs to be turned into a positive driver for innovation and attractiveness, supporting rather than undermining cohesion. Cities need to adapt their economic strategies and social services to an ageing population.

To develop a green, healthy and attractive city, a holistic approach to environmental and energy-related issues needs to be adopted. Pollution and unsustainable use of natural resources need to be reduced, and mobility has to be made sustainable, inclusive and healthy. The open public space needs to be revalorised. Cities have to manage transitions towards viable local economies that are linked to the global economy and to global hubs of excellence and innovation, developing resilient, inclusive and knowledge-based economies. They have to stimulate job creation and support a broad local skill-base.

Cities also have to develop in harmony with their surrounding regions and play their part as motors of regional growth, favouring a polycentric urban Europe with balanced territorial development. They must safeguard their identity and unique characteristics and play different roles in cooperation networks over broader territories as well as in the global economy.

Cities have to move towards a more holistic model of sustainable city development, in which they overcome seemingly conflicting and contradictory objectives. Economic growth has to be reconciled with the sustainable use of natural resources, global competitiveness must be inclusive and favour a local economy, and attractiveness to the global social and economic elite must not exclude less-favoured groups.

In essence, to meet the challenges of tomorrow, cities need to adopt an integrated approach to planning and development, integrating the social, economic, environmental and territorial dimensions of urban development.

3.6.2. Overcoming conflicts and contradictions

There are obvious contradictions between social, economic and environmental models of development. Economic development does not always permeate into social progress in a positive fashion, and there are an increasing number of situations where there is a decoupling of social and economic development. For example, the economic dynamics of some companies may contrast with the social deprivation of the area where these companies are settled. Cities must remain engines for economic growth and participate in world competition while maintaining social cohesion within their territories.¹²⁸

The green development model of a balanced and healthy society is contradictory to an economic growth model based on competitiveness and continued economic growth.

Environmental and social concerns do not always go hand in hand. Tensions may occur in cities where environmental objectives are higher on the political agenda than social ones. Eco-neighbourhoods and green technologies may, for instance, be unaffordable to those most exposed to energy poverty. Social cohesion policies do not necessarily fall in line with environmental policies.

There are also contradictions between ambitions, visions and objectives at different territorial scales and between neighbouring territories. If neighbourhood problems are addressed only at neighbourhood level, the problem at hand may be moved on to another part of the city or beyond it. If competition between nearby cities is too strong there may be no clear winner and partial losers instead. Socially-oriented development models may also compete with and be contradictory to technology-oriented models.

¹²⁸ Jacquier, Claude, Research Director, CNRS, introductory note to the *Conference on Multilevel Urban Governance*, Belgian Presidency of the European Union, Liège, 1–2 December 2010.

Competing societal visions?129

Two main competing visions shape contemporary economies and societies:

- The vision of a low-carbon economy in the context of wider debates about climate change and sustainable development;
- 2) The vision of a post-Fordist knowledge-based society in which knowledge and skills are seen as the key factors in competitiveness and as generators of wealth.

While the former is about the *restraint* and *reduction* of environmental impact, the latter is about *growth* and *enhancement* of economic competitiveness. There is, therefore, a potential conflict between economic growth aspirations in an era of climate change and resource constraints. How these visions of the future are conceived, discussed and enacted in practice has major implications for socio-technical transitions in urban and regional contexts.

The ability of cities to build consensual visions, integrating and reconciling different competing city visions and models of development, becomes a key challenge in itself.

3.6.3. A better understanding of realities, capacities and objectives

The challenge of moving toward shared visions of holistic, sustainable development models is to a certain extent the challenge of reaching a better and shared understanding of urban realities. Overall objectives need to be understood in wider terms of final objectives – e.g. sustainable quality of life and liveability – and not only in the more narrow terms of the means to get there (e.g. economic growth, employment rate, income levels).

A better understanding of urban realities requires the development of more appropriate and multifaceted indicators capable of measuring more qualitative aspects of urban economic and social life – the environment, economic development potential, cultural assets, etc. Current indicators are not sufficiently developed to properly measure cities' environmental progress or to link environmental issues to other issues. Data does not allow the assessment of risks faced by cities in terms of provision of natural resources, though they are a key contributor to a city's environmental resilience. There is also a need to complement quantitative with qualitative analysis to include intangible and non-monetary resources.

Table 2 Alternative ways of understanding and describing reality

Feature	Dominant responses	Alternative Responses Varied Intangible	
Objectives	Econo-centric		
Measurements	Tangible		
Scales	Global excellence	Global 'excellent relevance' & 'relevant excellence'	
Processes	Linear, products, supply/ demand, push/pull models	Ecosystems, networks and flows	
Knowledge	Narrow; disciplinary; sectoral; codified	Broad; interdisciplinary; cross-sectoral; tacit	
Mechanisms	Technological, mechanistic solutions	Multiple interventions and mechanisms	
Learning	Transferable models	Context-sensitive approaches	
Social Interests	Elites: corporate, governments, major institutions	Wide range of stakeholders, potential beneficiaries and participants	
Concepts of Economic & Ecological Security	Divisible	Collective	
		· · · · · · · · · · · · · · · · · · ·	

Source: Simon Marvin & Beth Perry 130

An agreement on the overall vision needs to be based on a shared process of visioning and understanding of both present and future potential realities. If the vision is to become reality, it must be well understood and owned by all the actors that determine the future of a city, e.g. city administrations, inhabitants, businesses, other socio-economic stakeholders, etc. This calls for collective strategic planning processes.

4. Governance – how to respond to the challenges



4.1. Introduction – from government to governance

The great challenges that European cities face have no straightforward or simple solutions. Their often contradictory interlinkages demand holistic and integrated approaches that are able to balance different interests and objectives. What is more, the challenges do not respect administrative borders, and the strategies for dealing with them may have far-reaching territorial consequences beyond the intervention area.

It is clear that different levels of fixed government structures alone are not well suited to addressing the future challenges in a sustainable way. Adapting government structures to better respond to challenges is a futile task: not only would the dynamic nature of challenges demand a constant re-adaptation, but their multi-dimensional nature requires responses at different scales. Instead, different government levels will have to play different roles in a multi-scalar governance system.

In this chapter we discuss the key elements of a multi-scalar governance system: a holistic and integrated approach to challenges; long-term strategic planning, foresight and vision-building; community involvement and collective mobilisation around long-term objectives; inter-city partnerships and cooperation. We also point to the importance of the city-regional level of governance.

4.2. An integrated approach to urban development and governance

In Chapter 3 we have seen that the main challenges for the Cities of tomorrow are very much interlinked and often of a seemingly contradictory nature. Strategies to strengthen economic growth may build upon a less sustainable use of natural resources; global competitiveness and attractiveness strategies may lead to a two-tier society with few job opportunities for low-skilled or disadvantaged

groups and a decoupling of the local and global economy; green growth and CO₂ reduction strategies centred on new technologies may not only exclude the low-skilled from the labour market but also increase social exclusion through energy poverty due to a lack of knowledge and resources for those who most need to take advantage of the new green technologies, i.e. a green divide. Therefore, cities need to integrate the social, economic, environmental and territorial dimensions of urban development in planning and development.

'Due to the complexity of challenges there is a need for integration of the different social, economic and spatial dimensions [...] Concrete (sectoral) interventions [...] will never result in sustainable answers and can have negative and even dangerous social, environmental and spatial consequences.'131

An integrated approach to urban development has several dimensions. Urban challenges can be looked at in terms of where they manifest themselves or for whom they are most relevant. They can also be considered in terms of the most suitable level of governance or territorial scale required to address them effectively. Many predominantly urban challenges, even those that are most visible at a neighbourhood level, such as the integration and empowerment of marginalised groups, depend on national, and sometimes European, policies. Even if a problem is local and has a local solution, its solution may just shift the problem to another nearby locality, so an overly narrow territorial approach may be counterproductive. Understanding the territorial dimension of urban challenges is, therefore, fundamental.

The debate around the sustainability of biofuels has shown that challenges and objectives need to be understood and formulated by taking into account a wider context and secondary effects. Objectives might be met at the very local level but not on a wider territorial scale. For instance, the development of eco-neighbourhoods helps to reduce energy consumption and waste in housing and living, but may generate more private car use if it is not well integrated

spatially in terms of proximity to services and easily accessible public transport. Objectives and targets have to be relevant and effective at different territorial scales.

The interrelation of challenges also needs to be understood. Isolated sectoral investments - especially large-scale infrastructure investment with a strong lock-in effect - may be counterproductive to long-term sustainable development objectives. Transport policies cannot be evaluated only in terms of their outputs, e.g. number of kilometres of road or public transport built, but must also be assessed in terms of their outcomes and contribution to a range of socio-economic and environmental objectives. Transport infrastructures impact on the accessibility of work, education, leisure or services. In the context of territorial planning, they are a leverage that reinforces density in given areas, on the basis of local transport networks well connected to the core city. There are too many examples of road infrastructure that have caused spatial segregation and contributed to inner city congestion, increased CO₂ emissions and pollution, urban sprawl and a decrease in the quality of life. Even if the widespread use of zero-emission cars became reality, congestion, spatial segregation and urban sprawl would remain a problem.

The mitigation of energy vulnerability and the reduction of CO, emissions through programmes targeted at the roll-out of new technologies can have significant effects in terms of the reduction of greenhouse gas emissions but may fail to address one of the biggest problems with the present dependence on oil – energy poverty. Most schemes to introduce new energy-saving technologies are based on tax incentives or advantageous loans that either have no effects on the most disadvantaged groups or are out of their reach because of their low financial capacities. The fact that these groups live in housing with poor insulation and inefficient heating systems makes them even more vulnerable to high energy costs. A strategy to address the challenge of climate change and energy vulnerability based mainly on technical market-led solutions could, therefore, have detrimental effects on social cohesion and create a green divide.

There are many more examples of the interlinkages of challenges. Developing science and technology parks which concentrate research and innovation businesses outside city centres may release the housing pressure in city centres and create a critical mass of activities, but may also be damaging to the objective of a social and functional mix of activities. Such investment in research must be aligned with investment aimed at fostering cities' attractiveness and connectivity. 'We have welcomed the fact that important funds be allocated to us for innovation and research. However, a better balance should have been found with related investment in transport infrastructure. International connectivity is very low, which contradicts our ability to access places of interest for cooperation and the possibility to attract knowledge workers from abroad'132

Most areas of most cities are economically and socially complex and fragmented, and city administrations have to deal with this reality. New institutional models are needed that are able to combine, for instance, climate initiatives with parallel activities in urban regeneration, building rehabilitation, economic and employment, and socio-cultural development. A dialogue must be fostered between actors in charge of different sectoral policies, such as environment, housing, transport, energy, and those who are in charge of social, cultural and economic development.

An implicit approach to addressing challenges is often present in the formulation of the challenge itself sometimes unintentionally. It is not uncommon for strong interest groups to formulate challenges in a way that serves their particular interests, too. There is a danger that only the strongest voices are heard and that shorter-term market interests override long-term public interests. The European urban development model relies on cities' capacity to formulate challenges and strategies that correspond to longer-term visions and objectives that are sustainable and inclusive. This implies giving weaker stakeholders a say in the formulation of future visions and in the development of the cities, whether at neighbourhood or a wider territorial level, and transparency in strategic planning processes. Real partnerships need to be set up between all relevant actors from the private and public sectors as well as civil society.

Integration and conditionality: local anti-segregation interventions in Hungary¹³³

To better balance technical-infrastructure investments with social development at local level, anti-segregation planning has been made conditional for local governments who seek to access EU funding in the 2007–13 programming period.

In 2007, the preparation of an Integrated Urban Development Strategy (IUDS) was made compulsory for cities applying for Structural Funds money for urban renewal actions (ROP 2007–13). The IUDS is a mediumterm (7–8 years) strategic implementation-oriented document with sectoral and territorial aims. It has to be discussed and approved by a resolution of the municipal assembly to ensure legitimacy.

The real novelty of the IUDS was that cities had to prepare anti-segregation plans. Such plans had to contain the delimitation of segregated areas and areas threatened by deterioration and segregation. They also included an assessment of the delimited areas and of social impacts of envisaged developments and policies, on the basis of precise indicators. Moreover, anti-segregation

programmes also had to be prepared, including a vision for a regeneration or elimination of the degraded areas and for the main directions of interventions. A complex set of tools had to be used with a focus on local housing, education, social and health-care conditions.

Independent experts assessed the anti-segregation plans and programmes. Without their approval the city's application for Structural Funds financing for urban renewal actions would not be accepted, i.e. the social (anti-segregation) dimension was a condition to access EU funding.

This strict conditionality raised strong opposition from local politicians, given inter alia the lack of professional urban development background and planners for the preparation of integrated plans, the lack of relevant data and a negative perception of an obligation imposed 'from above'. However, despite the problems, the Hungarian IUDS can be considered a success. Almost 200 cities prepared integrated development strategies, including anti-segregation plans. The latter became a key element of the general 'equal opportunities policy', with a recognition that cities could only be forced to think about how to decrease segregation if this was posed as a general condition for accessing EU funding.



4.3. New models of territorial governance

4.3.1. New urban realities

The new urban reality is characterised by peri-urban development. New relationships between the core city and its surroundings are developing, together with increasing individual mobility: people living in rural areas live urban lives and exploit urban services; urban residents use rural services, not least public goods like nature; schools and other services are not chosen because of proximity but because of quality; commuting and other daily mobility patterns are stretched over increasingly large areas.

'In older industrial countries the peri-urban is a zone of social and economic restructuring: in the EU growth zones, and most of the developing world, the peri-urban is often a zone of rapid and chaotic urban sprawl. In both situations, it is clear that the peri-urban is not just an in-between fringe; rather it is a new and distinct kind of multi-functional territory. It is often the location for airports, business parks and high-value housing, which are seen as essential to urban/regional development (as per the Lisbon Agenda). It is also the location for problems: urban sprawl; wasted public funds; transport congestion; loss of agricultural land; damage to landscapes and biodiversity; fragmented communities; and lack of spatial planning.'134

Though an urban challenge is best addressed at a specific governance level, this does not imply that other levels, higher or lower, are inadequate. In terms of representative democracy, each level plays a particular role and has its own benefits. There are many compelling arguments for the government levels that are closest to the citizens. Problems are experienced at the city or neighbourhood level, and inhabitants may be more easily mobilised around issues that are of direct concern in their daily life. 'The more we widen the subject matter, the more we move to the larger

territory, the more we also may move away from people's concerns and risk losing pragmatic issues.'135

What is problematic is the potential discrepancy between the urban realities, especially in terms of functional urban areas, and the administrative city and its representative democracy. A tax base that does not correspond to the areas or populations it is serving in terms of public services and goods, or a fragmented system of local government – each with their own tax base – makes integrated policies difficult to achieve. The present institutional forms and spatial settings of local governments in many European countries are inappropriate for dealing effectively with the big and complex future urban challenges in an integrated way. The risk is that both the competitiveness of many urban areas and the European balanced model of urban development are at stake. 136

4.3.2. The increasing importance of the city at regional or metropolitan level

Given the scope of many challenges, there is a relative consensus on the need for a level of government that reflects the *de facto* city rather than the *de jure* city. Strategic planning and the delivery of public policies on economic development, the labour market, mobility and transport, housing, education, water, energy, waste, immigration, etc. cannot be addressed at too local a level. Good government and governance structures at a metropolitan level are also a key condition for cities' competitiveness. 'The better they are managed, the stronger they become, and the more competitive position they can achieve in the global metropolitan network, which would benefit individual Member States and the entire European Union.'¹³⁷

Several examples may be given of existing supra-local governance systems organised around a core city (monocentric city regions such Berlin and Madrid) or in more polycentric networks (overlapping monocentric areas such as the Ruhr, Randstad and polycentric areas with no dominating large city).¹³⁸

¹³⁴ Ravetz, Joe, Cities of tomorrow – Contributions from experts, Brussels, April 2010.

¹³⁵ Zaimov, Martin, elected representative of Sofia.

¹³⁶ Tosics, Iván, op.cit.

¹³⁷ Gorzelak, Grzegorz, Cities of tomorrow – Contributions from experts, Brussels, April 2010.

¹³⁸ Reference to Vandermotten, Christian in Tosics, Iván, issue paper on Governance challenges and models for the Cities of tomorrow, Brussels, January 2011.

German metropolitan regions: alliances for growth and joint responsibility 139

The idea of *Metropolregionen* was first developed in 1995, and after their official adoption as part of the German spatial development strategy in 2005, their number increased to 11 regions. The three most important functions are decision-making functions linked to: spatial concentration of economic centres; presence of research centres and of a creative and competitive milieu; accessibility to and from international locations and good traffic infrastructures. They fulfil an important role in marketing, solving traffic problems and increasing scientific—economic links.

The establishment of metropolitan regions was the result of a political process set in motion by the

Standing Conference of Ministers Responsible for Spatial Planning. With the exception of some financial support for emerging initiatives and selected pilot projects, the federal government did not fund or subsidise the metropolitan regions. Regional initiatives have been voluntary, and the goals and strategies were determined jointly by all the partners. The six biggest urban agglomerations (Rhine-Ruhr, Berlin, Hamburg, Frankfurt, Munich and Stuttgart) were the first to be designated 'European Metropolitan Regions'. In addition, five smaller urban agglomerations (Leipzig-Halle, Hannover, Nuremberg, Bremen and Rhine-Neckar) lobbied to be included in the policy as well. A quasiofficial competition ensued as the regions prepared reports on their potential and competitiveness, as well as concepts for regional governance and spatial planning.

In the past, the territorial implications of urban growth have often been taken for granted. The growth of cities was supposed to generate growth for surrounding areas. However, the absence of territorial policies has, in some cases, led to the opposite result. For example, 15 years ago, the slowest growth areas in Italy were not in the south of the country, but in the remote peripheral areas of Milan and Turin.

Compared to the German example of a metropolitan region – with its strong economic and innovation rationale – the Italian example of *Città di Città* ('City of cities') is more focused on 'habitability' and the multiple facets of quality of life. There is an implicit model in which a series of hubs can flourish around the core city of Milan, on the basis of social and cultural dynamics between the cities. Even if innovation is also underlined, the rationale for this metropolitan level of cooperation/governance is the building of an attractive and service-oriented network of cities.

Governance at the metropolitan or city-region level is not confined to national frameworks but can also cross national borders, as illustrated by the Lille metropolitan area. The area has developed a series of projects involving: cooperation in the field of economic development and coordination of land-use planning; common planning of a green and blue web; management of water, freight, and public transport; urban renewal, etc. Cooperation also involves branding for the whole area. The complexity of the territory has led to the development of innovative cooperation and governance processes.

These three examples of metropolitan governance depend on different government and administrative structures; they operate in different national planning contexts and they have been organised for different purposes. However, they are all based on the underlying premise that the supra-local governance level is vital for the development of these city-regions in terms of both competitiveness and cohesion. They also indicate that there is an added value in the combination of density and diversity, as well as in the reinforced identity of the areas concerned – a sort of branding for people and businesses.

¹³⁹ Sinz, Manfred, Cities of tomorrow – Contributions from experts, Brussels, April 2010.

¹⁴⁰ Tosics, Iván, op.cit.

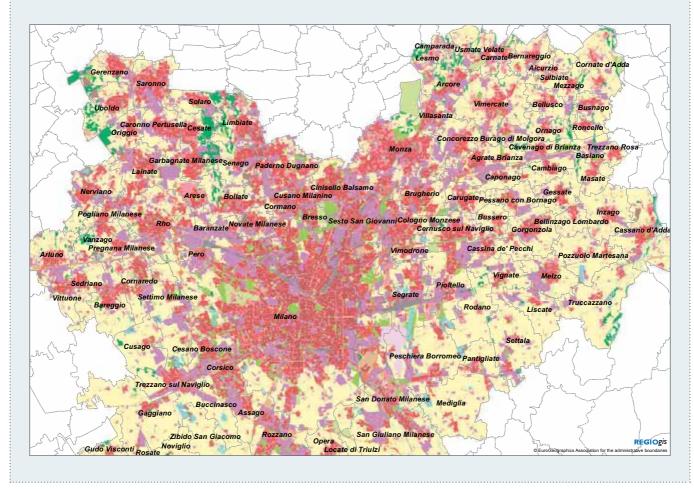
Città di Città – a polycentric network at the metropolitan level¹⁴¹

The macro city-region around Milan has evolved from a central hub-pattern, in which Milan held a dominant position in a central city vs. periphery pattern, towards a more polycentric urbanisation built on a network of cities and municipalities around Milan.

Città di città is a strategic planning process promoted by the Province of Milan to cope with the problems of guiding development in this dynamic urban region. The development of this kind of strategic planning process was required in order to cope with the growing externalities of the Milan region and reinforce the assets of smaller cities around Milan according to a common vision. There is now a series of cities and towns, which exist both as independent entities with local jobs and markets, and as parts of a wider functional urban region¹⁴². Thanks to cooperation, there are strong conurbations between municipalities which, in the past, were just satellites of Milan.

Città di città addresses a range of issues such as: availability of stable or temporary residences; accessibility to public spaces; promotion of new local welfare; mobility by different means, in different directions; promotion of culture in various places; reduction of congestion and pollution; connection of people in new public spaces of different types; ability to find silence to slow down the frantic pace of life; creation of a lively atmosphere in other places; space for unplanned activities; a reintroduction of nature where it has disappeared, etc.

This process has created a thick web of cities beyond the Province of Milan. The cities and municipalities now recognise themselves as belonging to something more than just the periphery of Milan. They work together to develop common public transport, open spaces and services as part of a greater territorial development process that was inconceivable when they were just individual satellites.



A functional territory: the Lille metropolitan area

With around 3.8 million inhabitants over 7200 km², the Lille metropolitan area is one of the largest cross-border agglomerations in Europe. It covers two language areas and three regions with Nord-Pas-de-Calais on the French side with Lille as its capital, and Dutch-speaking Flanders and French-speaking Wallonia on the Belgian side.

Effective territorial cooperation in defining a common development strategy began in 1991 between the Lille Métropole Communauté Urbaine (a formal metropolitan government comprising 85 French municipalities) and 4 Belgian *intercommunales* (around Mouscron, Ypres, Kortrijk and Tournai). After years of informal cooperation, 'Eurometropole Lille–Kortrijk–Tournai' was eventually set up in 2008. This first European Grouping for Territorial Cooperation (EGTC) brings together 14 public partners.

Three years earlier, a French government call for metropolitan cooperation provided the opportunity to bring together another, wider but more flexible, partnership with areas located south of Lille, in the former coal mining basin and around Arras, Cambrai and Maubeuge. In May 2005, 'a memorandum of understanding for cooperation' in what was called the 'Aire métropolitaine de Lille', was signed by 23 local and regional public authorities from France and Belgium. The aim is 'to constitute a network metropolis, combining the level of services of a European metropolitan city with a high quality of life' through six strategic objectives: sustainable development; the promotion of creativity; the development of innovation and research; the improvement of internal and external accessibility; tourism; and communication and promotion. The non-profit organisation was created in December 2007 in order to represent and develop the cooperation process and to monitor the implementation of the work programme.

4.3.3. The need for flexible multi-scalar governance

Different territorial and governance levels have more or less relevance depending on the specific challenges and objectives they have to address. Issues such as water management may be best dealt with at sub-regional or regional level, public transport and research infrastructures may be best addressed at metropolitan or city-regional level, while equality and integration may need a more local approach at neighbourhood level. A formal governance system tailored to reduce discrepancies between the *de facto* city and the *de jure* city may not necessarily be relevant once operational, given the time required to put new administrative systems into practice.¹⁴³

Coordinated approaches in a multilevel governance framework are needed to effectively tackle the challenges of tomorrow. Problems solved at the level closest to the citizens who are able to deal effectively with them have to be complemented with better coordination at a higher level, to avoid transferring problems from one local level to another, or from the city centre to its periphery. In essence, what is needed is a functional and flexible approach that both respects the principles of subsidiarity and can be adapted to a functional geography and the specificities of different territorial scales.

There are many models for handling the growing discrepancies between the administrative and functional setup of urban areas. Some models aim at a better adjustment

¹⁴¹ Balducci, Alessandro, Workshop 2 Cities of tomorrow – Visions and models, Brussels, October 2010.

¹⁴² The concept of 'Macro City-Region' as developed by Hall, P. and Pain, K. in *The polycentric metropolis: learning from mega-city regions in Europe*, Earthscan Publications Ltd, London, 2006: 'a series of anything between 10 and 50 cities and towns, physically separate but functionally networked, clustered around one or more larger central cities, and drawing enormous economic strength from a new functional division of labour.'

¹⁴³ Baert, Thierry, Workshop 3 Cities of tomorrow – How to make it happen? Brussels, December 2010.

of the administrative setup to the functional reality, e.g. merging neighbouring settlements with the city and creating strong metropolitan bodies that take over a series of functions from the local municipalities. Other, less ambitious models build on different forms of cooperation between municipalities belonging to the same Functional Urban Area, e.g. by mono-functional agencies or metropolitan bodies with limited delegated power. Due to the political difficulties in changing administrative borders or creating strong supra-local bodies, the latter model may be favoured. But the democratic legitimacy of this lighter model of FUA governance may be questioned because it has less transparency and less accountability to directly elected bodies.¹⁴⁴

The examples of German metropolitan regions, *Città di Città* and the Lille metropolitan area illustrate that although these larger governance areas have been set up to respond to specific challenges, the lower levels of governance continue to play an important role both in their implementation and in other more local matters. The articulation of supra-local governance structures on local and neighbourhood levels is essential, especially with respect to accessibility and vulnerability issues, but also in relation to attractiveness and the quality of the urban environment.¹⁴⁵

Though local projects and intervention must be framed and understood in a larger territorial context, it is equally important that there is an understanding among actors at higher governance levels of what is happening at the local or micro-local level. National, regional or citywide policies have in some cases replaced local policies that were focused on deprived neighbourhoods and embedded both social development and urban regeneration. This mainstreaming of local projects into regional or national policies may result in a fragmentation and a lack of common understanding of objectives and issues at stake, even among the various associations on the ground. There is a need to use common visions to link up the various bodies involved, and consequent requirements for training and mediation work. In this context, it is essential to ensure good communication between various levels.¹⁴⁶

4.4. Building capacity for long-term visioning and strategic planning

In the previous two sections we have discussed the need for an integrated and holistic approach to urban development that manages to reconcile seemingly contradictory challenges while taking into account the territorial dimension of the challenges. Several elements need to be put into place for such an approach to be effective. Most important, a long-term city vision may be needed to guide actions. The European urban development model contains the basis for such a vision, but each city has to refine its own vision according to its potential and its inhabitants' and organisations' desires.

¹⁴⁴ Tosics, Iván. op.cit.

¹⁴⁵ Balducci, Alessandro, Workshop 2 Cities of tomorrow – Visions and models, Brussels, October 2010.

¹⁴⁶ Fayman, Sonia, Workshop 3 Cities of tomorrow – How to make it happen? Brussels, December 2010.

NEWCASTLE-GATESHEAD – A long-term strategy as a joint response to the financial crisis

The city of Newcastle is the administrative capital of England's North East region and its population of 2.5 million. Newcastle itself has 278 000 inhabitants, while across the river, Gateshead has 200 000.

Over the past 30 years, the economy in Newcastle and its surrounding area has undergone a rapid transformation, shifting from a heavy industrial base, including shipbuilding, coal mining and heavy engineering, to a more diversified industrial base, with the public sector accounting for some 38% of all jobs. The recent financial crisis and ensuing recession have only added to the challenges faced by the region.

Not wanting to let short-term shocks prevent long-term vision, action was taken. In June 2009, the city council drafted a 10-point action plan in support of both individuals and businesses. The city, together with Gateshead, also set up '1NG' (1 Newcastle Gateshead), a strategic body responsible for pushing forward the 2010 '1PLAN', a 20-year economic and spatial strategy for the two cities. The underlying aims include strengthening the cities' ability to cope with inevitable future external shocks, addressing the needs of individuals and businesses, cooperating with like-minded communities, focusing on sustainable growth and paying special attention to living and working environments. The cities believe their strategy and approach could be transferred and adapted to other similar cities.



4.4.1. The need for a solid knowledge base

Cities need a solid knowledge base to properly assess their current situation and future development potential. This involves a better understanding by the cities of their strengths and weaknesses, an awareness of their diversity, creativity, entrepreneurial base, human resources and social capital, etc. Indicators are needed to measure progress towards objectives on a range of issues and to evaluate the effectiveness of strategies. Ideally cities should be able not only to assess their own situation, but also to compare themselves with other cities.

Several things are needed to achieve this. City administrations must have the capacity to share and analyse information, to establish causal links between indicators and action, and, not least, to formulate and measure long-term objectives. Crude indicators, such as GDP measurements and different types of input and output indicators, have to be complemented with outcome indicators as well as qualitative indicators, such as perception surveys. GDP data in particular should be used with great caution when applied at the urban level, as many people living in cities work outside them and vice versa. Pockets of deprivation may also not be visible in GDP data.

There is a need for a 'shift of focus from actions and financial means to their outcome in terms of people's well-being and progress through appropriate indicators [...]: the time needed to travel from W to Y at an average speed (as an aspect of mobility); the results of tests in a given topic (as an aspect of competence); the share of firms denied credit at any interest rate (as an aspect of banks' rationing); the share of all children living in "jobless households" appropriately defined (as an aspect of jobless households).'147

Cities also have to be capable of distinguishing between the effect of internal and external factors on their development. A very sophisticated employment policy may yield negative employment figures due to external circumstances such as the recent financial and economic crisis.

City-specific data that is consistent and comparable across Europe is difficult to obtain. There is a high level of discrepancy between European cities concerning the scope and quality of available information. These differences relate both to the different types of government and the governance systems put in place – there is not even a shared definition of a city in Europe – as well as to different traditions and capacities for data collection. Statistical offices in some Member States have very complete databases with demographic, educational, income, employment, social security, etc. data sets that can be combined to provide quite detailed socio-economic pictures of municipalities' inhabitants, while in other countries data are less systematic and more fragmented.

But even with very comprehensive socio-economic data sets, it is difficult to understand and analyse issues such as social polarisation and cohesion. People's social relationships and their daily and weekly mobility patterns and use and consumption of public services, are equally important as more hard data on income, employment and education. Cities thus have to develop new tools that can deal with such more qualitative issues.

'While the quantitative changes in terms of population numbers are not big except for the relative growth in suburban satellites of big cities, the qualitative change of population in different parts of urban regions and nationally seems to be significant. As there is lack of less empirical (quantitative) evidence, these are rather hypotheses based on some evidence from case studies. The less measurable issues may prove to be essential but the contemporary science and science-driven policies tend to underestimate the 'dubious' observations and opinions without scientific proof. Research should therefore focus on the less palpable, soft evidence. All these hitherto changes in the physical urban space are extremely controversial vis-à-vis the upcoming change of external constraints in the respect of urban spatial pattern.' ¹⁴⁸

For long-term visions to be formulated and for progress to be monitored, it is imperative to reinforce information

¹⁴⁷ Barca, Fabrizio and McCann, Philip, 'Outcome indicators and targets – Towards a performance-oriented EU Cohesion Policy', February 2011.

¹⁴⁸ Maier, Karel, contribution to Workshop 1 Cities of tomorrow – Urban challenges, Brussels, June 2010.

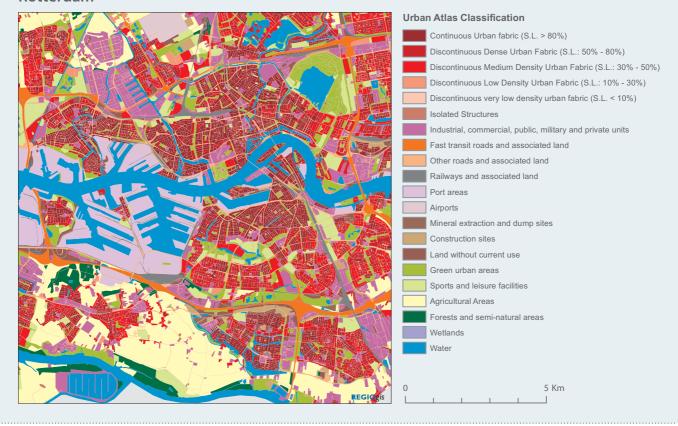
Europe-wide data – the Urban Audit¹⁴⁹ and Urban Atlas¹⁵⁰

The Urban Audit provides comparable data for 321 cities in the 27 EU Member States, 10 cities in Norway and Switzerland, and (with a smaller data set) 25 cities in Turkey. It is a unique source for city comparisons. It contains a long list of indicators collected every three years, and a short list of key policy indicators which are collected annually. The Urban Audit builds on ten years of close cooperation between the national statistical offices, cities and the European Commission (Eurostat and DG Regional Policy). It will be further developed and adapted to European policy objectives, such as the Europe 2020 strategy.

Based on the analysis of the Urban Audit data, the *State* of *European Cities* reports provide information about demographic change, urban competitiveness, living conditions and the administrative power of 321 EU cities.

The European Urban Atlas provides detailed digital geo-referenced data on land cover and urban land use, compiled from satellite imagery and auxiliary data sources. The Urban Atlas was launched by the European Commission (DG Enterprise's GMES bureau and DG Regional Policy) and supported by the European Space Agency. All major EU cities and their surroundings will be covered by 2011. This adds harmonised land-use indicators to those already collected by the Urban Audit. The Urban Atlas will be updated every five years.

Rotterdam



^{149 &}lt;a href="http://ec.europa.eu/regional_policy/themes/urban/audit/index_en.htm">http://ec.europa.eu/regional_policy/themes/urban/audit/index_en.htm and http://epp.eurostat.ec.europa.eu/portal/page/portal/region_cities/introduction.

¹⁵⁰ http://www.eea.europa.eu/data-and-maps/data/urban-atlas

Perception survey on the quality of life in European cities¹⁵¹

The European Commission has conducted perception surveys every three years since 2004 in order to assess the quality of life in major European cities (31 cities in 2004, 75 cities in 2007 and 2010). The most recent surveys have given environmental issues more attention, including a series of questions on:

- the availability and use of public transport, and other means of transport to work/training;
- cities' commitment to fighting climate change (e.g. reducing energy consumption in housing or promoting alternatives to transport by car);
- perception of the city as a 'healthy city';
- perception of 'poverty' in the city;
- people's satisfaction regarding the availability of public spaces and the quality of the built environment in their neighbourhood.

gathering and analysis not only at the level of regions and countries but also at a local level. Ideally a range of different data sets should be included in such a knowledge base, e.g. indices of housing conditions, accessibility and actual use of public services and infrastructure, deprivation, environmental health, cultural aspects, etc., as well as a set of assets which are often given insufficient attention because they are non-marketable, such as quality of air, sound pollution, aesthetics and architectural quality, cultural heritage, cohesion and social peace.

New and more precise indicators alone are not sufficient to properly understand and assess cities' current situation and future development potential. Cities also need the ability to communicate this type of information between their own departments in order to foster a shared and integrated understanding of the current situation and the progress made in meeting overall objectives.

There is also a need for city diagnostics to be fully understood and shared by those outside a restricted group of experts. Information and communication policies to render technical information comprehensible and accessible to wider groups have to be complemented with participatory approaches to create a shared understanding of challenges and shared ownership of strategies. One solution is to promote collective intelligence-learning focused on daily life problems, e.g. developing project-based learning. The ability to formulate a long-term vision is dependant on the ability to make a solid diagnosis of

current needs and future potential. But a long-term vision is also needed to focus intelligence-gathering and learning on the right issues.

4.4.2. Foresight as a participative governance tool to manage complexity

Urban governance must be focused on understanding the possible development trajectories of the city and the switch to sustainable trajectories according to a long-term and shared vision of the city. A solid knowledge base alone is insufficient to build a long-term vision to guide actions; cities also need appropriate tools and instruments for strategic planning and collective visioning. The ability of cities to conduct forward-looking exercises and to formulate their own visions of the future is fundamental in this context.

Foresight is about shaping, debating and thinking about the future. It is a systematic, participatory, future-intelligence-gathering and medium- to long-term vision building process aimed at present-day decisions and the mobilisation of joint actions. It is a set of structured and participative vision building and strategic planning activities that allows cities and regions to think about, consider, debate and shape the medium- to long-term future of their territories. Many of the key process elements of foresight are widely used in strategic planning: the use of expert panels; socio-economic and environmental data

SERAING – Urban foresight of residents integrated into the city Master Plan

Seraing is a former industrial city in Belgium with 61 000 inhabitants and a surface area of 36 km². A decline in the local steel industry has contributed to high unemployment and a downturn in commercial activities in some areas, including Molinay, a multicultural, inner city neighbourhood covering 1.5 km² and home to 1700 inhabitants. Since 1997, the NGO *Centre d'Action Laïque* (CAL) has played a key role in addressing issues here.

In 2006, the city of Seraing adopted a Master Plan (physical urban plan). As Molinay was not specifically targeted, the CAL organised nine debate workshops involving residents in order to establish a common vision for the neighbourhood, and worked with external experts and partners to identify the main challenges.

One partner, the Destrée Institute, a foresight expert, managed to integrate the 'Molinay 2017' process into its INTERREG project: Futurreg. However, no strategic action or monitoring programmes were identified, as CAL believed this was the duty of the municipality.

The challenges listed were later positively received by the municipality, and, even though other challenges are still to be addressed in the fields of education, safety and housing, in 2008 some local infrastructure works were successfully integrated into the revised Master Plan. Despite difficulties in turning strategies into action, Molinay 2017 remains an excellent example of a participatory foresight process combining local support and professional expertise.



consultation; brainstorming; trend and extrapolation; and the setting of strategic goals. Foresight's distinctive feature is a long-term future orientation that goes beyond immediate issues and concerns, and the use of methodologies such as brainstorming, scenario development and scenario analysis using SWOT (strengths, weaknesses, opportunities and threats) analysis or similar techniques.

Foresight, unlike most approaches to strategic planning, deals with long-term prospects, and draws upon the views of multiple stakeholders. Foresight is not only a powerful tool for reacting and adapting to external events but also a method for engaging individuals, communities, businesses, public authorities and other organisations proactively in the

identification of their preferred future. It is recognised that before decisions with long-term implications can be taken, it is necessary to generate a widespread dialogue about future choices and preferences. Stakeholder engagement is, therefore, at the heart of most contemporary futures exercises.

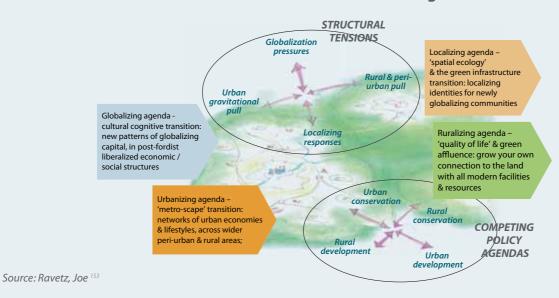
Foresight exercises can have a narrow sectoral focus or adopt a wider, more systemic perspective. The former tends to be more technology- and competitiveness-oriented while the latter often has a more social perspective. Some years ago, long-term visions were dominated by the Lisbon Agenda, converging in the idea of achieving national or global competitiveness and levels of attraction. Following the economic downturn with its associated negative social

Peri-urban transition challenges – a wicked problem needing a foresight approach

'Policymakers are surrounded by "wicked" problems which cannot be solved, and policy challenges which are multi-level, multi-objective and multi-stakeholder. From practical experience, success may depend not

only on more or better governance, but on new forms and systems of governance. So we can look at the challenges for urban governance in more than one way – from dealing with the problems of the present, to the challenge of how to respond, adapt and evolve in the future'¹⁵².

Peri-urban transitions / challenges



¹⁵² Ravetz, Joe, 'Challenges for urban governance', Brussels, June 2010.

¹⁵³ Ravetz, Joe, op.cit.

Wider stakeholder mobilisation to manage complexity¹⁵⁴

The growing complexity of urban and territorial development increases the need for a wider stakeholder engagement, which is mirrored in the evolution of foresight. As we move away from a closed practice between experts and decision-makers, we see more open and participative approaches, involving, in most cases, key stakeholders in various thematic or transversal workshops and sometimes a wider citizen involvement (e.g. Charleroi 2020, Côtes d'Armor 2 mille20). In the latter situation, important financial and communication means are needed to support the process.

This evolution has had impacts on the methods used. Expert-based Delphi surveys and scenario building are being replaced by more open foresight workshops to debate issues and future scenarios. In the participative way of creating scenarios, we see artists, writers or

videographers helping to describe the images of tomorrow. A striking feature is the culture of debate which now characterises most future studies, including highly participative methods such as world cafés, a rather simple but structured conversational process. ¹⁵⁵ Information technologies are increasingly being used, as for instance in the Urgent Evoke ¹⁵⁶ project, and their full potential has yet to be explored.

The involvement of a wider set of actors makes foresight more democratic and gives its results more social legitimacy. Outputs of foresight exercises become milestones in cities' development and can be referred to by citizens or organisations when dialoguing with decision-makers. Wider involvement also generates a wider ownership of the exercise, of its results and of the territory. As a consequence, foresights have in some cases, such as the Northern Basque Country in France or in some Spanish regions, become replicable rather than one-off exercises.

Table 3 Examples of city foresights¹⁵⁷

	Small / medium-size urban context	Large-size / global urban context
Long-term systemic view ≥ 20 years	Prospective des quartiers ¹⁵⁸ : Avignon, Rennes, Besançon (FR); Seraing, Ottignies-Louvain-la-Neuve 2050 (BE)	Randstad 2040 (NL); Grand Paris; Lyon; Rennes; Pays Basque; Normandy 2020 (FR); Bruxelles 2040 (BE); Göteborg 2050 (SE); Gipuzkoa +20 (ES)
Long-term sectoral view ≥ 15 years	Digital Thermi (Central Macedonia, Greece); Martinique 2025 (FR)	Built Environment Foresight 2030 (UK); BMW 2025 (IE); Cyberterritoires et territoires en 2030; Lille 3000 (FR); TransBaltic Foresight Debate
Short-term sectoral view 5–10 years	Linz 21 (AT) and many Agenda 21 initiatives led in small urban contexts	Istanbul Digital City programme (TR) Manchester as a Knowledge Region (UK) Agenda 21 of Berlin
Short-term systemic view 5–15 years	Hammarby Sjöstad (Stockholm, SE); Chambery 2020 (FR); Castellon 2020 (ES); Many urban planning exercises	Piano Strategico Turin (IT); Andalucia 2020; Bilbao 2010 (ES)

Source: Van Cutsem, Michaël, op. cit.

¹⁵⁴ Van Cutsem, Michaël, Institut Destrée, Cities of tomorrow - Challenges, visions, dys-visions as seen by cities, Brussels, December 2010.

^{155 &}lt;a href="http://www.theworldcafe.com/">http://www.theworldcafe.com/.

^{156 &}lt;a href="http://www.urgentevoke.com/">http://www.urgentevoke.com/.

¹⁵⁷ Van Cutsem, Michaël, Institut Destrée, op.cit.

¹⁵⁸ Literally, 'neighbourhood foresight'.

consequences, the awareness of climate change as a main threat, and the shift in policy rhetoric away from the Lisbon Agenda, foresights now tend to be more environmentally or socially driven. In both cases, the marketing and mobilising role of foresight is often emphasised, as illustrated by the ambition of Liverpool to be a 'thriving city by 2040' (see p. 46) or the vision of Bilbao 2030 as an 'innovative city, open to the world and exceptionally creative' (on previous page).

The branding dimension¹⁵⁹ of future visions often results in bold catchphrases such as 'the best big city in the world',

'a world city in the international competition between territories', 'the Knowledge Capital', 'Knowledge means Change', 'Cosmoregion in 2015', etc. – most of which are centred on economic leadership, quality of life, balanced development, and technological proactivity. Such visions do not always reflect reality and may lack the necessary widespread ownership and processes of change to be effective. But well conceived and shared visions can be effective tools to overcome conflicts and have strong leverage effects in steering investments and forming a base for shared projects.

A vision of Bilbao 2030

In 2030 Bilbao is an innovative city, capable of foreseeing change, with a strong sense of identity and belonging, with communities sharing a long-term project, open to the world and exceptionally creative. Different types of innovative cultural, urban renewal and environmental projects are being developed, as well as an infrastructure for global competition.

The vision is based on three principles:

- Optimisation of resources and effectiveness; cooperation with surrounding territories.
- Motivation of people and ideas; analysing things in a more innovative way.
- Metropolitan Bilbao as a locomotive for the region (7 million people in the hinterland of Bilbao), and development of the region as a poly-nuclear region rather than a metropolitan region.

Cities do not compete using only infrastructures but also with intangibles, such as knowledge, people, quality of life and leadership. The vision of Bilbao is a vision of a city capable of attracting and materialising good ideas for the benefit of the community. It is based on people and their values, the city's activities and

the city's appeal. Innovative businesses and initiatives should turn Bilbao into a knowledge node within a global network.

Bilbao 2030's vision underlines the need to be creative, open, entrepreneurial, well educated, multicultural, etc. There is a focus on the 25–35-year-old cohort as many young people have left the city during the recent crisis. The generational change of leaders and the role of professionals are emphasised by working in networks.

The main challenges in realising this vision are:

- Understanding an uncertain future and adapting to the economic, social and cultural changes brought by the global economy;
- Achieving effective public–private collaboration;
- Mobilising leadership and involving people; making the projects credible and worthwhile.

The project is implemented by the Metropoli 30 association. It involves more than 400 people from the public sector, private sector and civil society. It builds on the experience of the Bilbao regeneration project, which was a success in terms of integrated development.

¹⁵⁹ Emile Hooge underlines a tendency according to which cities themselves become copyrighted labels ('Quand les villes deviennent des marques'), 'La cote des villes' in *Futuribles*, No 354, July–August 2009, p. 49.

Negative visions or dys-visions may play an important role in visualising potential conflicts and emphasising the need for corrective actions. The most negative scenario in the 'Liège 2020' foresight exercise focused on governance fragmentation, pointing to the danger of individual and institutional conflicts, with each actor following its own strategy. This scenario was so negatively received by the local actors that the process was stopped. However, the dys-vision functioned as a strong warning signal and raised awareness of the need to act. Subsequent steps were taken to tackle some of the challenges presented in the scenario 160. Dys-visions may also play an important role in raising awareness of different more or less predictable hazards and may be useful tools in strengthening cities' resilience to both foreseeable and unexpected risks.

4.5. Collective mobilisation around a European urban development model

Foresights and other forms of participative strategic planning initiatives mainly have a citywide or cityregional scope, and are often market-geared with a focus on institutional actors. A wider collective mobilisation engaging citizens in key urban development issues seems increasingly important for remedying socio-economic polarisation and exclusion, as well as counteracting the negative effects of growing diversity. Large sports or cultural events can have a mobilising effect and help to create a shared identity and boost confidence in the future. But also less spectacular action is needed with a focus on everyday concerns.

4.5.1. Resident mobilisation

The involvement of city residents is crucial to the success of many policies, especially in a context of crisis and possible conflicts between the different stakeholders. In cities where resources and time have been dedicated to organising participatory processes, there is stronger cohesion, especially at neighbourhood level, and greater ownership of both short- and long-term strategies and visions by the residents. Some local governments have put into place mechanisms to directly involve the residents in budgetary decisions. Even if such processes are restricted to specific parts of the local budget, they create a trend for a greater empowerment of citizens. Other examples of participative and solidarity-based governance include employment pacts, the Quebec model, 162 social enterprises, etc. 163

4.5.2. Local community-led development approaches

Area-based local community-led development approaches are focused on supporting endogenous development processes, i.e. stimulating development from within by external support, facilitating innovative local solutions. Unlike local authority-led initiatives, they build on a stronger role, commitment and engagement of the community itself and are not necessarily confined within administrative borders. As such they are able to also take on wider and more long-term economic development strategies.

¹⁶⁰ Van Cutsem, Michaël, op.cit.

¹⁶¹ Moulaert, Frank, reference to the recent history of urban policy in Antwerp in presentation, Workshop 3 *Cities of tomorrow – How to make it happen?* Brussels, December 2010.

¹⁶² A model of governance ensuring the participation of a plurality of actors.

¹⁶³ Reference to the KATARSIS FP6 Coordination Action in Tosics, Iván, issue paper, Cities of tomorrow, January 2011.

Resident empowerment and participation in deprived neighbourhoods in Berlin¹⁶⁴

Berlin faced massive flows of in- and out-migration in the years following the fall of the Iron Curtain.

1.7 million people left the city and as many people moved in, until every second inhabitant was a newcomer in a city of around 3.4 million people.

The massive population flows resulted in a growing impoverishment of the inner city as wealthy people moved to the outskirts of the city. To remedy this, the city set up the 'Soziale Stadt' programme aimed at the revitalisation of deprived neighbourhoods in districts with special development needs. Thirty-four intervention areas with a total population of 390000 inhabitants – more than a tenth of Berliners – were established. The programme is funded by the Land, the European Union and the State.

The programme is aimed at fostering participation, activation and empowerment and is based on a series of principles, notably:

 focus on the needs, opportunities and resources of the residents and their living environment;

- intensive and interdisciplinary cooperation involving local interest groups and local stakeholders;
- a change in perspective target-group-specific scope is extended to include territorial reference with a focus on the social situation;
- common learning, innovation and development process.

Formal structures with resident participation, or *Quartiersräte,* have been put into place. These area councils are responsible for deciding local budgets, 75% of which have been devoted to the development of socio-cultural projects (compared to 25% only as an average for the whole 'Soziale Stadt' programme).

The positive impact of giving local residents greater responsibility has led inter alia to a new definition of tasks to be achieved by the boroughs and by the Senate Department for Urban Development. New forms of cooperation between the boroughs and the Senate administration have been developed, as well as a regular dialogue on city-wide objectives, local needs and territorial sets of priorities.



164 Klikar, Clemens, Workshop 3 Cities of tomorrow – How to make it happen? Brussels, December 2010.

PLAINE COMMUNE – Area-based approach to encourage businesses to provide jobs to locals in deprived areas in transition

Plaine Commune (346 209 inhabitants – 2007 data) is one of the many metropolitan government structures set up since 1999 to facilitate joint work between local authorities, and one of the most prominent ones in the capital region. Eight municipalities in the Seine-Saint-Denis *département* are part of Plaine Commune: Aubervilliers, Epinaysur-Seine, La Courneuve, l'Île-Saint-Denis, Pierrefitte, Saint-Denis, Stains, Villetaneuse. It is located in an area characterised by much poverty, unemployment, low-skilled workers and economic relocation.

Plaine Commune had a strategy of attracting large firms from the service industry, however such firms do not typically recruit low-skilled workers. Another problem was unbalanced urban development between different areas. Plaine Commune thus developed a new strategy to improve access to jobs with new businesses coming to the area.

One flagship initiative was the set-up of job-search resource centres (Maisons pour l'Emploi) in each of the eight municipalities, backed by the ERDF. Charters have also been signed by Plaine Commune and about 100 companies for specific actions aimed at social cohesion. In April 2011, the large *LE MILLÉNAIRE* shopping centre opened in the area. According to the Charter signed in 2006, locals should be recruited for 75% of the 700 jobs expected.

The main strength of Plaine Commune's strategy is the will of all local authorities concerned and the supra-local level to work together rather than compete. Other strengths are its capacity to promote synergy between its own administration and businesses, and the strong link between Plaine Commune and residents.



Local development in an urban setting - URBAN I & II

The Urban Pilot Projects and the subsequent URBAN Community Initiative programmes (URBAN I 1994–99 and URBAN II 2000–06) are examples of local-development-approach initiatives supported by the European Union, via the European Regional Development Fund. Local partnerships were encouraged to develop an integrated and innovative approach to tackling the social, economic and environmental challenges of urban areas suffering from multiple deprivations.

The ex-post evaluation of URBAN II found evidence of positive impacts of the local development approaches in programme areas through improved performance in relation to economic, health, crime, education and other data. The stakeholders saw the main benefits of the URBAN programme in the method itself, the promotion of integration, its flexibility, partnership building and its local agenda.

Local development approaches encourage partnerships between public, private and voluntary organisations, providing a powerful tool to mobilise and involve local communities and organisations, as well as citizens. They provide a more integrated and inclusive approach to tackling local challenges, with a focus on the quality, inclusiveness and sustainability of growth strategies. They are particularly relevant in addressing areas hit by multiple disadvantages where traditional regional development tools do not work. They can also be used to support active inclusion, fight poverty, foster social innovation, or design initiatives for the regeneration of deprived areas.

As with any other instrument or approach built on strong bottom-up participation and engagement, local development is dependent on actors having sufficient capacity.

4.5.3. Need for capacity building to ensure full empowerment

In parallel with the increased need for resident mobilisation and participation, there is a tendency for old models of representative democracy to be complemented by more participative modes of democratic engagement and accountability. It can be expected that within new governance frameworks, individual citizens and

communities will take more responsibility for their own welfare and for the local policy processes that shape their lives and the places in which they live. 165

Citizen participation and empowerment raise some questions about democratic legitimacy and the representativeness of those engaged. Weaker or marginalised groups, e.g. the long-term unemployed, single mothers, ethnic minorities or the less-educated, have greater difficulties in expressing their voices. Participation is sometimes mistakenly used to designate information activities. Stronger interest groups or those who are more skilled in making their voice heard may monopolise opinions and act as communication gatekeepers. Outreach methods are, therefore, needed to ensure that participation involves not only active citizens and representatives of the middle classes, but also a higher diversity of actors at the local government and community levels, including people from all socio-economic backgrounds, age groups and from diverse positions in society.

The success of local development approaches relies heavily on individual management capacity and the commitment of project holders and their social networks. The need for capacity building at the local level is especially strong in communities with little or no tradition of civic engagement by citizens and organisations, which is the case in many of the EU-12 Member States.

4.6. Cooperation between cities is key to sustainable European urban development

Cities have competed against and cooperated with each other throughout history. The more recent expansion of cities beyond their cores and their increased connectivity with a much larger territory, has not only increased possibilities for economic (and socio-cultural) exchange, but also increased competition. Today cities compete for foreign and domestic investments, human capital, trade, tourists, etc. This competition often leads to productive emulation processes, but may in some instances be detrimental to economic development and territorial cohesion, as well as leading to a suboptimal use of

resources. There are, for instance, limits to the demand for airports, universities, business parks and large arenas in a given territory.

In a situation of scarce public resources, cooperation around strategic issues such as public services, large development projects, knowledge infrastructure and transport hubs becomes essential for sustainable urban and territorial development. It is, therefore, essential that cities in neighbouring territories engage in 'coopetition' or cooperative competition rather than in plain competition.

'The main challenge for coopetition among EU cities is developing a strategic process of thinking, talking, planning and acting creatively and differently, yet together, towards a sustainable responsible and successful future.' 166

The European added value in trans-national city cooperation

Cross-border cooperation concerns neighbouring cities which belong to the same Functional Urban Area on different sides of national borders. Within cross-border metropolitan regions, cities cooperate on issues such as transport and regional planning, economic development, tourism, culture, research, education and employment. Well-known examples include Lille–Kortrijk–Tournai and Copenhagen–Malmö. Cross-border cooperation also involves cities that belong to a common broader geographical basin with shared features, e.g. Vienna–Bratislava–Gyor–Brno. The cross-border strand of the European Territorial Cooperation Objective supports such cooperation.

Networks of cities also operate at the level of macroregions, such as Baltic, Mediterranean or Atlantic cities. For example, through its fourth priority 'Promoting attractive and competitive cities and regions', the Baltic Sea Region 2007–13 Transnational Cooperation Programme foresees both hard measures, such as investments in infrastructures, as well as softer ones, such as marketing and encouraging synergy between actors to create a 'global integration zone'. The cooperation programme is now closely linked to the broader macroregional EU strategy for the Baltic Sea Region. 168.

Cities also network across Europe to share experience and to learn from each other. The EU networking programme URBACT¹⁶⁹ supports such cooperation in a number of thematic areas such as 'innovation and creativity', 'active inclusion', 'cultural heritage' or 'human capital and entrepreneurship'. This networking stimulates peer learning and reinforces city managers' capacity to confront shared problems and exploit similar potentials.

The European Grouping for Territorial Cooperation (EGTC)¹⁷⁰ is a European legal instrument designed to facilitate and promote cross-border, transnational and interregional cooperation by enabling the public authorities of different Member States to deliver joint services.

¹⁶⁶ Workshop 1 Cities of tomorrow – Urban challenges, Brussels, June 2010.

¹⁶⁷ METROBORDER ESPON Project – Interim Report.

^{168 &}lt;a href="http://ec.europa.eu/regional_policy/cooperation/baltic/index_en.htm">http://ec.europa.eu/regional_policy/cooperation/baltic/index_en.htm.

^{169 &}lt;u>http://urbact.eu</u>.

^{170 &}lt;a href="http://ec.europa.eu/regional_policy/funds/gect/index_en.htm">http://ec.europa.eu/regional_policy/funds/gect/index_en.htm.

Cooperation can take place at different territorial levels depending on the subject. Many local authorities already cooperate to provide school buses, manage multimodal transport systems, collect and treat waste, provide water, etc. Functions shared over greater territories may include universities, major transport nodes, business parks, hospitals, etc. Such inter-municipal cooperation is the basis for the creation of the new, more flexible functional urban area governance entities discussed in section 4.3.

These cooperation entities not only permit the provision of public services with limited resources, but can also ensure territorial development in accordance with the European model of polycentric sustainable development. Urban sprawl, undesirable depopulation and concentration, unsustainable land use, depletion of resources, etc. may be limited by efficient cooperation within a larger functional area. Competitiveness and the viability of economic sectors also depend on efficient coopetition that strengthens both the competitiveness and attractiveness of the larger area. This cooperation may be extended to larger geographic areas with some specific shared features, such as river basins, coastlines or mountain ranges, and concern tourist trails, flooding prevention, etc.

Cooperation may also be oriented towards exploiting particular commonalities or complementarities and can take place over greater geographic distances – for instance between cities hosting clusters belonging to the same value chain or having strengths in complementary research and technology fields. A third form of cooperation occurs when city administrations share intelligence and policy learning to create human capacity-building focused on addressing common urban challenges.

4.7. Conclusions – a strengthening of the European urban development model

The contributions, shared experiences and discussions between academics and urban stakeholders that have taken place in the context of the Cities of tomorrow process have put forward a set of key governance principles of special relevance for the European urban development model.

4.7.1. Governance considerations for the Cities of tomorrow

To meet the challenges of tomorrow, cities have to overcome seemingly conflicting and contradictory objectives and move towards more holistic models of sustainable city development: economic growth has to be reconciled with the sustainable use of natural resources; global competitiveness must be inclusive and favour a local economy; green growth must not exclude marginalised groups; global attractiveness must not be built to the detriment of the socially disadvantaged groups.

The Cities of tomorrow have to deal with challenges in an integrated, holistic way.

Cities need to adopt an integrated and holistic approach in their planning and development, uniting the social, economic, environmental and territorial dimensions of urban development. An implicit approach to addressing challenges already lies in the way they are formulated. For instance, a one-sided focus on CO₂ reduction through technological solutions may lead to a green divide, a situation in which those who are most in need of reducing their energy bill cannot afford the new technology.

An integrated approach in terms of geographic and government scale is also needed. Challenges do not respect administrative boundaries in their manifestations or in the strategies employed to address them and the effects of these strategies. This will require dynamic and flexible governance systems that can adapt to the different territorial scales of the challenges.

The Cities of tomorrow have to match placeand people-based approaches.

An integrated approach cannot deal with places that neglect people or vice versa. Therefore, there has to be a matching of place- and people-based approaches. These approaches are complementary and their link has to be reinforced. A place-based approach is necessary with respect to context sensitivity, freedom of agency and institutional diversity; a people-based approach is

Combining people- and place-based approaches to achieve spatial integration¹⁷¹

Spatial integration can be achieved through three interrelated processes combining place- and people-based approaches: (i) an up-scaling of successful local experiments, such as social innovation, learning methods, intercultural dialogue, etc.; (ii) a re-scaling of different types of urban intervention, e.g. identifying

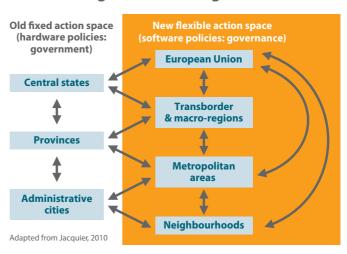
appropriate scale and right timing; (iii) inter-scaling by promoting stable and coherent links of cooperation through negotiation between agents and organisations with different spatial levels of intervention, e.g. neighbourhood, city, city-regional level. This would help to overcome sector perspectives of urban space by the adoption of a more holistic view, promoting collective intelligence and learning focused on daily life problems.

necessary due to civic, political and social citizenship and the paramount importance of offering equal rights for all inhabitants. If places alone are targeted, this often results in a gentrification process, while targeting only people can lead to a worsening of local problems due to unexpected pauperisation processes.

The Cities of tomorrow have to combine formal government structures with flexible informal governance structures as a function of the scale of challenges.

There are many variations of city and city-regional government across Europe. Some are very close to their citizens and favour a more direct democracy. Others operate at a higher territorial scale, are more remote from the citizens but have better capabilities of dealing with complex territorial issues. No local government system or level can be said to be more appropriate than another, as the optimal level depends on the issue at stake. What seems to be increasingly important is the capacity to shift from a government to a governance mode suitable to the scale of the challenges. Such a governance mode must be capable of integrating formal government structures as well as being flexible enough to deal with challenges on different scales.

From fixed to flexible boundaries; from government to governance



To reconcile different long-term objectives, a shared understanding of the present and of possible desirable futures is required – an agreement of a shared vision to strive for and the strategy to get there.

The Cities of tomorrow have to develop governance systems capable of building shared visions reconciling competing objectives and conflicting development models.

Integrated approaches can only be implemented if there are clear visions, clear objectives and political commitment. The contradictory nature of the challenges and the sometimes conflicting objectives of development require a nurtured dialogue between public authorities and the many urban stakeholders, such as households, enterprises, NGOs, associations and other representatives of different social, economic, ethnic or cultural groups. Such dialogue must be able to take into account the different territorial scales of challenges and be able to marry lower governance level strategies with higher ones. In this context, cities can be seen as social platforms for dialogue between different communities and interest groups. Conflicts can then be turned into something positive, becoming levers for social innovation, linking opportunities and needs.

Cities' capacity for long-term strategic planning, strategic information gathering and organisational learning becomes very important, as does their ability to mobilise stakeholders in collective strategy and vision-building processes. The ability of city administrations to manage horizontal cooperation is crucial for vision building, strategic planning and the implementation of integrated approaches. In addition, input indicators have to be complemented with outcome indicators better related to the overall objectives so that real progress and effectiveness of strategies can be measured.

Cities are not isolated islands in a rural territory, but form more or less dense networks. The sustainable development of these networks is essential both for the cities themselves and for the territorial cohesion of the EU.

City cooperation is necessary for coherent spatial development

The development of cities has been followed by a parallel process of expansion around the core cities and increased connectivity with a much larger territory, including other cities. This has increased possibilities not only for economic exchange, but also for more competition between cities, competition for human resources, for tourists, for business investments, etc. This competition can at times be destructive for economic development and territorial cohesion, as well as leading to a suboptimal use of natural resources. Cooperation around strategic issues such as public services, large development projects, knowledge infrastructure and transport hubs becomes essential for a sustainable urban and territorial development.

Cooperation between municipalities has to be facilitated as far as possible through formal and informal settings and not be hindered by legislative constraints that make joint management of services either difficult or impossible. More intellectual forms of cooperation have to be stimulated at a European level.

4.7.2. Towards socially innovative, inclusive and integrated multi-scalar governance

Cities play a crucial role in the daily life of all EU citizens. The future success of the European urban development model is of extreme importance for the economic, social and territorial cohesion of the European Union. It is, therefore, of the utmost importance that cities are allowed to develop in a balanced and socially inclusive way, strengthening their competitiveness and attractiveness without negatively impacting on the wider development of the territory.

Cities' role in the implementation of the Europe 2020 strategy has been emphasised both at the European level as well by the cities themselves. This role cannot be overstated. Not only are cities the best-placed actors to implement sustainable solutions to reduce CO₂ emissions or to ensure that growth is inclusive, they are also the actors that have to reconcile the contradictions and tensions in between the objectives.

Cities have to adopt socially innovative, inclusive and integrated multi-scalar governance that is able to transform tensions into opportunities: tensions between competing

or contradictory objectives; between sectoral interests; between different interest groups or communities; between different governance levels; between different competing territories; and between short, medium and long-term visions. As such, cities become platforms not only for economic, technological or environmental innovation, but, most of all, also for social innovation.

But cities cannot do this in isolation. National regulation and policies must acknowledge and facilitate the economic, social, environmental and not least territorial role of cities. Without multi-level governance frameworks and strong higher-level urban policies conducive to an integrated territorial approach, cities will be hard-pressed to effectively tackle the challenges ahead. The European level can act as a facilitator and make sure that the territorial dimension is fully taken into account by its policies, but the successful implementation of the Leipzig Charter, the Toledo Declaration and the Territorial Agenda 2020 relies heavily on national and regional governments.

Conclusions



This report has gone through three steps: demonstrating that there is a European model of urban development (Chapter 1); discussing the major strengths, weaknesses, opportunities and threats to this model (chapters 2 and 3); and focusing on the governance challenges of our Cities of tomorrow (Chapter 4).

The conclusions support the main urban and territorial development principles, priorities and objectives that have been expressed through the Leipzig Charter, the Toledo Declaration and the Territorial Agenda 2020, underlining the importance of **a stronger territorial dimension** in future cohesion policy. The report supports the key objectives of the Europe 2020 strategy, but points to the need for integrated, coherent and holistic approaches across sectors, governance levels and territories.

Social, economic and environmental challenges have to be addressed both at neighbourhood level and in broader territorial contexts. Cities can no longer be defined solely by their administrative boundaries, nor can urban policies target only city-level administrative units. Attention has to be paid to the necessary complementarities between functional approaches - at the level of larger agglomerations and metropolises - and social and cultural approaches involving citizens' engagement and empowerment - at the level of neighbourhoods. Both the broader territorial reality and the internal urban form have to be taken into

account. Urban policies will have to ensure coherence between sectoral initiatives with spatial impacts and placebased initiatives.

To fulfil such objectives, **fixed coordination mechanisms have to be complemented by flexible ones** to ensure dialogue and cooperation between territorial and

governmental levels, as well as between sectors concerned by urban development. Tensions between different interests will have to be overcome. Compromises will have to be negotiated between competing objectives and conflicting development models. **A shared vision** is important to sustain such dialogue.

A solid knowledge base is needed to underpin a shared understanding of development potentials – a must, before any vision of the future can be elaborated. Such knowledge cannot be derived solely from experts but needs to be understood and sometimes even co-produced by all those concerned. In addition to improving the availability and comparability of territorial data and knowledge based on sources such as ESPON, the Urban Audit and Urban Atlas, there are needs for less tangible data. Stakeholders' and citizens' involvement is essential for asking the right

'[...] I believe that in the current economic turmoil, where the financial crisis has already had serious consequences on employment and public budgets, we have to mobilise all our strengths to alleviate the negative impacts on the most vulnerable populations. Social innovation is not a panacea but if encouraged and valued it can bring immediate solutions to the pressing social issues with which citizens are confronted. In the long term, I see social innovation as part of the new culture of empowerment that we are trying to promote with a number of our initiatives, starting with the Renewed Social Agenda. [...]'

José Manuel Barroso, President of the European Commission, 31 March 2009

questions, measuring the right things, creating ownership of strategies and mobilising endogenous potential.

Strategies will have to **take into account the diversity of cities**: their development paths, their size, their demographic and social contexts, and their cultural and economic assets. For example, it will be important to

examine the relevance of smart specialisation strategies in those cities or regions which face specific difficulties due to the convergence of demographic, economic and social difficulties.

Innovation will have to be fostered to support a transition towards Cities of tomorrow. Cities of tomorrow should be diverse, cohesive and attractive cities, they should be green and healthy, and they should be places for a resilient and inclusive economy. The potential of socioeconomic, cultural, generational and ethnic diversity should be fully exploited as a source of innovation. Innovation strategies have to be manifold, addressing services and technology as well as institutional and social innovation.

Innovation will also have to address organisational and institutional issues as new forms of governance will be required to tackle the complexity of the challenges ahead. Linking to social innovation, the question of **values and ethics** has been underlined by several experts during the reflection process.

Inclusive growth strategies will have to overcome the negative consequences of the decoupling of economic growth from social development and address vicious circles of demographic and economic decline that an increasing number of European cities will face in the coming years. A coherent approach to smart, inclusive and green growth strategies must be adopted so that conflicts and contradictions between these different objectives can be overcome and accomplishment of one objective is not detrimental to meeting others.

Lack of financial resources, low fiscal or regulatory power, or insufficient endogenous development potential make it difficult for many European cities to develop in a harmonious and sustainable way, following the ideal model of attractiveness and growth. **Shrinking cities may have to redefine their economic basis** and manage transitions towards new forms of economic, social and spatial organisation.

In addition, if current trends continue, **social exclusion** and increasing spatial segregation will affect a growing number of regions and cities, including the richer ones. Pockets of poverty and deprivation already exist in the wealthiest of European cities and "energy poverty" hits the most vulnerable groups, especially in cities with poor or obsolescent housing stock.

There is a strong political rationale for paying special attention to deprived neighbourhoods within the context of the city and larger territory as a whole, as underlined by the Leipzig Charter and by the Toledo Declaration. Education and training play a crucial role in permitting social and spatial mobility and stimulating employment and entrepreneurship - this report also underlines the importance of social capital, which goes beyond education and training and includes relational skills. But social inclusion should not be an aim only for 'people-based' policies; people-based approaches need to be combined with place-based ones. Addressing only 'people' can help people to move away from problems and further impoverish disadvantaged neighbourhoods; addressing only 'place' may either displace the problem or have lock-in effects on local communities.

As already underlined by the Toledo Declaration, this report points to the strategic role of **integrated urban regeneration**, framed in the broader concept of integrated urban development, as one important perspective for achieving a series of objectives, such as: ensuring citizens' participation and stakeholders' involvement in working towards a 'more sustainable and socially inclusive model in the whole built environment and in all the social fabrics of the existing city'¹⁷²; addressing climate change, demographic change and mobility as major urban challenges; ensuring greater coherence between territorial and urban issues; and promoting a common understanding of the integrated approach.

This report points to recommendations of Territorial Agenda 2020 with respect to framing urban development in a territorial context linked to the Europe 2020 strategy and promoting a balanced polycentric territorial development and the use of integrated development approaches in cities, rural and specific regions.

One of the challenges in a harmonious territorial development of Europe, as identified by TA2020, is the quick pace of land takeover due to the spread of low-density settlements, i.e., **urban sprawl**. Strategies for **recycling land** (urban regeneration, redevelopment or reuse of abandoned, derelict or unused areas) have already been developed in the context of cohesion policy and may play a key role in the future, as may other green strategies, such as the development of green belts and/or corridors, the **greening of the city** and fostering of family-and elderly-friendly cities via public spaces and services for all, while improving the management of energy and material resources and flows in the city (urban metabolism, recycling, local energy solutions).

In line with TA2020, this report also emphasises the need for territorial integration in cross-border and transnational functional regions and highlights the importance of improving territorial connectivity and cooperation between European cities.

Cities cannot be defined solely by their administrative boundaries, nor can urban policies target only citylevel administrative units. The importance of **multilevel** **governance** has been strongly underlined by the European Parliament and the Committee of the Regions. This is completely in line with the conclusions of this report: European, national, regional and local policies need to be articulated with each other.

This report takes the concept of multilevel governance further. Policies addressing neighbourhoods need to be articulated with policies addressing not only larger agglomerations or territories in which cities are embedded, but also neighbouring areas. The subsidiarity principle that has been strengthened by the Lisbon Treaty implies not only that a higher governance level is being replaced by a lower one, but also that **new relations are being forged between different levels**, e.g. between the European and the local levels. The range of actors involved in policymaking and policy-shaping needs to be widened to include diverse stakeholders, including citizens. In essence, policies have to operate in a **multiscalar governance framework**.

It is the responsibility of all governance levels to ensure that the full potential of cities and urban agglomerations can be exploited to the benefit of all European citizens. **Europe's future depends on our Cities of tomorrow**.

Annexes

Chapter 1 - Annex 1

Administrative, morphological and functional urban areas of large European cities

	Pop adm city	Pop MUA	Ratio MUA/city	Pop FUA	Ratio FUA/city
London	7.43	8.27	1.1	13.71	1.8
Paris	2.18	9.59	4.4	11.18	5.1
Madrid	3.26	4.96	1.5	5.26	1.6
Barcelona	1.58	3.66	2.3	4.25	2.7
Milan	1.30	3.70	2.8	4.09	3.1
Berlin	3.44	3.78	1.1	4.02	1.2
Birmingham	0.99	2.36	2.4	3.68	3.7
Rome	2.55	2.53	1.0	3.19	1.3
Katowice	0.32	2.28	7.1	3.03	9.5
Warsaw	1.69	2.00	1.2	2.79	1.7
Frankfurt	0.65	1.46	2.2	2.76	4.2
Lisbon	0.53	2.32	4.4	2.59	4.9
Lille	0.23	0.95	4.1	2.59	11.3
Vienna	1.60	1.67	1.0	2.58	1.6
Manchester	0.44	2.21	5.0	2.56	5.8
Budapest	1.70	2.12	1.2	2.52	1.5
Liverpool	0.44	1.17	2.7	2.24	5.1
Stockholm	0.76	1.48	1.9	2.17	2.9
Bucharest	1.93	2.06	1.1	2.06	1.1
Copenhagen	0.50	1.36	2.7	1.88	3.8
Prague	1.17	1.18	1.0	1.67	1.4
Dublin	0.47	1.07	2.3	1.48	3.1
Amsterdam	0.78	1.05	1.3	1.47	1.9
Rotterdam	0.60	1.03	1.7	1.43	2.4
-lelsinki	0.56	1.07	1.9	1.29	2.3
Oslo	0.60	0.71	1.2	1.04	1.7
Bratislava	0.43	0.44	1.0	0.71	1.7
TOTAL	38.13	66.48	1.7	88.24	2.3

Source: Tosics, Iván

Chapter 1 - Annex 2

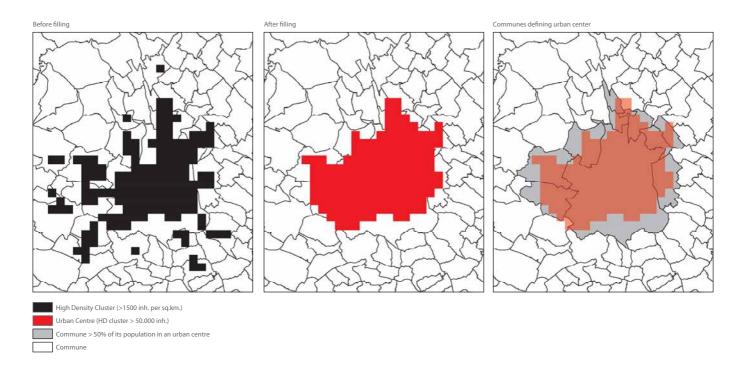
A definition of a city

The lack of a harmonised definition of a city and its functional area has hindered the analysis of cities in Europe. In cooperation with the OECD, the European Commission has developed a relatively simple and harmonised definition:

- A city consists of one or more municipalities (local administrative unit level 2 LAU2).
- At least half of the city residents live in an urban centre (image 1.3).
- An urban centre has at least 50 000 inhabitants. It consists of a high-density cluster of contiguous ¹⁷³ grid cells of 1 km² with a density of at least 1 500 inhabitants per km² (image 1.1.), as well as filled gaps ¹⁷⁴ (image 1.2).

Images 1.1, 1.2 and 1.3: How to define a city

High-density cluster, urban centre and city (Toulouse)



Once all cities have been defined, a functional area can be identified based on commuting patterns using the following steps:

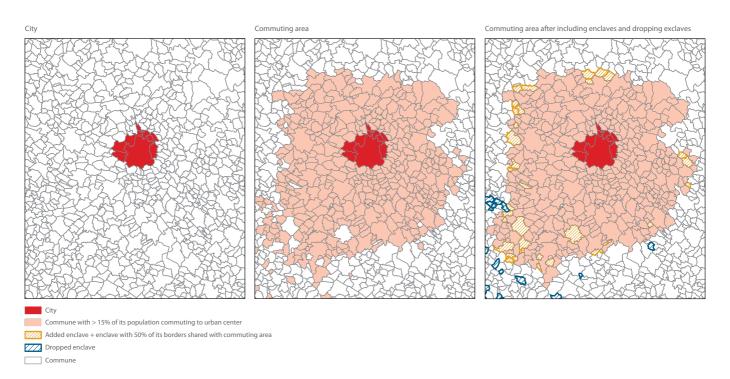
- If 15% of employed people living in one city work in another city, these cities are combined into a single destination.
- All municipalities with at least 15% of their employed residents working in a city are identified (image 2.2)
- Municipalities surrounded ¹⁷⁵ by a single functional area are included and non-contiguous municipalities are dropped (image 2.3).

¹⁷³ Contiguity for high-density clusters does not include the diagonal (i.e. cells with only the corners touching).

Gaps in the high-density cluster are filled using the majority rule iteratively. The majority rule means that if at least five out of the eight cells surrounding a cell belong to the same high-density cluster, it will be added. This is repeated until no more cells are added.

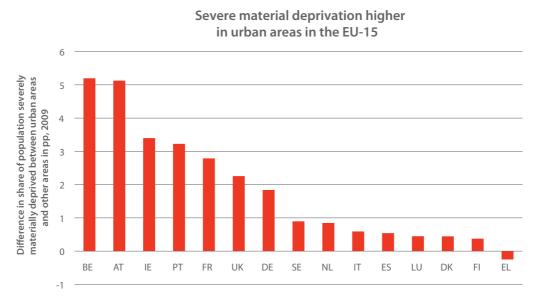
¹⁷⁵ Surrounded is defined as sharing at least 50% of its border with the functional area. This is applied iteratively until no more LAU2s are added.

City and its commuting zone (Toulouse)



Chapter 2 - Annex 1

Figure 5 Difference in share of severely materially deprived individuals in the urban population compared to this share in the rest of the population in EU-15 Member States (in percentage points), 2009



Source: EU-SILC (Survey on Income and Living Conditions)¹⁷⁶

Chapter 4 - Annex 1

What the experts say – can we agree on core European values, visions and objectives?

Yes!

 a precondition for everything else; a necessity; without agreeing on a minimum set of common values, there is no possibility of any European policy; values already present in the definition of challenges.

Well...

core values maybe, but visions and objectives...?

No!

- doubt over the possibility of defining core European values and visions when ideological orientations are so eroded;
- maybe among experts, impossible at general level; educated 'policy-makers' and 'experts' might agree on 'core' values but disagree on the political/economic interpretation of these...; outside this circle there will be much less agreement, for political, ethical, theological, cultural, etc. reasons; values maybe, but visions and objectives...?

What shared values?

Liberté, égalité, fraternité...

- Enlightenment and French Revolution: Freedom, Equality and Solidarity;
- liberty in economic initiative, in culture creation, in ordinary life, in sexual orientation, in opinion, in religion, combined with a struggle towards equality in respect of differences, avoiding discrimination;
- a balance between individual freedom and social (societal) responsibility;
- the principles and rights enshrined in the European Convention on Human Rights and now the Charter of Fundamental Rights.

... and diversity

- equality-related coordinated policies should enable Europeans to be free to live their diversities;
- European diversity must be seen as an asset in this regard which has to be a central part of a European strategy.

What shared objectives?

Europe 2020

 the common pillars on which we can agree are: economic, social and environmental dimensions (sustainability). The framework for common objectives represents the EU 2020 strategy; smart, sustainable and inclusive growth.

Quality of life and inclusion

 a decent quality of life for ALL EU citizens and the fight against exclusion and poverty in our society; ensure social integration (solidarity); seek decent employment for all (quality of life).

Environment

avoid irretrievable spatial and environmental damage (sustainability); reduce the maximum amount of environmental pollution (public health).

Urban innovation and creativity

• fostering innovation in all spheres of urban life (creativity).

Governance

 implement the Europe-wide shared understanding of the balance between individual freedom and collective responsibility; mutual recognition and division of labour and governance tasks between local (urban), regional, national and EU levels, i.e. multilevel governance.

Chapter 4 - Annex 2

What the experts say – what are the main obstacles to reaching (shared European) objectives?

Lack of (coherent) visions and political will; hegemony

- absence of political will and of a long-term perspective in EU policy-making; no ownership of objectives at sub-European level; with respect to political organisation, we need to foster innovative forms of participation and democracy;
- values sometimes in opposition (e.g. urban diversity and equal social rights);
- trend of imposing hegemonic interest, presenting
 it as public interest; some interests will always
 prevail strongly over others, and some ideas, visions
 and objectives will be distorted in favour of some
 interests.

Erosion of the welfare state and solidarity

- combination of inequality-related policies and postdemocracy; liberalisation leading to destruction of social tissue; dominance of economic considerations (in the narrow sense of just-for-profit); the (resulting) disappearance of the welfare state and shift of burden to the local level ('devolution') without the required resources;
- general demographic, economic, social trends the disequilibrium between age groups, the polarisation of the labour market (disappearance of the middleskilled group), the weakening of organic forms of solidarity and their replacement by new mechanic forms (top-down control);
- attitudes: xenophobia, racism, de-secularisation (religion and ideologies gaining in importance over the 'republican' ideal).

Lack of innovation in administrations and regulation

- imbalance in regulations incentives and sanctions designed for specific situations while the situation in the field is more complex, which creates blockages; procedures are not serving the principles and objectives – actors involved end up discussing regulations that make their life impossible and not visions and European objectives;
- fear of (social) innovation in administrations: (better
 to fly on 'automatic pilot' and to rely on bureaucratic
 routines); thinking in stereotypes (lack of time,
 expertise and willingness to get a grip on what urban
 governance really could mean); inertia and 'business
 as usual' treatment of European funds by national and
 regional authorities.

Material and immaterial means

- differences in financial means and experience between Member States; unequal distribution of opportunities and wealth across and within regions;
- legal powers and resources are not sufficient to secure public wealth/services vis-à-vis global economic powers, which do not take an adequate part of the responsibility.

Communication

- the European project depends not only on a common market, but also on a society where individual groups understand each other – a long-term process;
- lack of understanding communication is slow and confined to the upper levels, professional language tends to be too coded, local levels cannot follow the discussions;
- lack of a clear, urban-oriented message from the EU.

Chapter 4 - Annex 3

What the experts say – what are the opportunities provided for and offered by cities in relation to the challenges, visions and European objectives?

'We have an amazing opportunity to show a leading example to the world of what I feel will be an extraordinary, wide-ranging and deep social and political transformation during the next 10–20 years'

Where things happen

- geography (this is where challenges and opportunities exist), human capital, leadership, integrity (accountability), innovation, local knowledge, integrated approaches; cities are not only territories, but also hubs and nodes in a global or regional system or network;
- engines of growth, places of creativity and innovation, key nodes of command and control in private and public spheres, concentrations of human capital, the core place of social networks; can show the way forward, can reach critical mass, can provide flexible, local, comprehensive approaches to economic development;
- encourage knowledge alliances combining several kinds of 'savoirs'; tackle together the energy and urban renewal challenges.

Quality of life

- effective management of public money, more local jobs, mobilised private investments, high quality environment and life for citizens, active participation of local stakeholders and citizens in policy-making and implementation, boost for other sectors (e.g. education, culture, etc.);
- can influence the quality of life for their citizens, enabling democratic involvement of as many citizens as possible in defining 'good life', designing appropriate holistic concepts and implementing the relevant policies.

Platforms for participation and citizenship

- at city level, participative democracy and representative democracy can be combined in efficient schemes; a platform (in the sense of place/community) where public interest can be defined in a concrete way based on daily life problems and relations between people at neighbourhood level;
- to articulate the short-term objectives of social cohesion actions (political agendas) vs. the long-term of community/place dynamics; to understand the different degrees of priority and the sense of urgency; to function as a guarantee for social commitments on the basis of mutual confidence.

Platform for negotiation

- a 'negotiated city' which permits negotiation between apparently opposing values and visions; cities can be arenas for social conflict and contradiction; mobilise citizens and negotiate with the private sector, merge top-down with bottom-up and create true participation;
- cities as shared spaces are the stage for the desirable renewal of shared responsibility embedded in concept governance, so as to have a substantive base for dialogue and negotiation between different city social and cultural groups, organisations and institutions whose visions and actions are developed in a shared urban space.

Laboratories

 process of comparisons of various models of European cities, transfers of not only technical solutions but also social solutions, diversity being an asset e.g. a big laboratory; cities can be testing grounds for new policy directions from higher levels; cities can be laboratories for social and cultural innovation; capacity to develop new political models, including, but not only, participation mechanisms.

List of figures, maps and tables

Мар 1	Population density in Europe, 2001	3
Table 1	Defining cities according to density of the population	3
Figure 1	Job losses in cities due to the economic crisis	21
Figure 2	Trends in the use of material resources in the EU-15 and in the recently acceded EU-12 countries compared with GDP and population (EEA, 2010a)	28
Figure 3	Proportion of city income derived from local taxation	30
Figure 4	Understanding a city's development potential	49
Table 2	Alternative ways of understanding and describing reality	62
Table 3	Examples of city foresights	79
Figure 5	Difference in share of severely materially deprived individuals in the urban population compared to this share in the rest of the population in EU-15 Member States (in percentage points), 2009	96

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