

# Smart, Green and Inclusive Urban Growth: Visualising Recent Developments in European Cities

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## 1 ABSTRACT

Cities are expected to play a key role in delivering the Europe 2020 strategy for smart, green and inclusive growth. Concerning smart growth, cities are at the forefront of innovation. Moreover, the physical concentration of people, capital and business opportunities means that cities are more productive than other places. In relation to green growth, healthy, compact and energy-efficient cities are key to achieving sustainability in Europe. Many European cities are currently developing or expanding their networks for walking, cycling, public transport, waste management, district heating and green infrastructures. Finally, cities can contribute to inclusive growth. For example, by combating social polarisation and poverty, by providing affordable housing and by integrating refugees and migrants.

In the context of the Urban Agenda for the EU and the Dutch EU presidency in the first half of 2016, the PBL Netherlands Environmental Assessment Agency has recently published ‘Cities in Europe’ (PBL, 2016), a publication that visualises facts and figures concerning recent urban developments in relationship to smart, green and inclusive growth in the European Union.

Based on the harmonised definition of urban areas by Eurostat and the OECD (OECD, 2012), European cities are compared with each other and recent trends are described, such as those in migration, risk of urban poverty and urban-rural divergence in employment growth. Furthermore, the following questions are being explored: which cities have shown strong growth in population, GDP and employment? Are the growth rates related to the size of the agglomerations? In which cities is the population showing high levels of satisfaction about quality of life? And which cities are falling behind? What types of territorial patterns can be distinguished? This paper summarises the main findings of the publication and presents a number of infographics that give insight into the scale, dimension and relationships of urban developments in Europe.

## 2 INTRODUCTION

European cities are vital to the future of Europe. As stated in the Leipzig Charter on Sustainable European Cities (European Union, 2007), cities ‘possess unique cultural and architectural qualities, strong forces of social inclusion and exceptional possibilities for economic development’. Moreover, cities are centres of power, knowledge, innovation and integration. It is also in cities that great strides towards sustainability can be made, as their density allows for more energy-efficient forms of housing, transport and service provision. Many cities in Europe show serious ambitions and efforts to reduce greenhouse gas emissions. At the same time, however, these same cities often lack affordable housing and suffer from concentrations of unemployment and poverty. Furthermore, many cities have difficulties in dealing with traffic congestion, poor air quality and the effects of climate change (e.g. heat and heavy rainfall).

### 2.1 Urban Agenda for the EU

Cities are expected to play a key role in delivering the Europe 2020 strategy for smart, green and inclusive growth (European Union, 2015). Therefore, the EU’s cohesion policy for the 2014–2020 period seeks to support towns and cities through a range of European investment priorities, such as urban mobility, economic and social regeneration, the digital agenda, improvements in research and innovation capacity, and the low-carbon economy.

In the past years, the European Commission, EU Member States and European cities have collaborated to develop an Urban Agenda for the EU. The core objective of this Urban Agenda is to involve cities in the design of EU policy, to mobilise cities for the implementation of EU policies, and to strengthen the urban dimension in these policies. Under the 2016 Dutch EU Presidency, the Urban Agenda for the EU aims to strengthen the urban dimension in EU policies by: (1) improving the development, implementation and evaluation of EU legislation (‘better regulation’); (2) ensuring better access to and utilisation of European funds; and (3) by improving the EU urban knowledge base and stimulating the sharing of best practices and cooperation between cities.

In 2016, the Urban Agenda for the EU is focussing on 12 priority themes (see Figure 1), as well as aiming to promote stronger cooperation between the European Commission, EU Member States and cities in order to stimulate smart, green and inclusive growth in the cities of Europe.

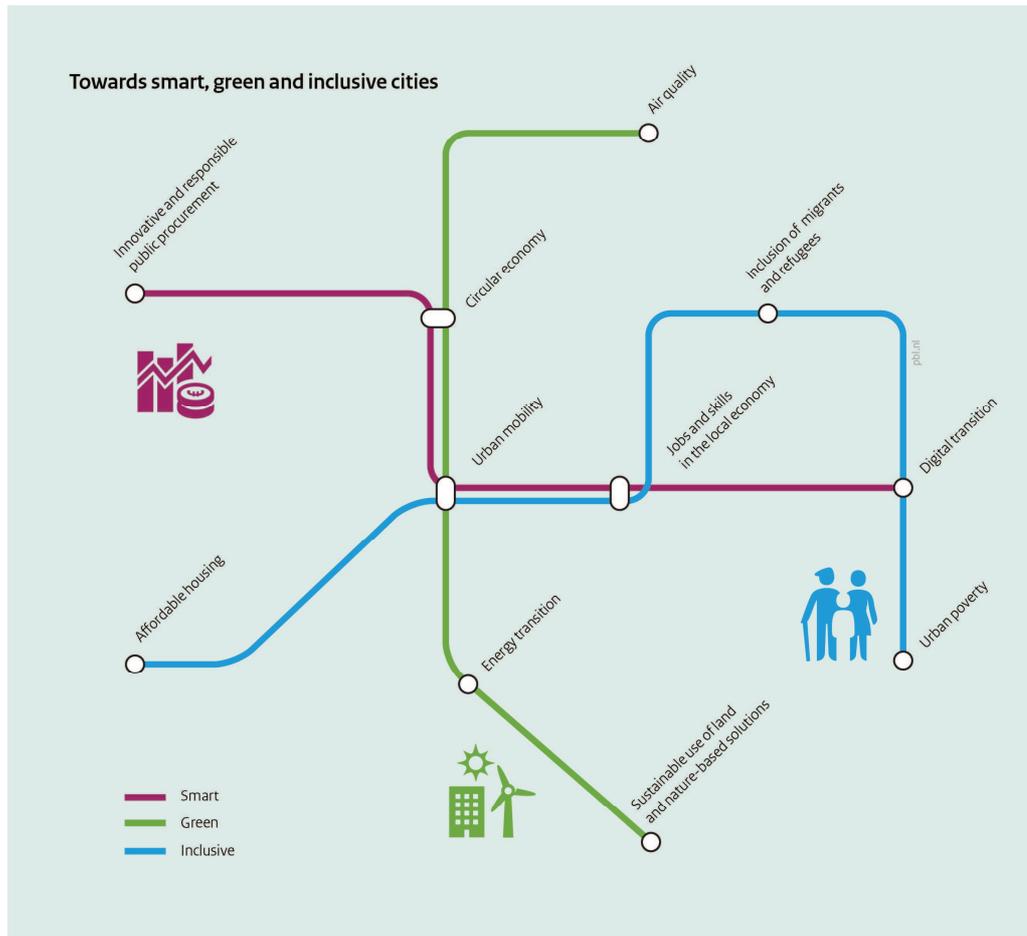


Fig. 1: Twelve themes of priority featured in the Urban Agenda for the EU, 2016.

## 2.2 Visualising data and using infographics

Eurostat and the OECD provide comprehensive databases on urban developments in European cities and urban areas that are accessible by internet. In many cases, however, the data is complex, not easy to find and not always easy to read. The publication ‘Cities in Europe’ (PBL, 2016) contains 13 infographics that show facts and figures on recent urban developments in a compact and comprehensible way. Using infographics is a powerful medium to communicate information and share knowledge with citizens, urban and regional planners and policy makers.

## 3 SMART GROWTH

The 2020 strategy aims to stimulate the transition towards an economy based on knowledge, research and innovation (European Union, 2015b). Cities are centres of knowledge and innovation, and engines of the economy. Metropolitan regions contain 59% of the EU population, but they hold 62% of its jobs and represent 67% of GDP (European Commission, 2014). The concentration of people, capital and business opportunities means that cities are more productive than other places. It is therefore not surprising that cities figure prominently in the EU strategy for jobs and growth. The Urban Agenda for the EU, in particular, aims to include cities in the coordinated growth strategies of Member States and the European Commission. It aims to ensure maximum utilisation of the growth potential of cities.

Many of Europe’s largest cities are also its most affluent (see Figure 2). The megacities of Paris and London rank among those with the highest GDP per capita ratios of the EU, such as Munich, Stockholm and Frankfurt. Still, there is not a clear linear relationship; Helsinki is smaller than Naples, but shows a higher GDP per capita and a stronger economic growth rate. Bigger is therefore not always better. There is much

more at stake, such as the national economy of the country in which they are situated. To a large extent, the geographical distribution of GDP per capita of cities reflects that of regions and countries in Europe.

Cities also differ in growth rate; just as real engines, they are running at different speeds. Again, size not necessarily matters – although Paris and London appear to perform above average – as much as geographical location. In the 2000–2010 period, a north–south divide could be seen, with northern cities generally outperforming those in the south. The most significant growth, however, occurred in central and eastern European cities, particularly in Poland. Some of this difference can be attributed to a lower starting point, but also to the EU’s Cohesion Policy, under which especially new recipients are eligible to receive high European subsidies.



Fig. 2: Infographic on GDP per capita growth in European metropolitan areas (source: OECD, adaptation by PBL)

#### 4 GREEN GROWTH

With the growing awareness of the consequences of climate change, the EU has committed itself to limiting greenhouse gas emissions and reducing the consumption of fossil fuels (European Union, 2015b). The Europe 2020 strategy has renewed the EU’s commitment to become a ‘low-carbon’ economy where, by 2050, greenhouse gas emissions will be 80% to 90% lower than they were in 1990. Among other initiatives, European Cohesion Policy funding is being reallocated to support the production of renewable energy and improve energy efficiency.

Cities can be instrumental in the transition towards a low-carbon economy. They are significantly more efficient in terms of energy use and land use than other areas (European Commission, 2014). Household energy consumption in cities tends to be lower because a larger proportion of people live in apartments or terraced housing, both of which are more efficient in terms of heating than freestanding houses. Cities are also more energy efficient as regards transportation. Due to the shorter distances, walking and cycling are more attractive options in towns and cities than in other areas. There is also a higher demand for public transport which makes it more cost-effective to offer high-quality services, such as underground rail. A growing number of European cities and urban regions are already making serious efforts to reduce their greenhouse gas emissions; for example, by implementing more renewable energy or expanding their district heating networks (see Figure 3).

Despite the lofty ambitions of Europe’s cities to become greener, simply reducing emissions in urban areas will not be sufficient to stop global warming. Cities provide fertile ground for innovation and creativity (UNEP, 2013), but because large-scale energy infrastructures are interconnected and government and governance structures are interdependent, coordinated multi-level innovation strategies are needed so that lessons can be shared with other metropolitan regions and across national borders.



Fig. 3: Infographic on CO2 emissions and policy ambitions in six European metropolitan areas (source: OECD, adaptation by PBL)

### 5 INCLUSIVE GROWTH

Europe's population is growing, not only as a result of natural processes (more births than deaths), but also because of immigration (from outside Europe). Over the last few years, Europe has experienced a large influx of people. As a consequence of the geopolitical instability in the Middle East and Africa, immigration and refugee flows into Europe have increased, and this has had a significant impact on European countries and cities. People also migrate within the EU. For example, because of disparities in employment and income levels, inhabitants of central and eastern Member States have moved to those in the west (Espou, 2015; European Commission, 2014).

Migration, in general, and the current refugee flows into Europe, in particular, have clear territorial and urban dimensions. The main cause of the EU's population growth is net immigration (see Figure 4). Between 2001 and 2011, the EU's total population (EU-28) increased by 3.8%, with net immigration accounting for 3% of this. Natural population change was only 0.7% (European Commission, 2014).

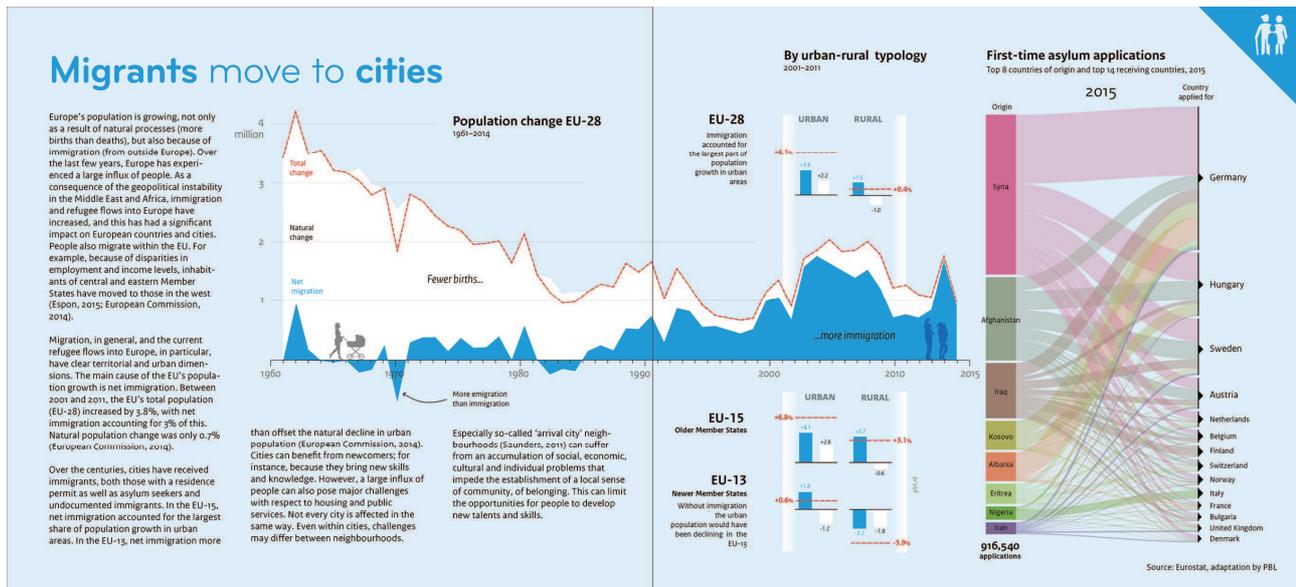


Fig 4. Infographic on population change and flows of refugees in Europe (source: Eurostat, adaptation by PBL)

Over the centuries, cities have received immigrants, both those with a residence permit as well as asylum seekers and undocumented immigrants. In the EU-15, net immigration accounted for the largest share of population growth in urban areas. In the EU-13, net immigration more than offset the natural decline in urban population (European Commission, 2014). Cities can benefit from newcomers; for instance, because

they bring new skills and knowledge. However, a large influx of people can also pose major challenges with respect to housing and public services. Not every city is affected in the same way. Even within cities, challenges may differ between neighbourhoods. Especially so-called ‘arrival city’ neighbourhoods (Saunders, 2011) can suffer from an accumulation of social, economic, cultural and individual problems that impede the establishment of a local sense of community, of belonging. This can limit the opportunities for people to develop new talents and skills.

## 6 CONCLUSIONS

Cities are economic powerhouses, places of social interaction and fora that enable us to exchange ideas. Cities, however, are also the places where some of our biggest challenges manifest themselves. In this ‘urban age’ cities are becoming increasingly aware of their responsibilities as well as their capacities to play their part in addressing issues like poverty, segregation, and climate change adaptation. Some cities aim to take the lead by setting ambitious targets and by experimenting with innovative approaches that can be shared across borders. Additionally, the European Union and its Member States increasingly look to cities to put their policies into practice.

Given the complexities of the challenges facing us, we need to explore the opportunities for cross-border collaboration and multi-level coordination. Exploration of new strategies, plans and practices requires, among other things, high-quality data, thorough analysis and clear communication. Visualising information, e.g. by using infographics or interactive websites, can play a vital part in creating and sharing knowledge. In this era of networked knowledge production, bringing statistics to life is indispensable for effective policy-making and informing and involving stakeholders and the public at large, in cities, countries and Europe as a whole.

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