Towards greener cities

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, 2015). 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. 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.

CO₂ emissions per metropolitan area
Per inhabitant in 2008
Source: OECD Metropolitan Explorer; TRANSFORM, adaptation by PBL

Policy ambition: 40% greenhouse gas reduction (by 2025), baseline 1990
Amsterdam

Policy ambition: 23.7% greenhouse gas reduction (by 2020), baseline 2005
Copenhagen

Policy ambition: 40% greenhouse gas reduction (by 2020), baseline 2000
Vienna

Policy ambition: 20% greenhouse gas reduction (by 2020), baseline 2000
Lyon

Policy ambition: 40% greenhouse gas reduction (by 2025), baseline 1990
Genoa

Policy ambition: 21% greenhouse gas reduction (by 2020), baseline 1990
Hamburg

Europe 2020 targets for green growth
The Europe 2020 strategy sets three objectives for climate and energy policy, to be reached by 2020:
- Reducing greenhouse gas emissions by at least 20% compared with 1990 levels
- Increasing the share of renewable energy in final energy consumption to 20%.
- Moving towards a 20% increase in energy efficiency

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.

Towards greener cities

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, 2015). 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. 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.