Cities leading the way to a better future

State of European Cities Report, 2016

By Lewis Dijkstra
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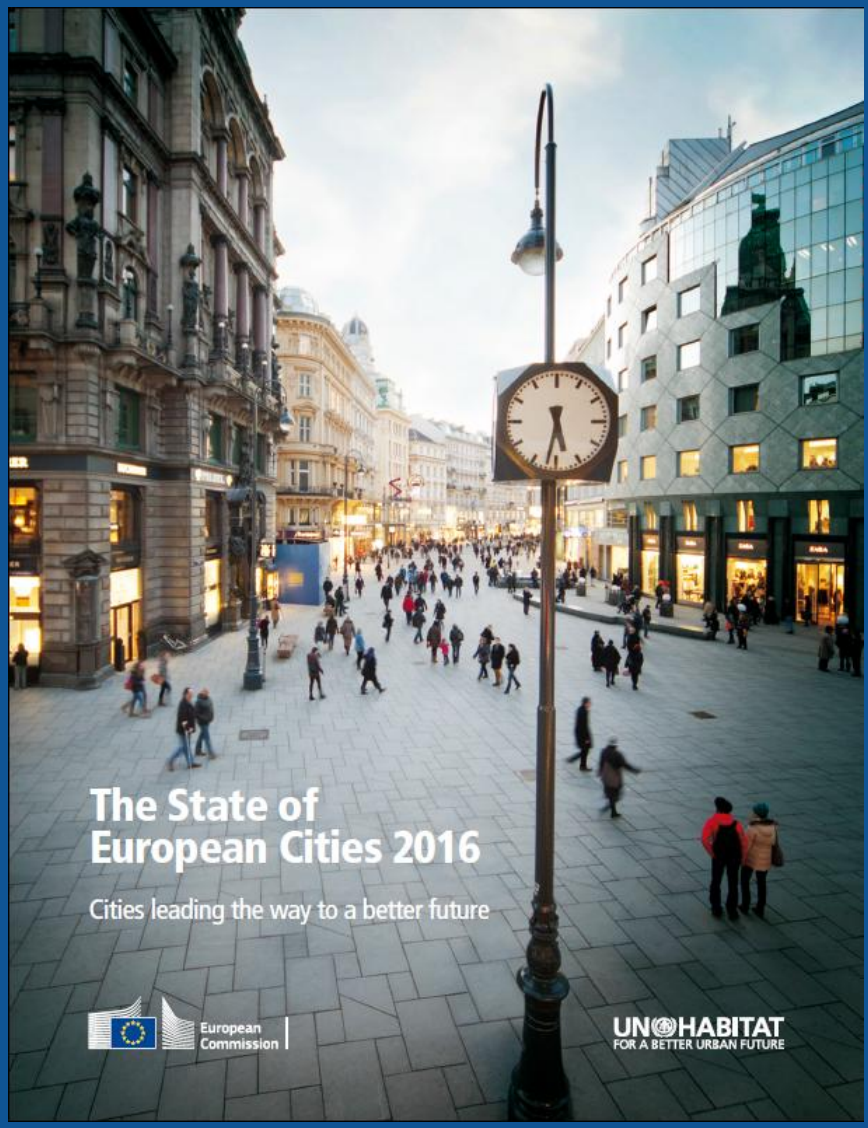
Economic Analysis Unit,
DG Regional and Urban Policy
European Commission



Regional & Urban Policy

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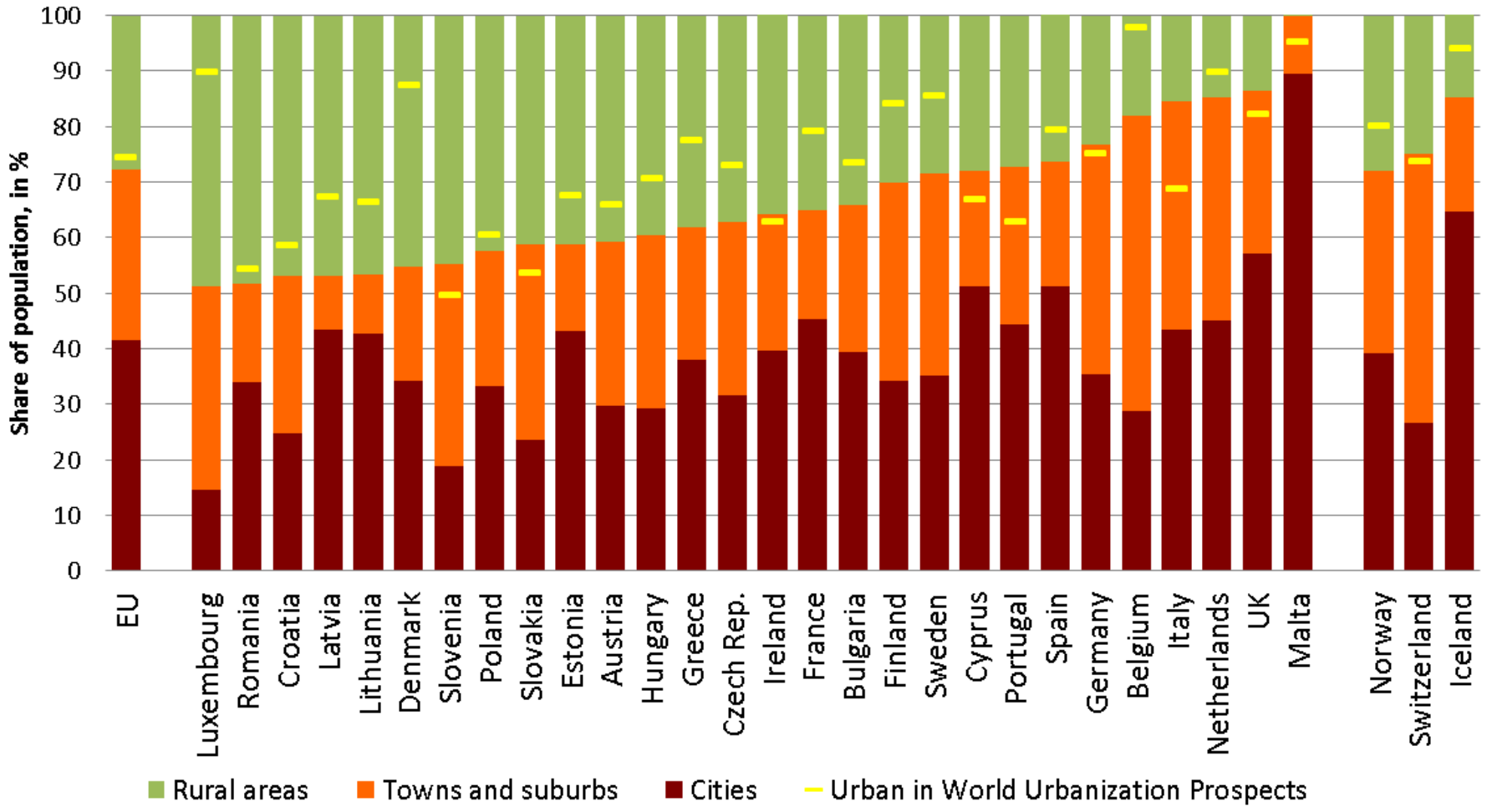
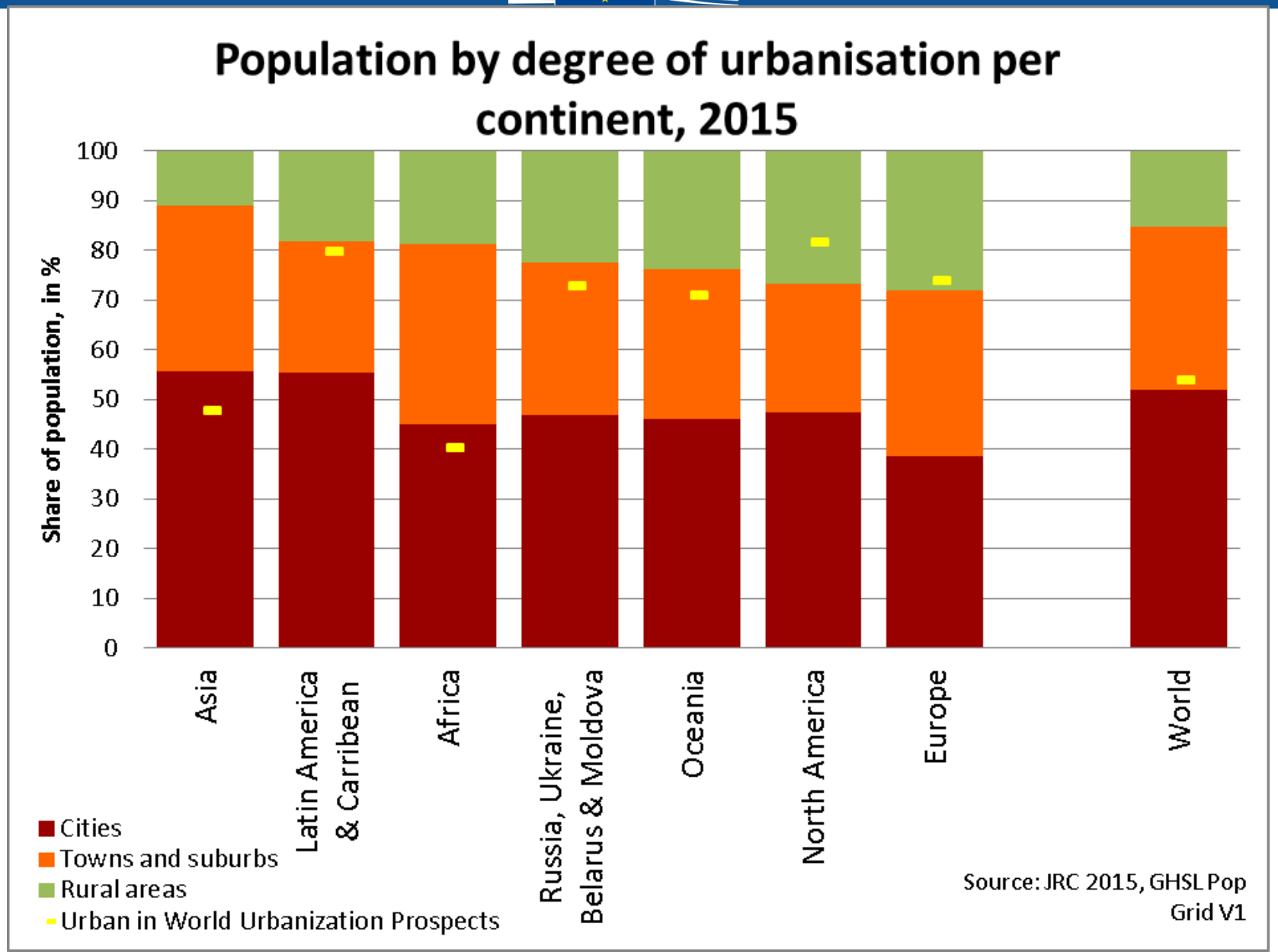
Goals of the report

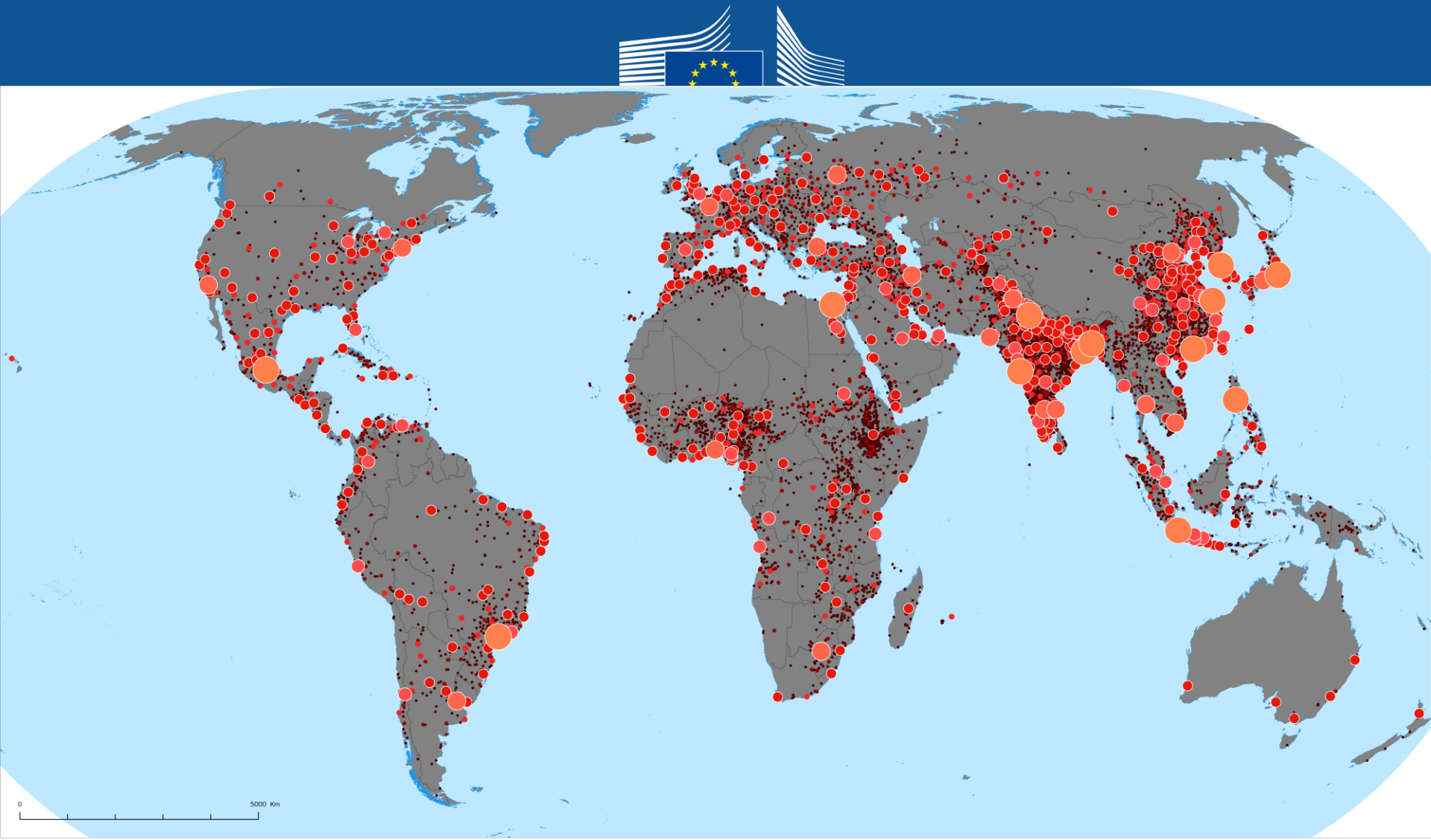
- *Help Urban Agenda for the EU (Better knowledge and data) and its partnerships (air quality, housing, migration, poverty,….)*
- *Support the New Global Urban Agenda*
- *Make it easier for mayors to compare their city and learn from each other (both within Europe and globally)*

Population by degree of urbanisation in Europe, 2014



Source: Eurostat and World Urbanization Propstects, 2014


Population by degree of urbanisation per continent, 2015
Share of population, in %
100
90
80
70
60
50
40
30
20
10
0
Asia
Latin America & Carribean
Africa
Russia, Ukraine, Belarus & Moldova
Oceania
North America
Europe
World
Cities
Towns and suburbs
Rural areas
Urban in World Urbanization Prospects
Source: JRC 2015, GHSL Pop Grid V1



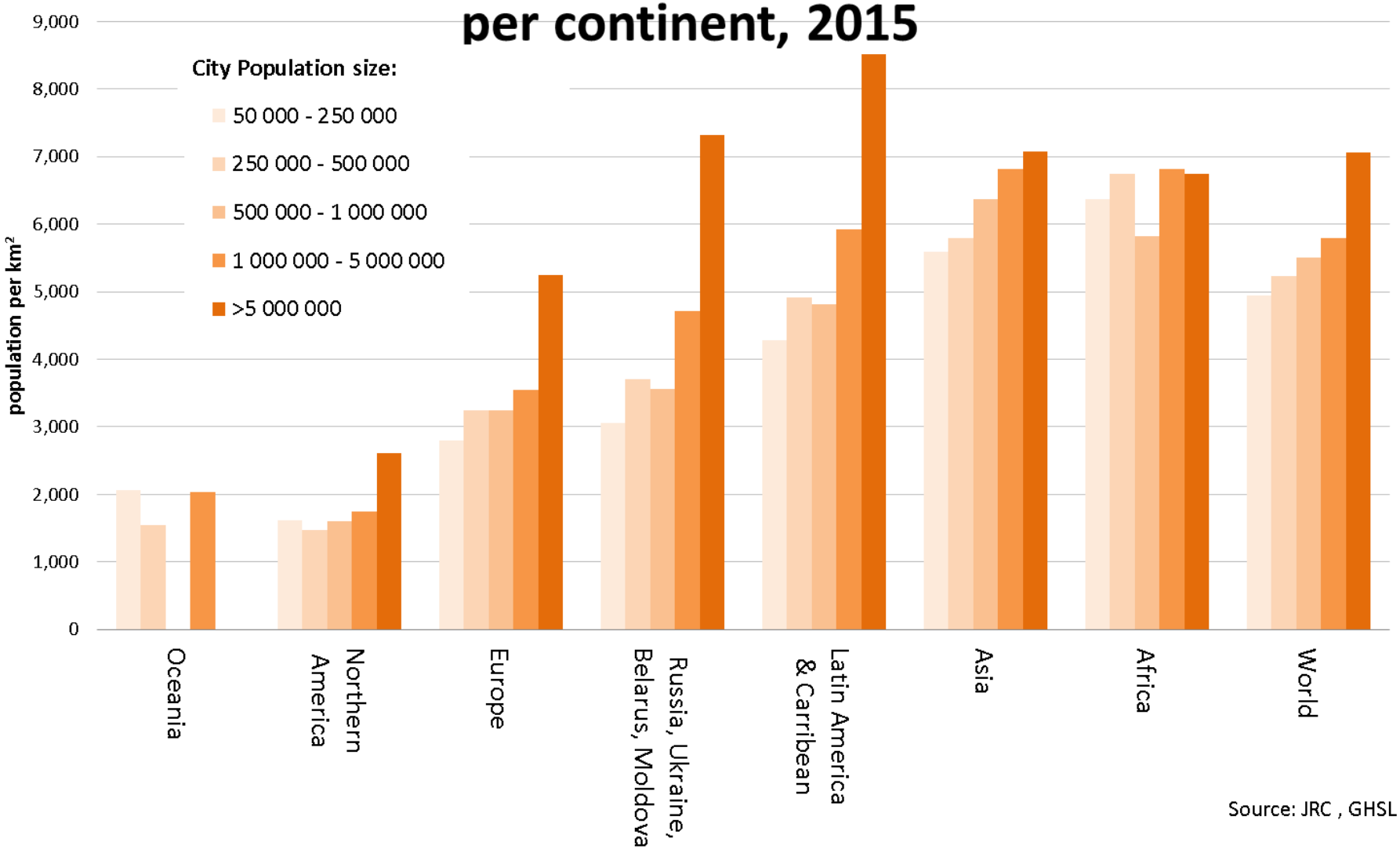
Urban Centres in the world by population size, 2015

Source : JRC (GHS - POP Global Settlement Model)

Inhabitants

100000 - 250000
250000 - 500000
500000 - 1000000
1000000 - 5000000
5000000 - 10000000
10000000 - 20000000
> 20000000

Median population density by city size class per continent, 2015



EU-OECD-WB voluntary commitment

- *Was announced at Habitat III*
- *Goal to develop a global, people-based definition of cities and settlements*
- *Methodology to be tested is the degree of urbanisation, which includes the city definition used in the EU-OECD functional urban area definition.*

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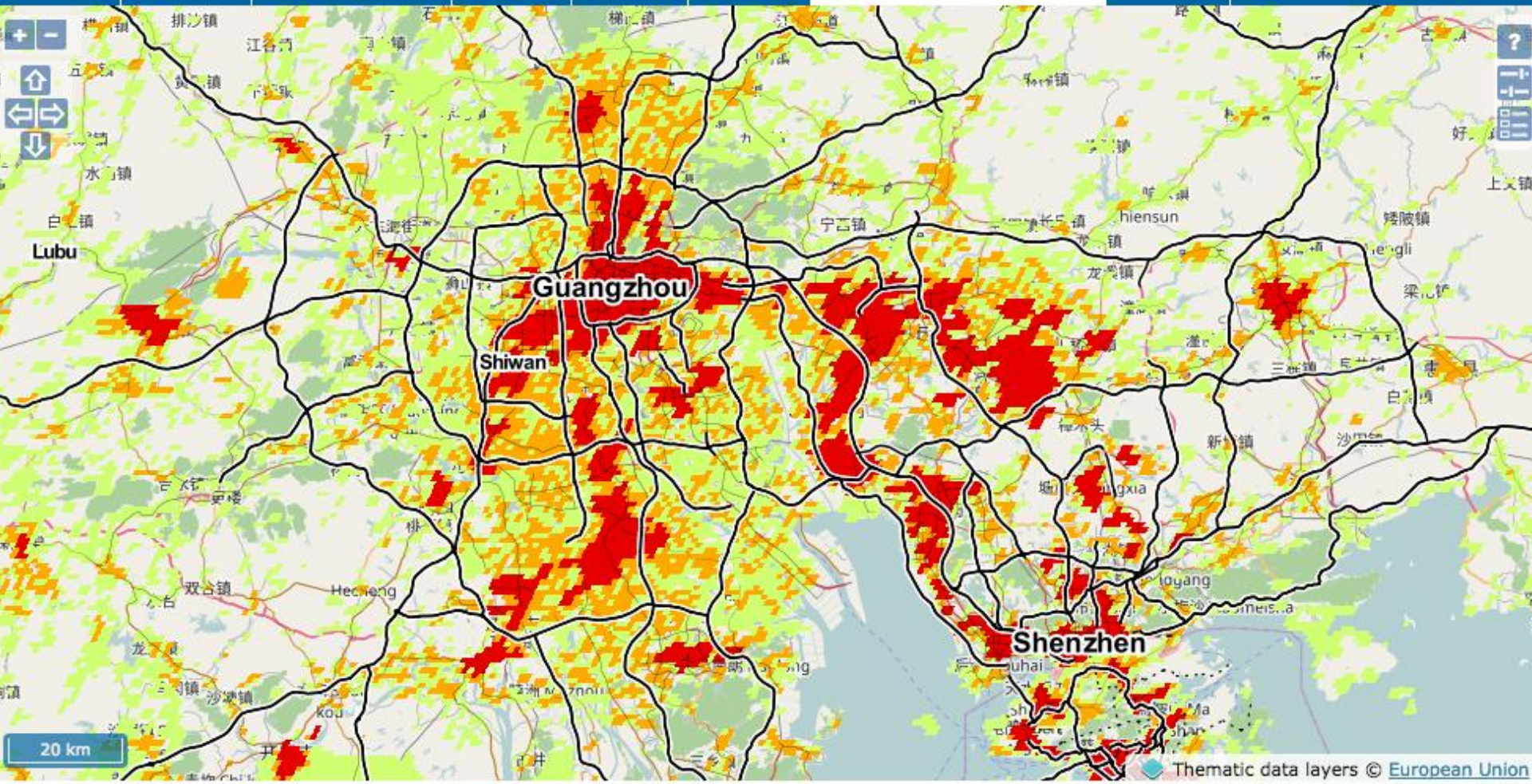
These Urban SDG indicators are very sensitive to the city boundaries

- 11.2.1 Proportion of population that has convenient access to public transport
- 11.3.1 Ratio of land consumption rate to population growth rate
- 11.6.2 Annual mean levels of fine particulate matter (e.g. PM2.5 and PM10) in cities
- 11.7.1 Average share of the built-up area of cities that is open space for public use for all



Create a link to share this map: Permalink

Layers selected:

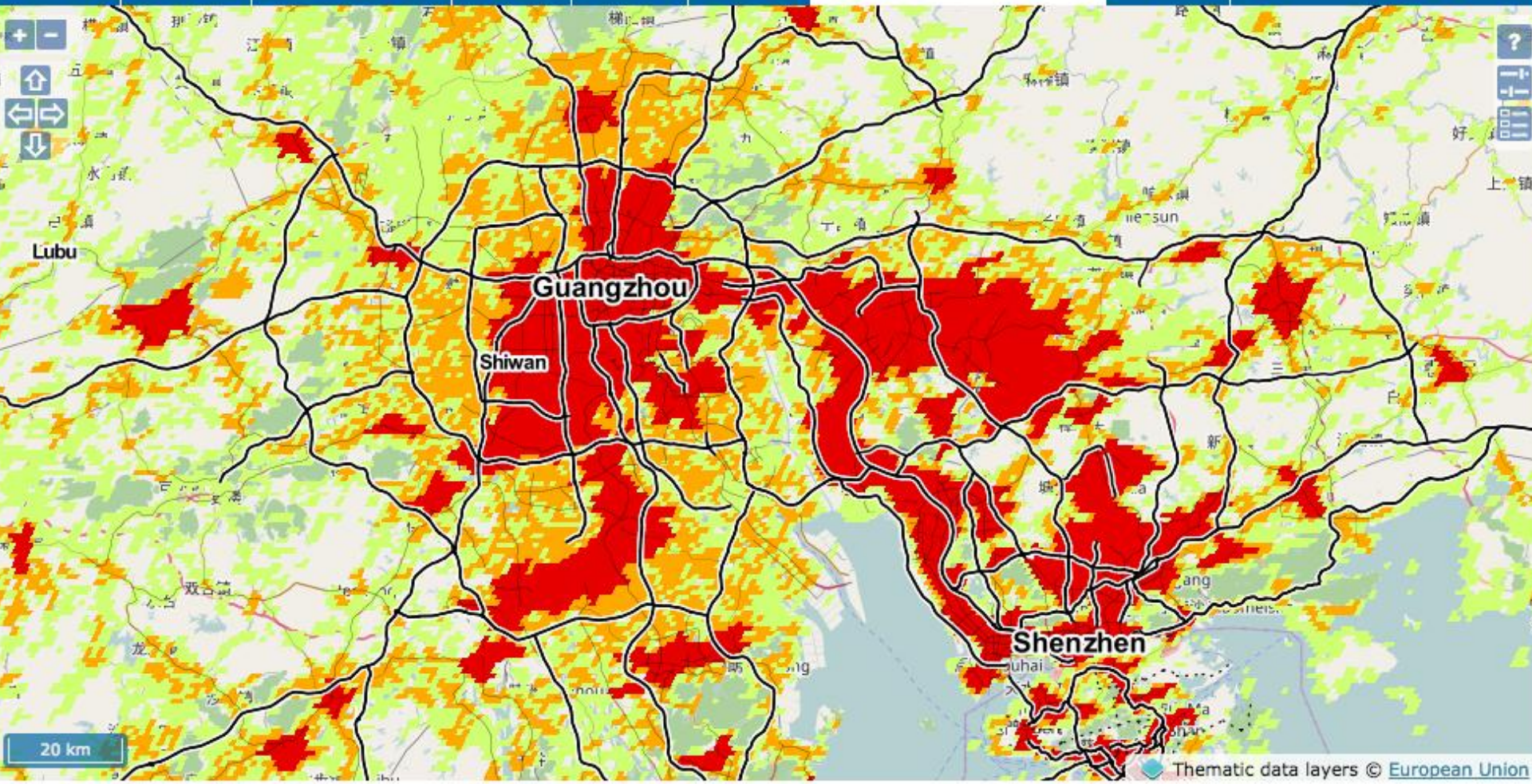
Built-up (resolution: 38m): none

Population (resolution: 250m): none

Settlement Model (resolution: 1km): SMod 1975

Base: OSM, Place names

1975



Create a link to share this map: Permalink

Layers selected:

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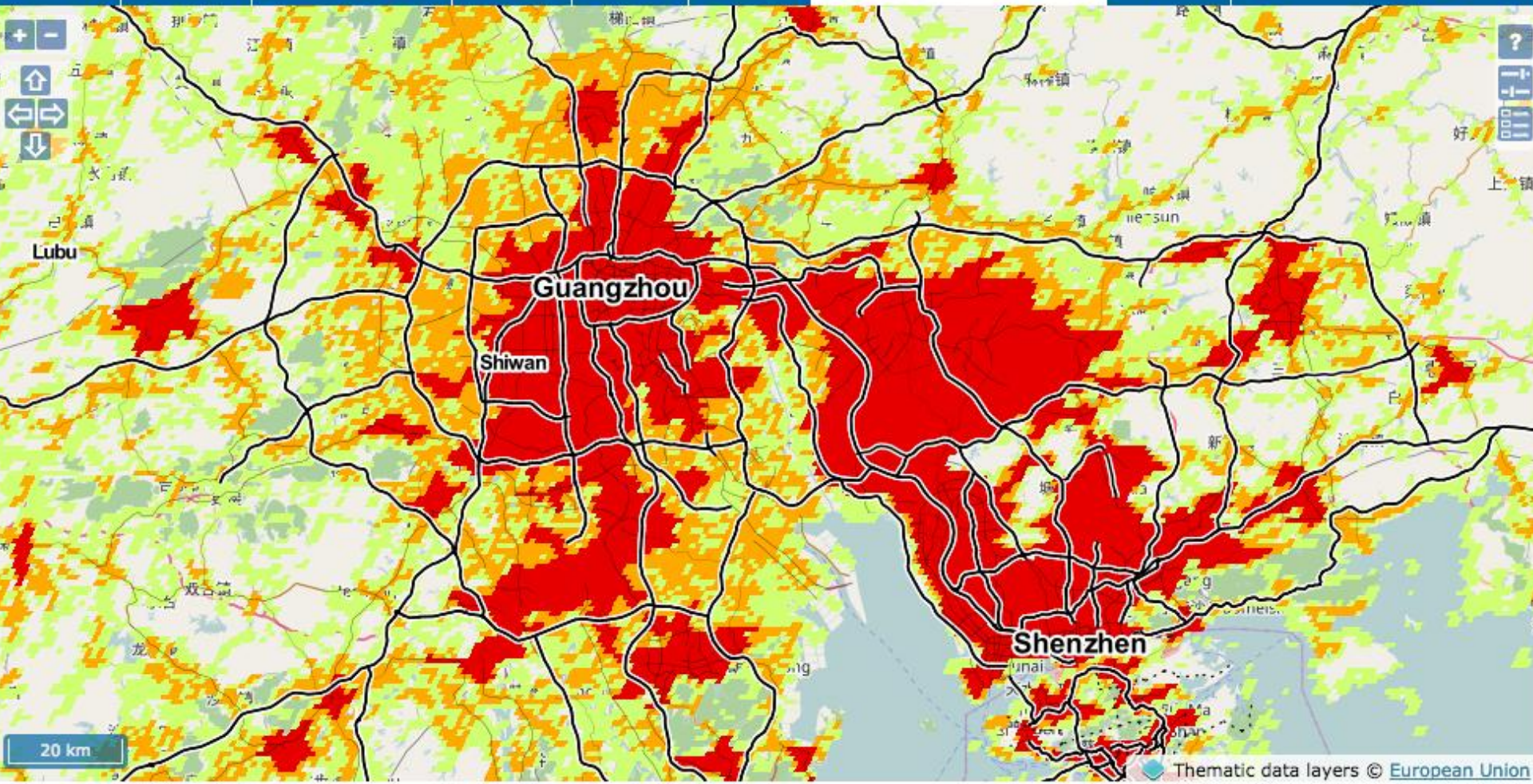
Population (resolution: 250m): none

Settlement Model (resolution: 1km): SMod 1990

Base: OSM, Place names

1990



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Layers selected:

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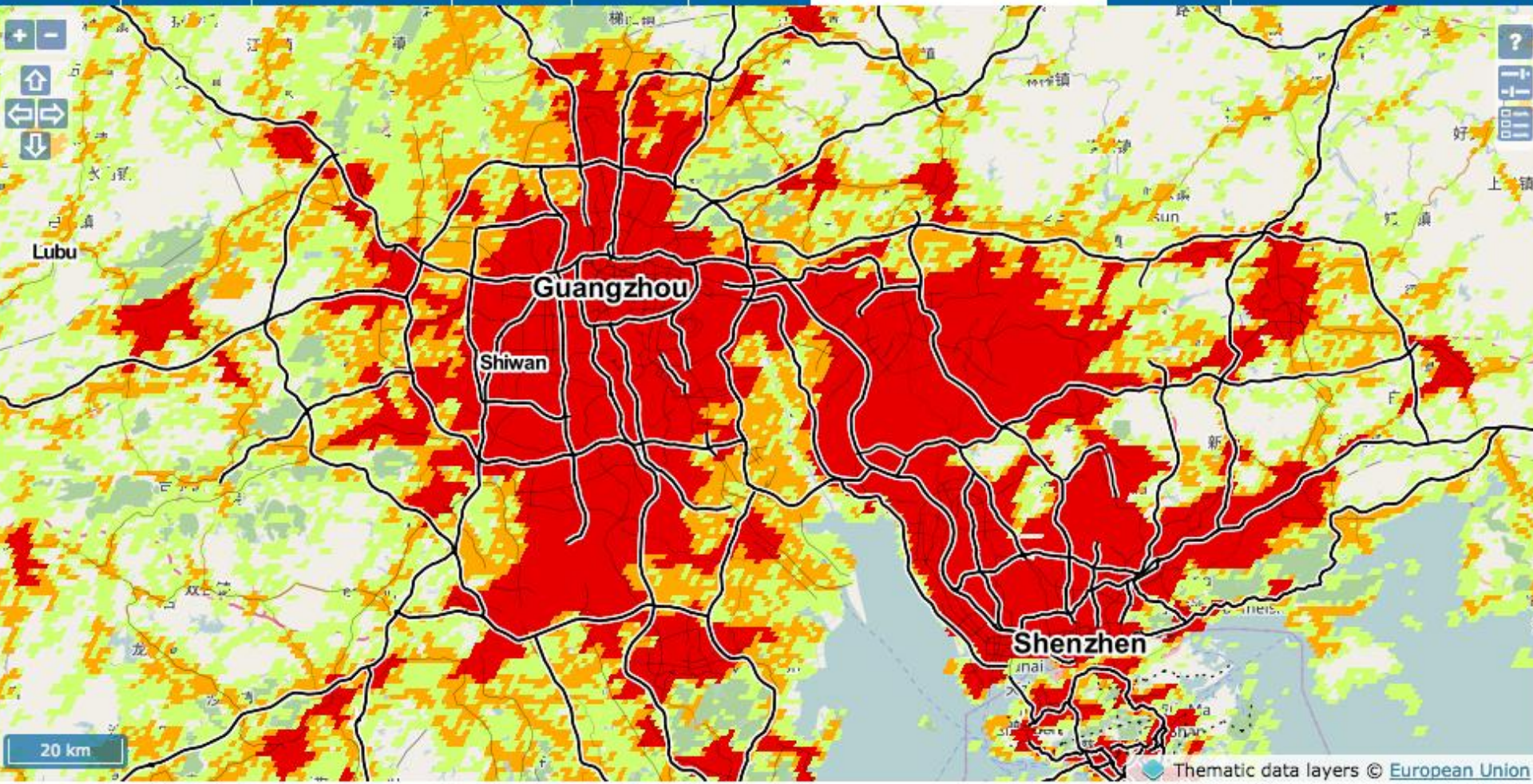
Population (resolution: 250m): none

Settlement Model (resolution: 1km): SMod 2000

Base: OSM, Place names

2000



Create a link to share this map: Permalink

Layers selected:

Built-up (resolution: 38m): none

Population (resolution: 250m): none

Settlement Model (resolution: 1km): SMod 2015

Base: OSM, Place names

2015

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DEMOGRAPHIC CHANGE & MIGRATION

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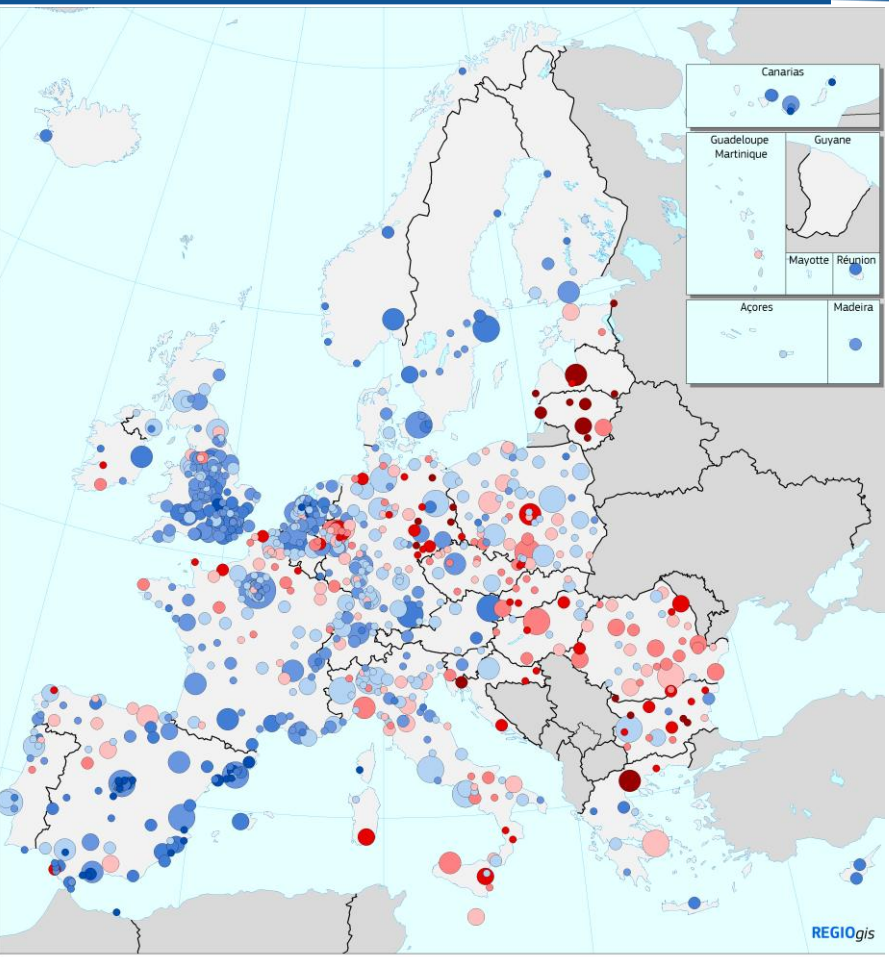


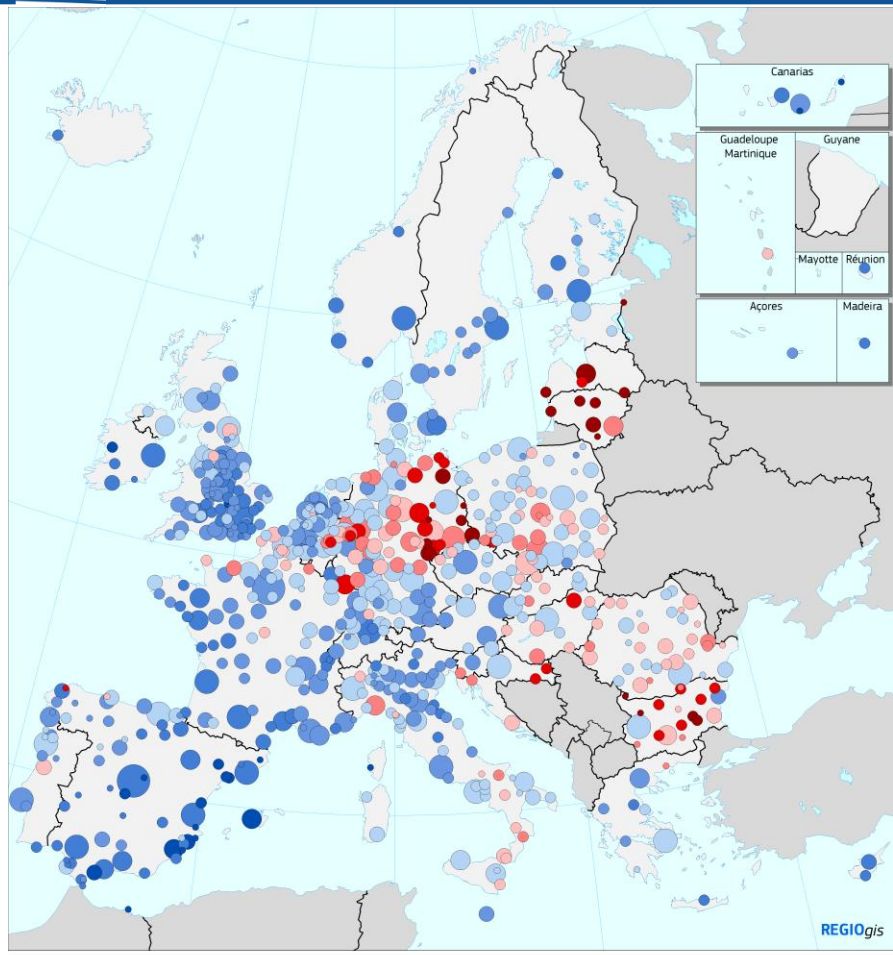
Change in population by city, 2001-2011

Total change (%)
- < -10
- -10 - -5
- -5 - -2.5
- -2.5 - 0
- 0 - 5
- 5 - 10
- 10 - 20
- >= 20

Urban centre population
- < 100,000
- 100,000 - 250,000
- 250,000 - 500,000
- 500,000 - 1,000,000
- 1,000,000 - 5,000,000
- >= 5,000,000

Sources: Eurostat, NSI, DG REGIO

0 500 Km



Change in population by FUA, 2001-2011

Total change (%)
- < -10
- -10 - -5
- -5 - -2.5
- -2.5 - 0
- 0 - 5
- 5 - 10
- 10 - 20
- >= 20

FUA population
- < 100,000
- 100,000 - 250,000
- 250,000 - 500,000
- 500,000 - 1,000,000
- 1,000,000 - 5,000,000
- > 5,000,000

Sources: Eurostat, NSI, DG REGIO

0 500 Km

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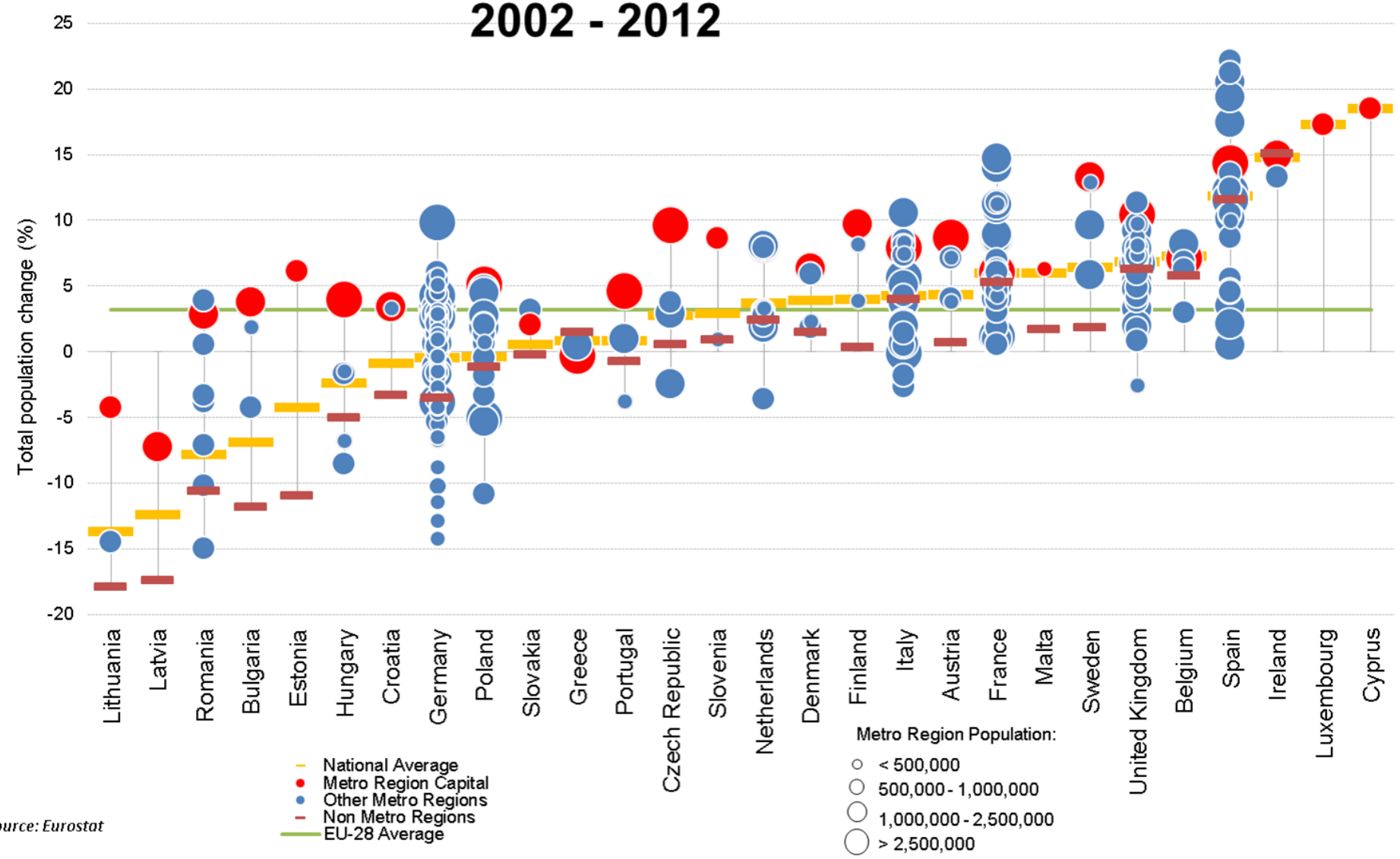
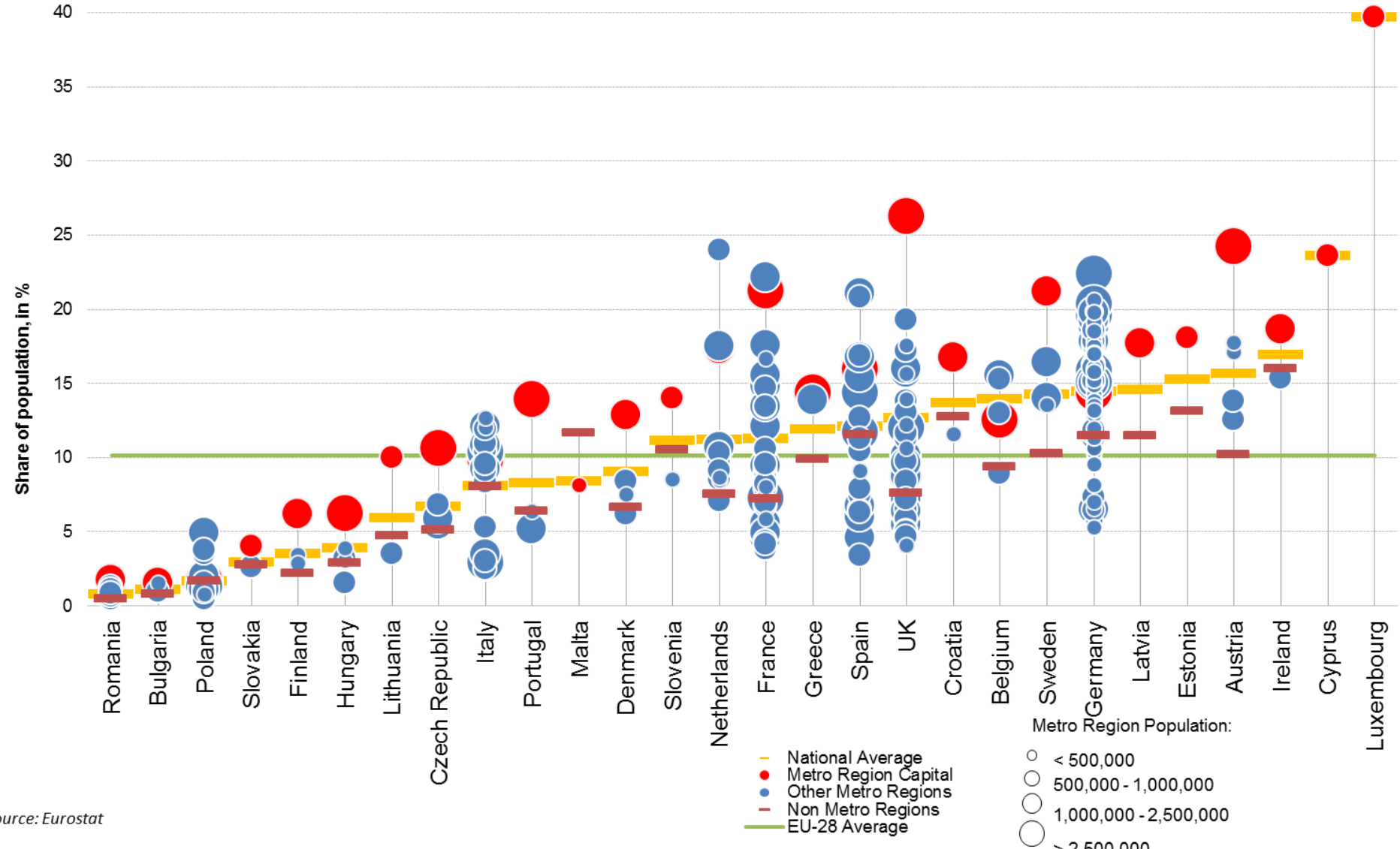
Total population change by metro region, 2002 - 2012



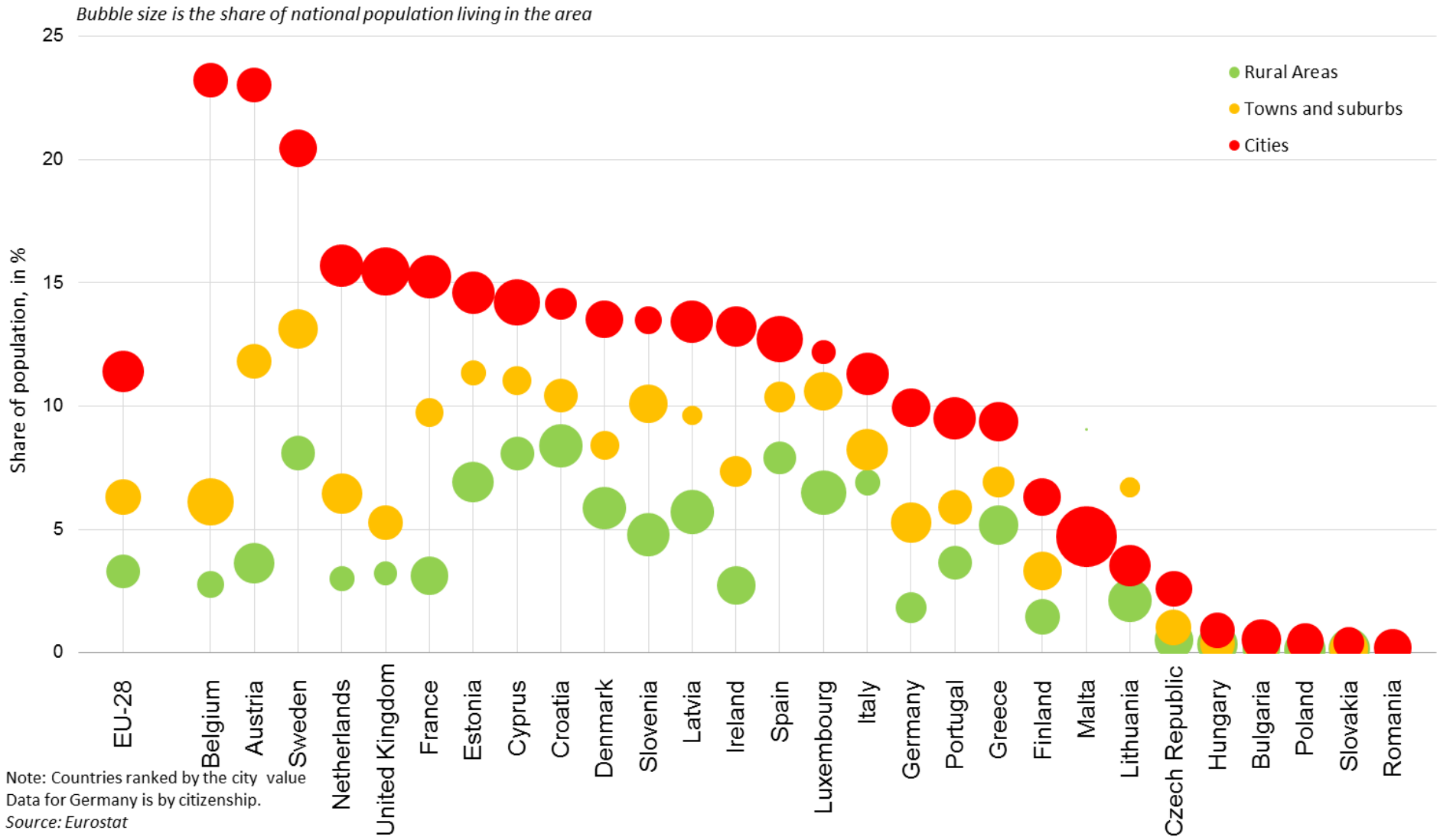
Source: Eurostat

Foreign-born population by metro regions, 2011



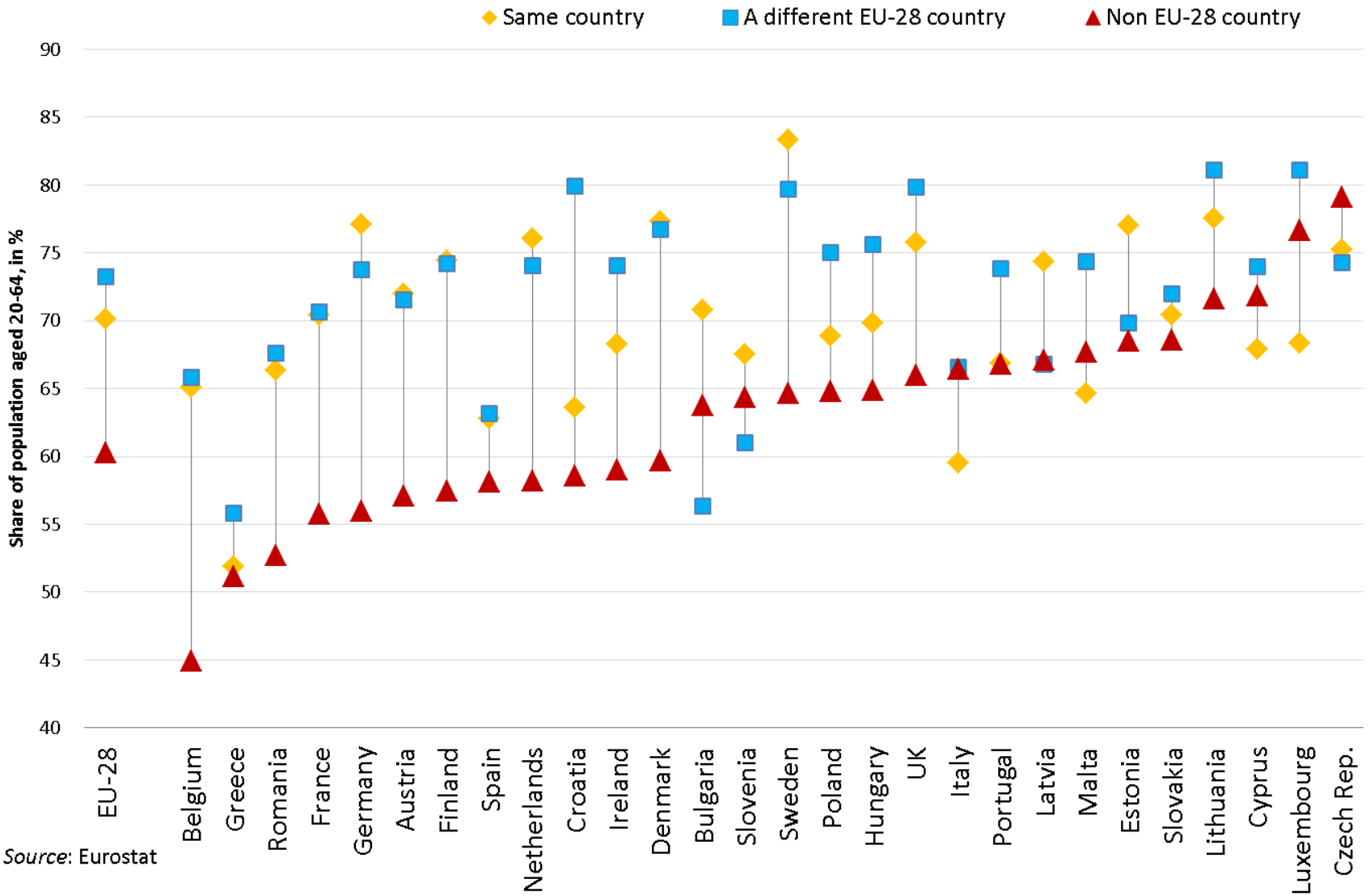
Source: Eurostat

Working age population (20-64) born outside the EU by degree of urbanisation, 2014



Note: Countries ranked by the city value
Data for Germany is by citizenship.
Source: Eurostat

Employment rate in the cities by country of birth, 2014



Source: Eurostat

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URBAN ECONOMIC DEVELOPMENT

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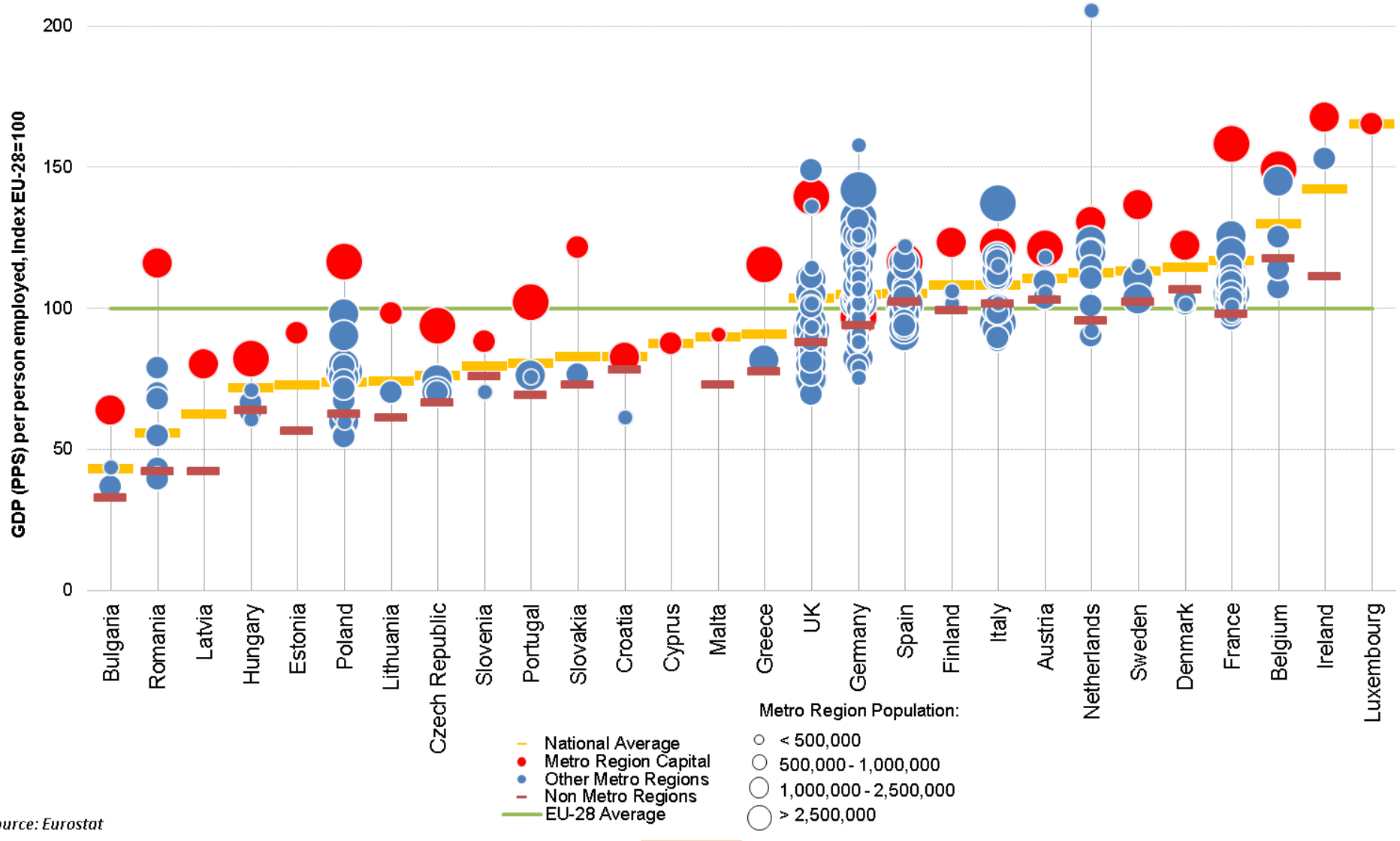
Productivity per metro region, 2013



Source: Eurostat

Productivity and middle income trap

- *Cities are more productive because of*
  - **More tertiary educated (sorting)**
  - **Higher employment rates (matching)**
  - **More high-growth firms (sharing)**
  - **Better accessibility and connectivity (sharing)**
  - **More innovation (learning)**
- *Low-income cities are catching up, but losing jobs*
- *Medium- and high-income cities lag behind*
- *Very-high-income cities maintain their lead*

Middle-income trap

	Average annual change 2000-2013, in %			
Metro region by income level	Population	GDP	GDP per head	Employment
Very high	0.7	1.6	0.9	0.8
High	0.6	1.3	0.7	0.9
Medium	0.4	1.1	0.7	0.4
Low	0.2	1.3	1.1	0.0
All Metro	0.5	1.3	0.9	0.6
Non-metro	0.1	0.9	0.8	0.0
EU	0.3	1.2	0.9	0.3

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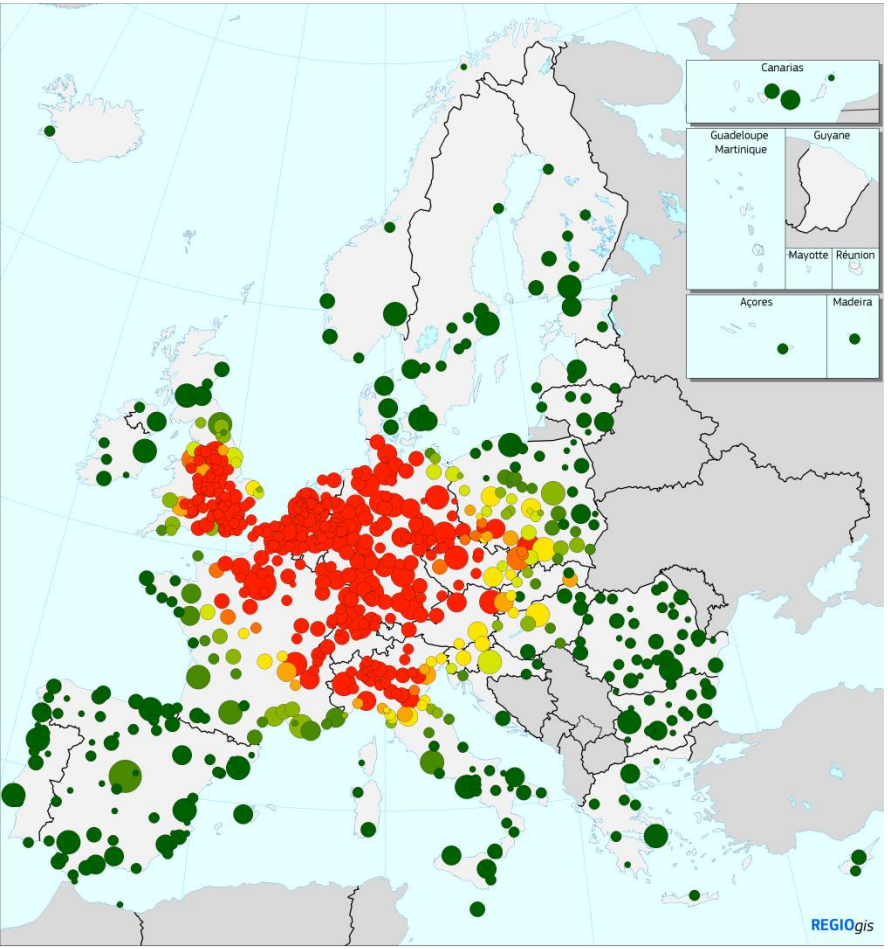


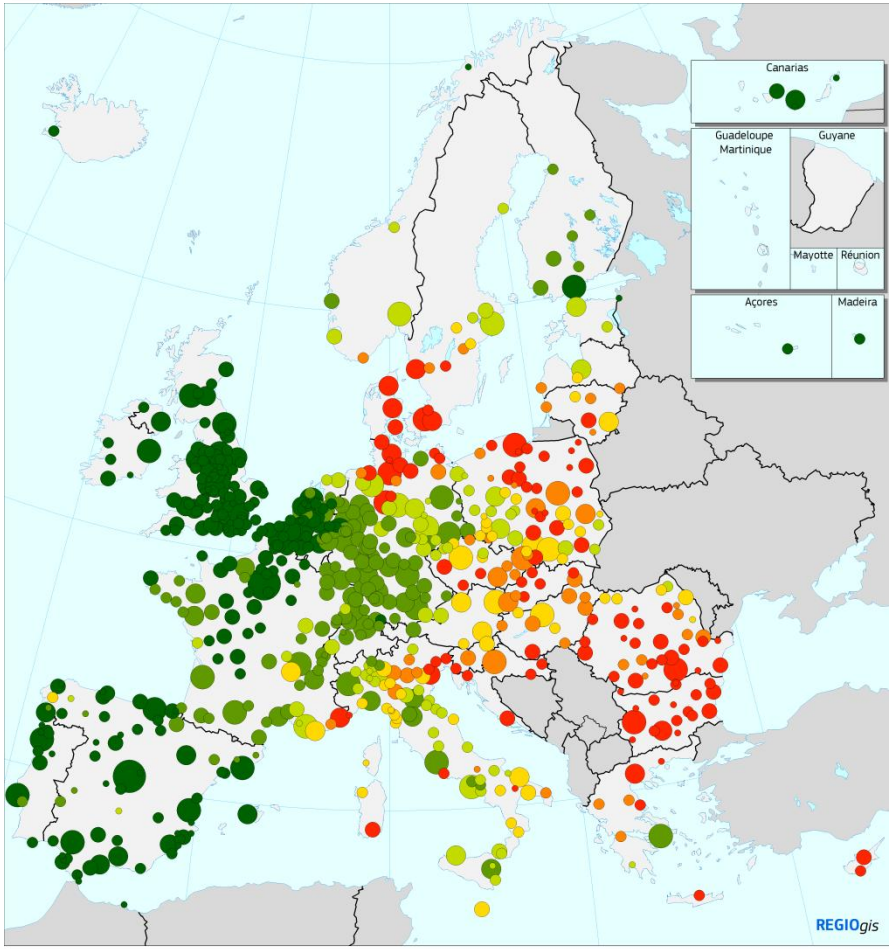
Potential road accessibility by FUA, 2012

Accessible population
- < 15,000,000
- 15,000,000 - 17,500,000
- 17,500,000 - 19,500,000
- 19,500,000 - 21,000,000
- 21,000,000 - 22,000,000
- 22,000,000 - 23,000,000
- 23,000,000 - 24,000,000
- >= 24,000,000
- No data

FUA population
- < 100,000
- 100,000 - 250,000
- 250,000 - 500,000
- 500,000 - 1,000,000
- 1,000,000 - 5,000,000
- > 5,000,000

Medium distance decay function.
Source: JRC, DG REGIO

0 500 Km



Expected change in road accessibility due to TEN-T network completion by FUA

Change in accessibility (%)
- < 5
- 5 - 10
- 10 - 15
- 15 - 20
- 20 - 25
- >= 25
- No data

FUA population
- < 100,000
- 100,000 - 250,000
- 250,000 - 500,000
- 500,000 - 1,000,000
- 1,000,000 - 5,000,000
- > 5,000,000

Medium distance decay function.
Sources: DG MOVE, TomTom, DG JRC

0 500 Km

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URBAN MOBILITY

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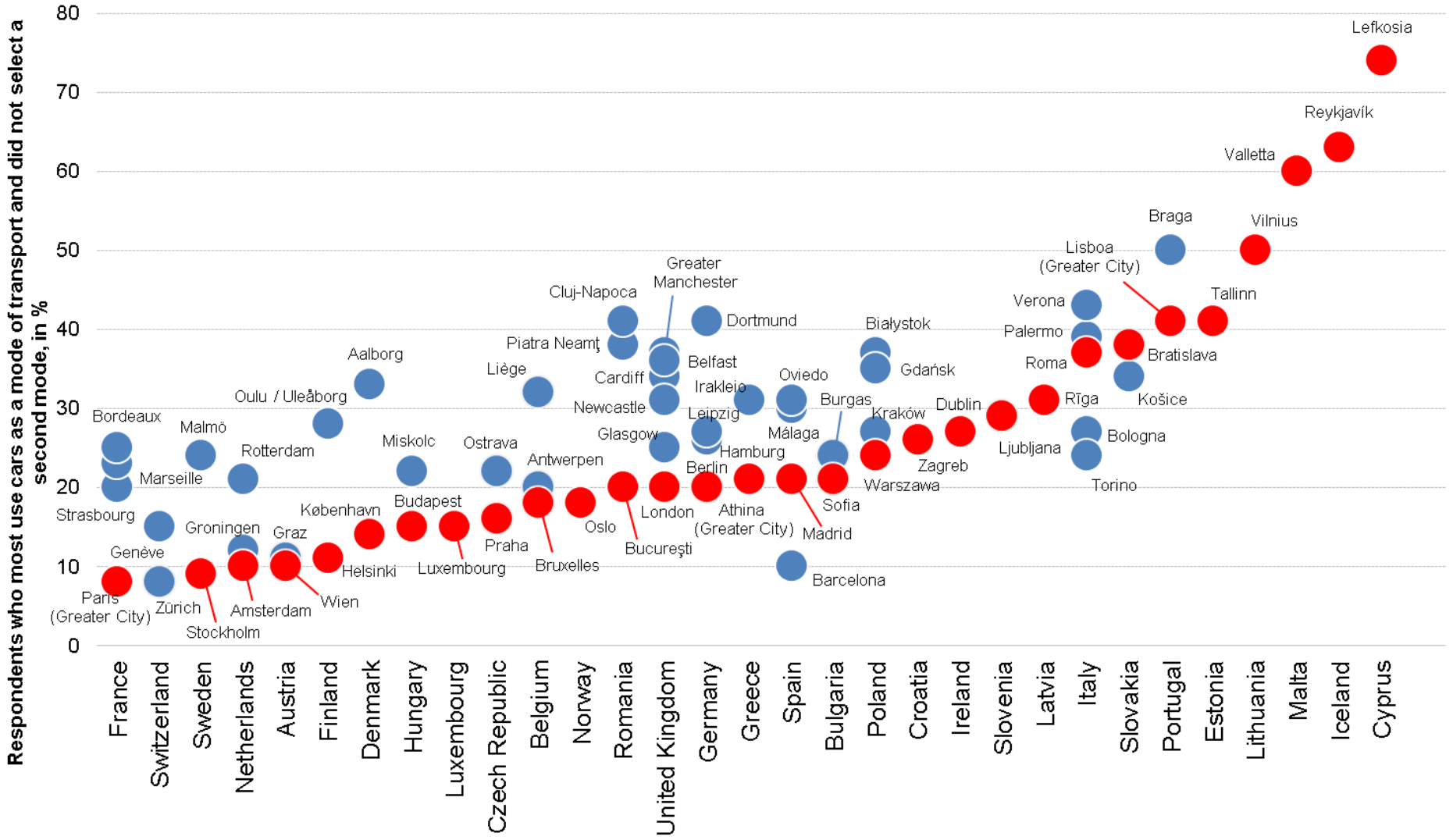
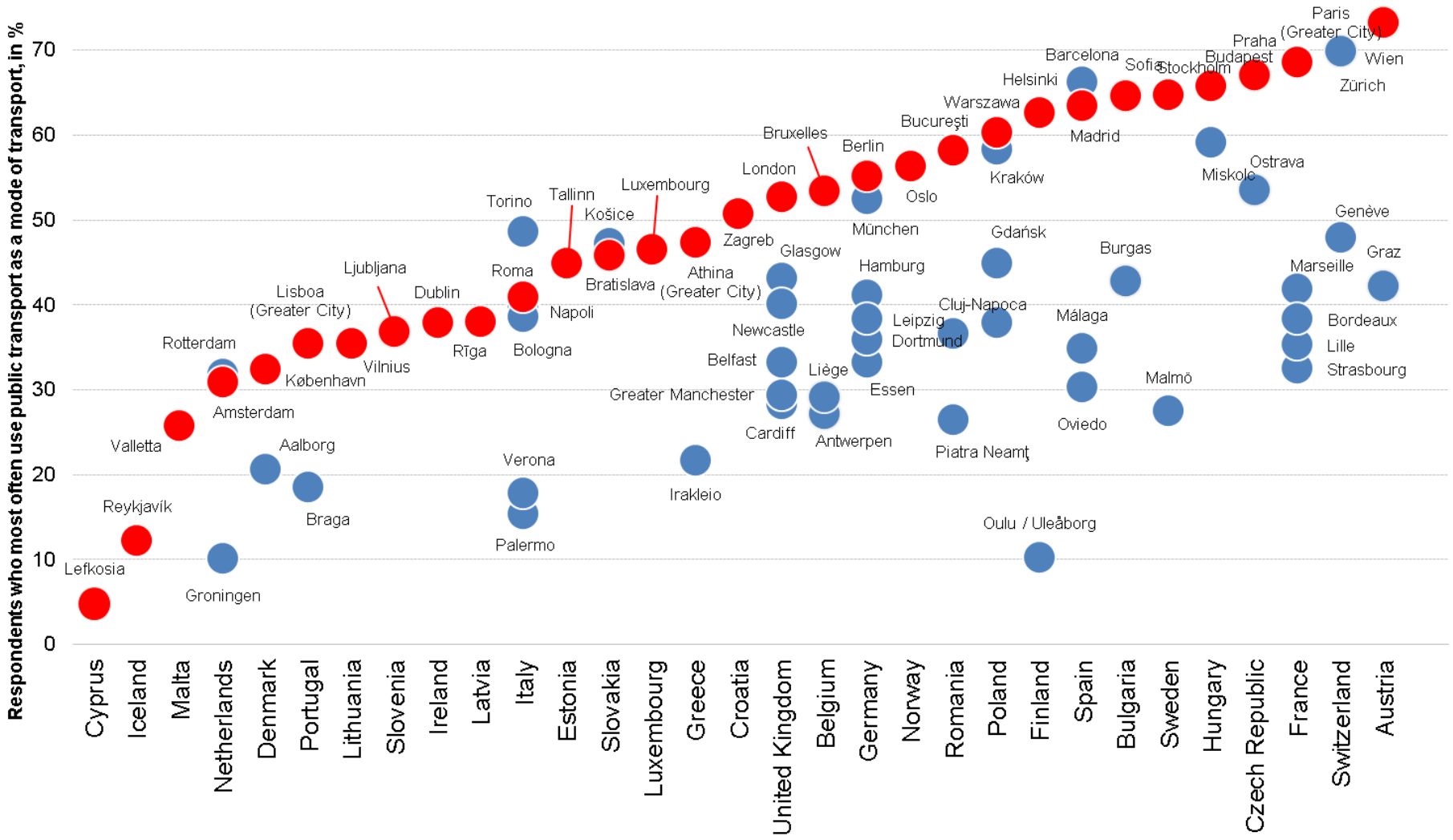
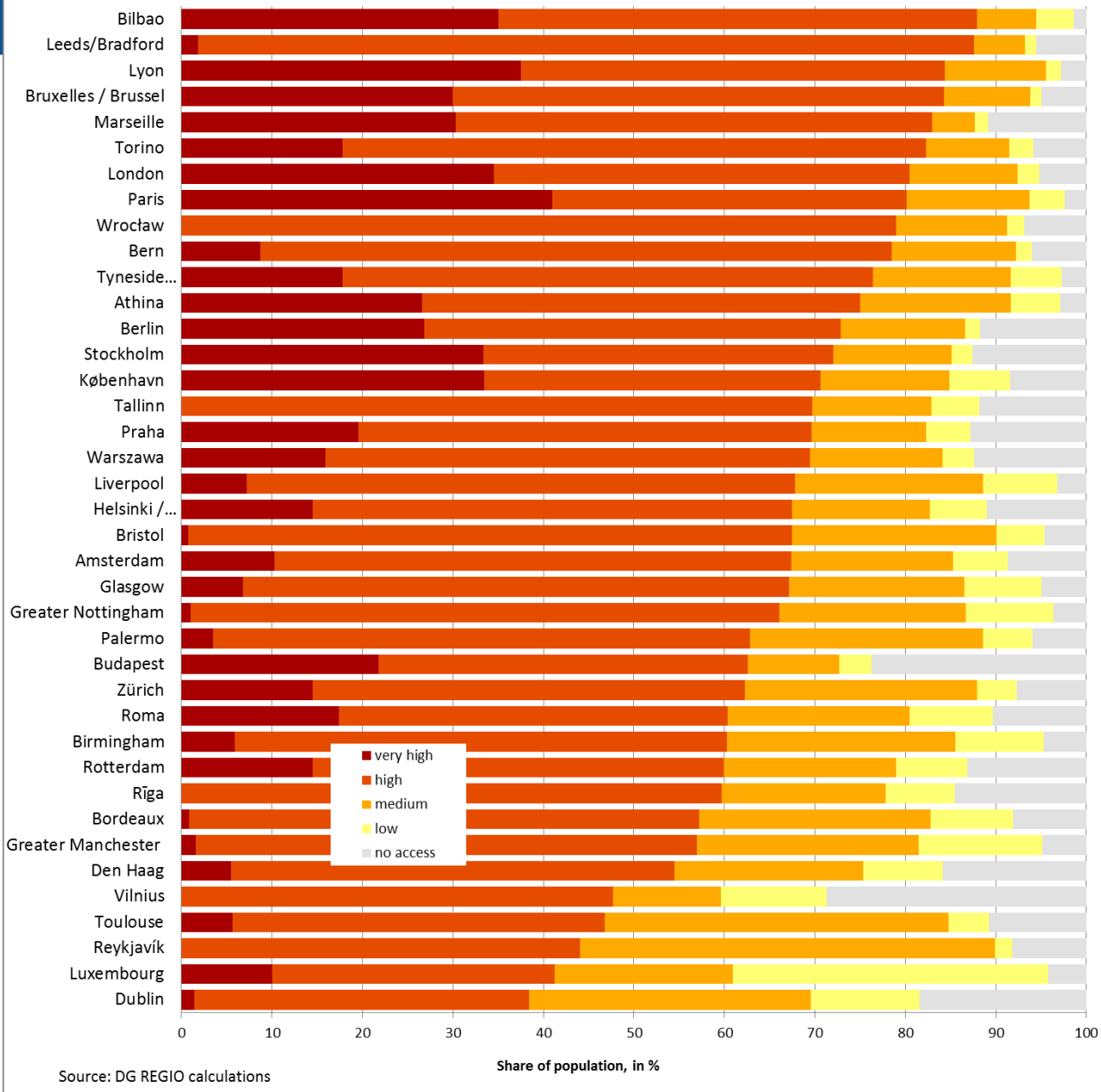
Car use per city, 2015



Public transport use per city, 2015

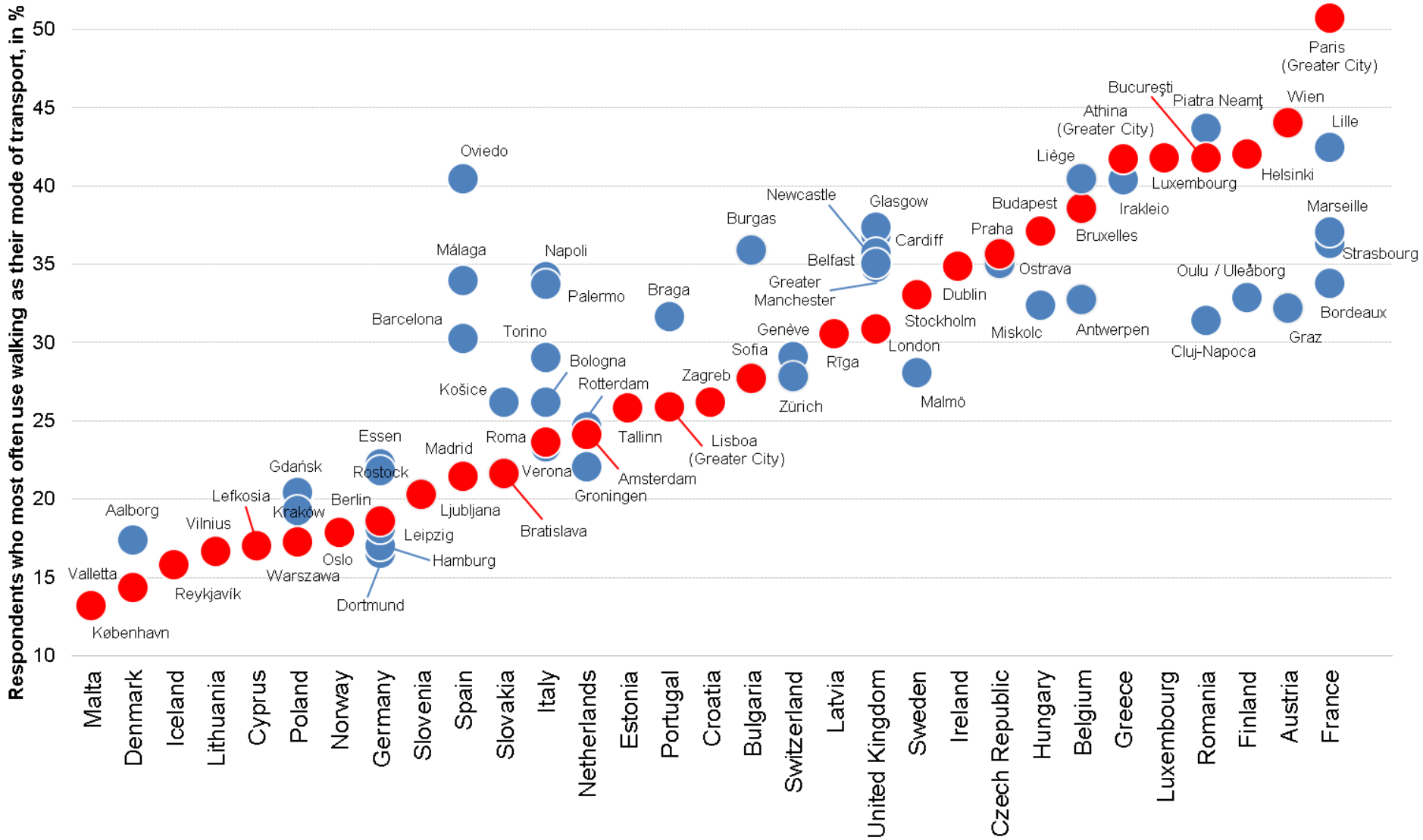


Access to public transport in capital cities and large cities, 2014

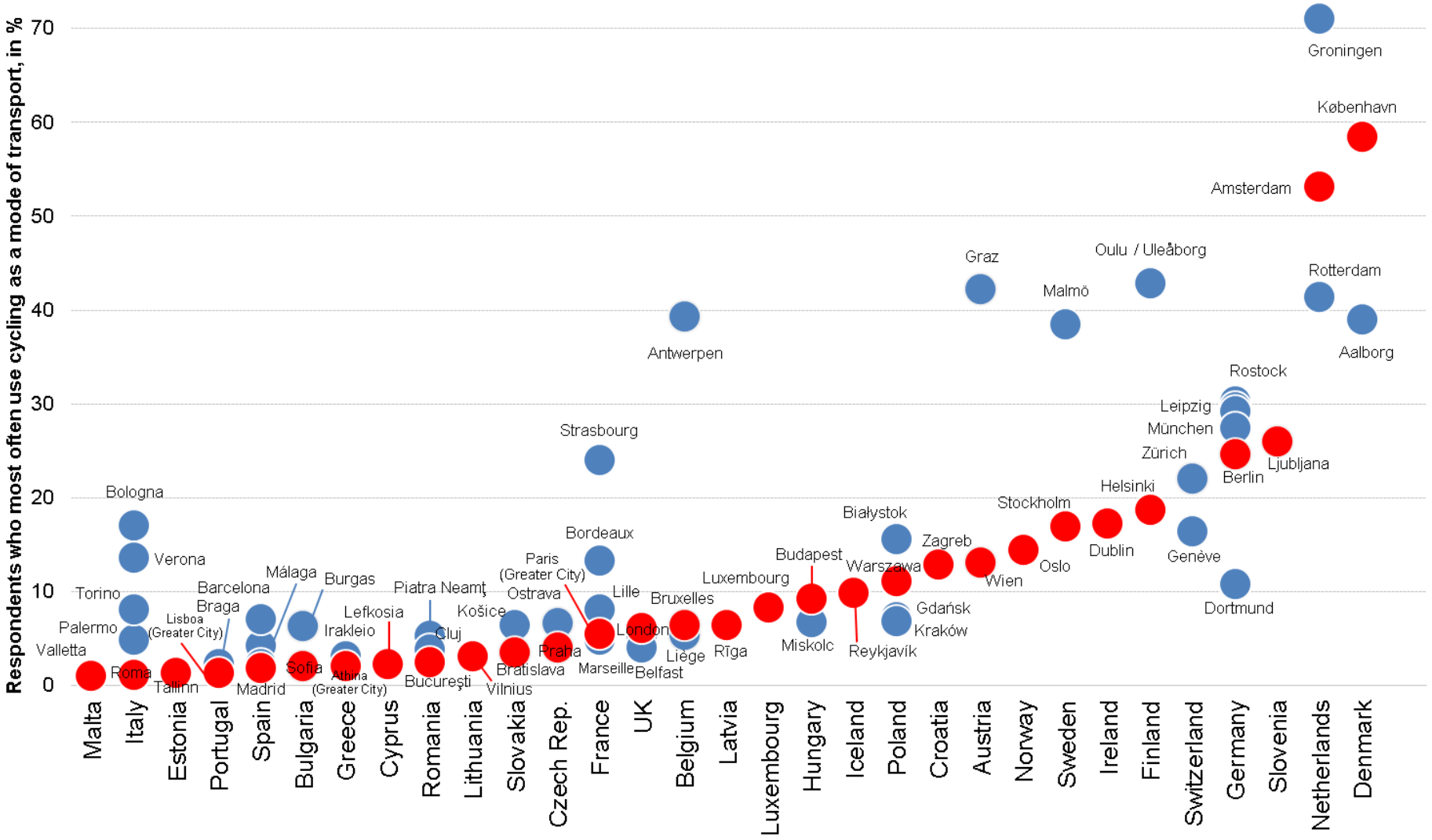


Source: DG REGIO calculations

Walking per city, 2015



Cycling per city, 2015



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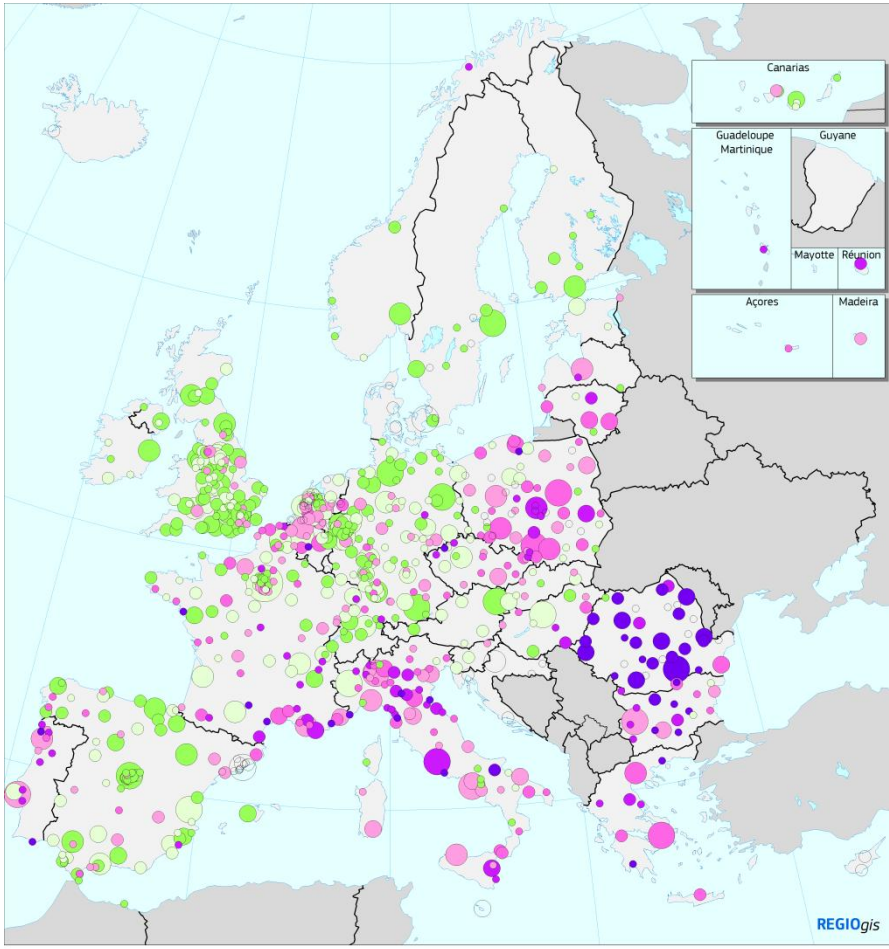
Road fatalities

- *Green below 2020 target*
- *Purple above 2020 target*



Road traffic fatalities in cities, 2013-2014

Deaths per 100,000 inhabitants
- < 2.0
- 2.0 - 3.1
- 3.1 - 4.5
- 4.5 - 6.0
- 6.0 - 9.0
- >= 9.0
- No data

Urban centre population
- < 100,000
- 100,000 - 250,000
- 250,000 - 500,000
- 500,000 - 1,000,000
- 1,000,000 - 5,000,000
- >= 5,000,000

The EU objective for 2020 is a rate below 3.1.
AT: 2013; BG, LV, NL: 2012-2013;
FR: 2012; IT, PL, PT, SK, NO: 2011-2012;
IE, EL: 2011; CZ, SE: 2010-2011; RO: 2008
Source: Eurostat

0 500 Km

Urban mobility

- *Low-carbon modes more popular in cities, but more can be done to make these attractive:*
  - **Make walking and cycling safe and convenient**
  - **Improve speed and frequency of public transport**
  - **Charge more for parking a car in the city centre**
- *To reach the EU GHG emission targets, car use may need to be reduced. Several cities have succeeded to reduce car use.*
- *Traffic safety is high in most EU cities, but it can still be improved in several cities*

RESOURCE EFFICIENT CITIES

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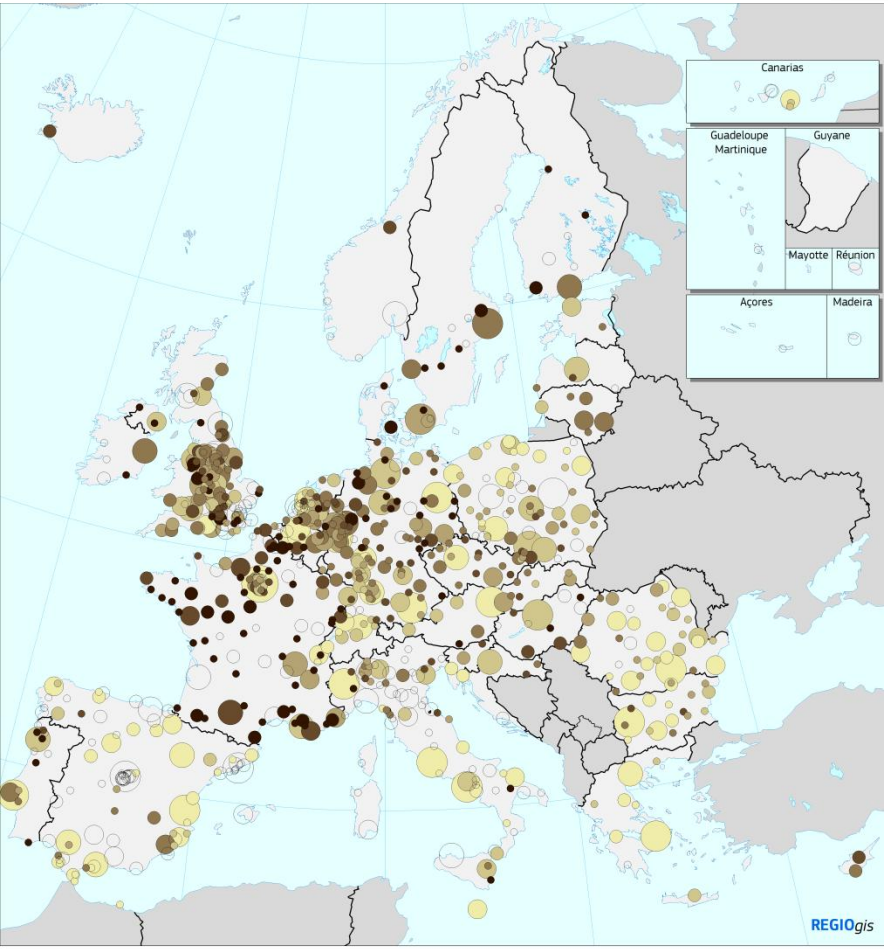


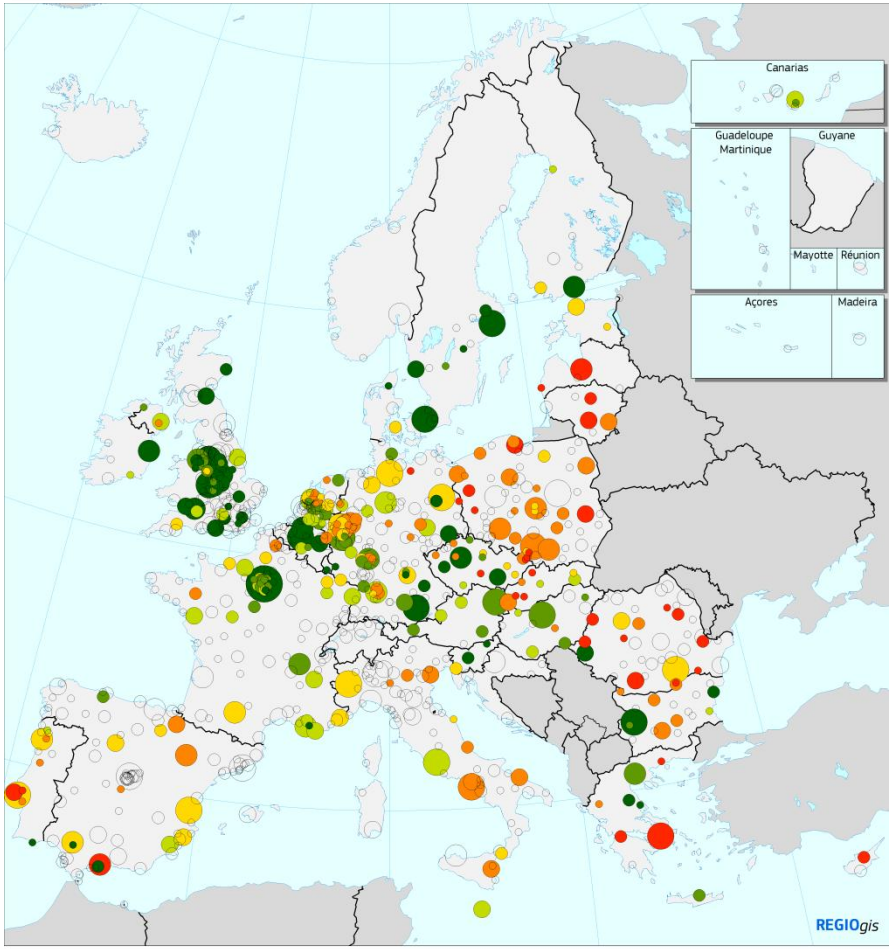
Residential, industrial and commercial areas per inhabitant by city, 2012

m²/inh.
- < 140
- 140 - 175
- 175 - 200
- 200 - 250
- 250 - 300
- >= 300
- No data

Urban centre population
- < 100,000
- 100,000 - 250,000
- 250,000 - 500,000
- 500,000 - 1,000,000
- 1,000,000 - 5,000,000
- >= 5,000,000

Residential, industrial, commercial, public and private built-up areas.
Sources: Copernicus Urban Atlas, Eurostat, DG REGIO

0 500 Km



Change in residential, industrial and commercial areas per inhabitant by city, 2006-2012

Total % change
- < -2
- -2 - 0
- 0 - 2
- 2 - 4
- 4 - 8
- >= 8
- No data

Urban centre population
- < 100,000
- 100,000 - 250,000
- 250,000 - 500,000
- 500,000 - 1,000,000
- 1,000,000 - 5,000,000
- >= 5,000,000

Residential, industrial, commercial, public and private built-up areas.
Sources: Copernicus Urban Atlas, Eurostat, DG REGIO

0 500 Km

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Resource efficient cities

- *Cities compared to rural areas need*
  - **Four times less land,**
  - **Ten times less local road**
- *Large cities and Mediterranean cities use less land per inhabitant*
- *Most EU cities with a growing population have a slower increase in land use than in population*
- *This efficiency can deteriorate or improve over time depending on national and local policies*

URBAN ENVIRONMENT & CLIMATE CHANGE

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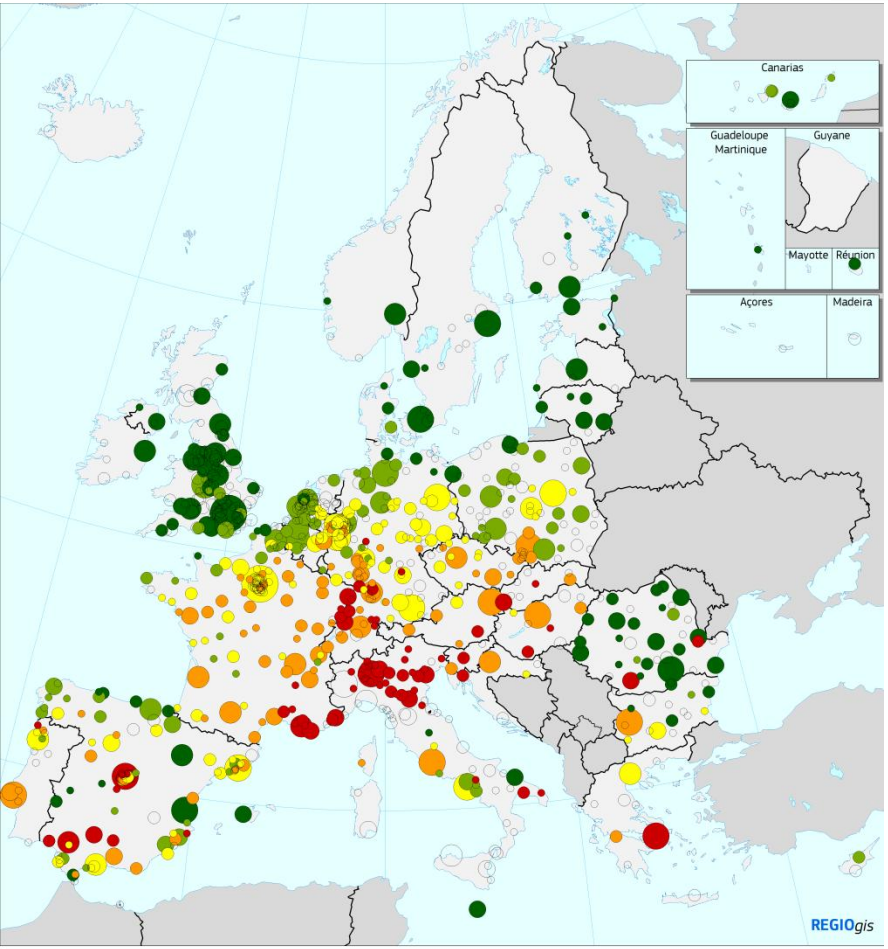

Concentration of ground-level ozone (O_3) in cities, 2013

Number of days with more than120 µg/m³
- < 2
- 2 - 8
- 8 - 15
- 15 - 25
- >= 25
- No data

Urban centre population
- < 100,000
- 100,000 - 250,000
- 250,000 - 500,000
- 500,000 - 1,000,000
- 1,000,000 - 5,000,000
- >= 5,000,000

Average recorded by measuring stations within city boundaries.
EU target value of 120 µg/m³ should not be exceeded more than 25 days per year (averaged over 3 years).
Sources: EEA, DG REGIO

0 500 Km

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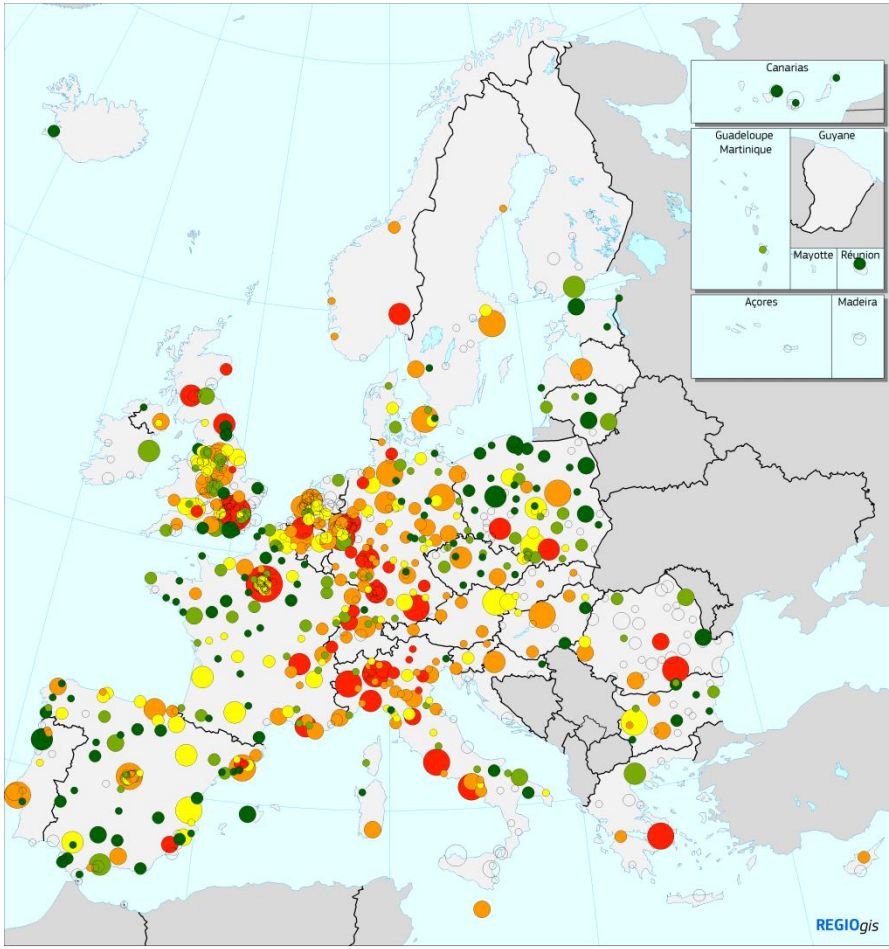

Average concentration of nitrogen dioxide (NO2) in cities, 2013

µg/m³
- < 20
- 20 - 25
- 25 - 30
- 30 - 40
- >= 40
- No data

Urban centre population
- < 100,000
- 100,000 - 250,000
- 250,000 - 500,000
- 500,000 - 1,000,000
- 1,000,000 - 5,000,000
- >= 5,000,000

Average recorded by measuring stations within city boundaries.
WHO guideline and EU limit value: 40 µg/m³
Sources: EEA, DG REGIO

0 500 Km

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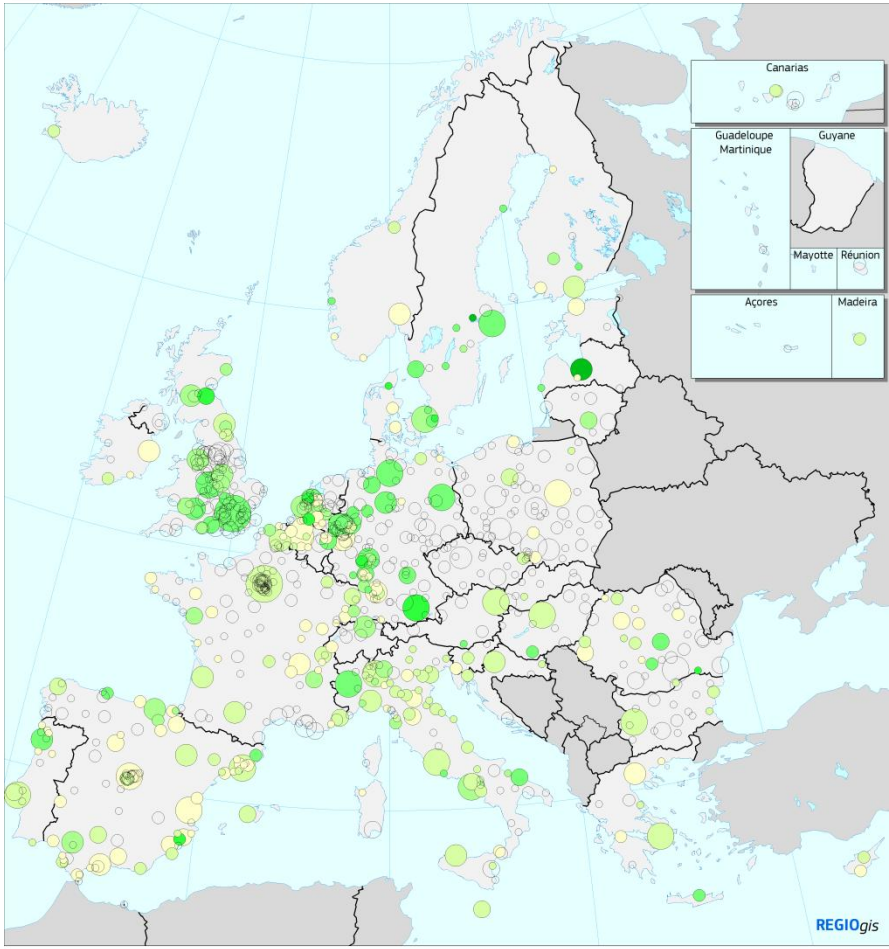
- *More than 300 cities have committed to reducing GHG emissions*
- *Cities focus increasingly on mitigation AND adaptation*



CO_2 reduction targets for 2020 by city, 2016

Reduction target (%)
- < 20
- 20 - 25
- 25 - 30
- 30 - 40
- 40 - 50
- >= 50
- No signatories

Urban centre population
- < 100,000
- 100,000 - 250,000
- 250,000 - 500,000
- 500,000 - 1,000,000
- 1,000,000 - 5,000,000
- >= 5,000,000

Reduction targets set by Covenant of Mayors signatories (as of 01/06/2016) located in cities.
In most cases the reduction target refers to the absolute value of CO_2 emissions; in others it refers to per capita reduction.
Source: Covenant of Mayors Office, JRC, DG REGIO

0 500 Km

URBAN GOVERNANCE

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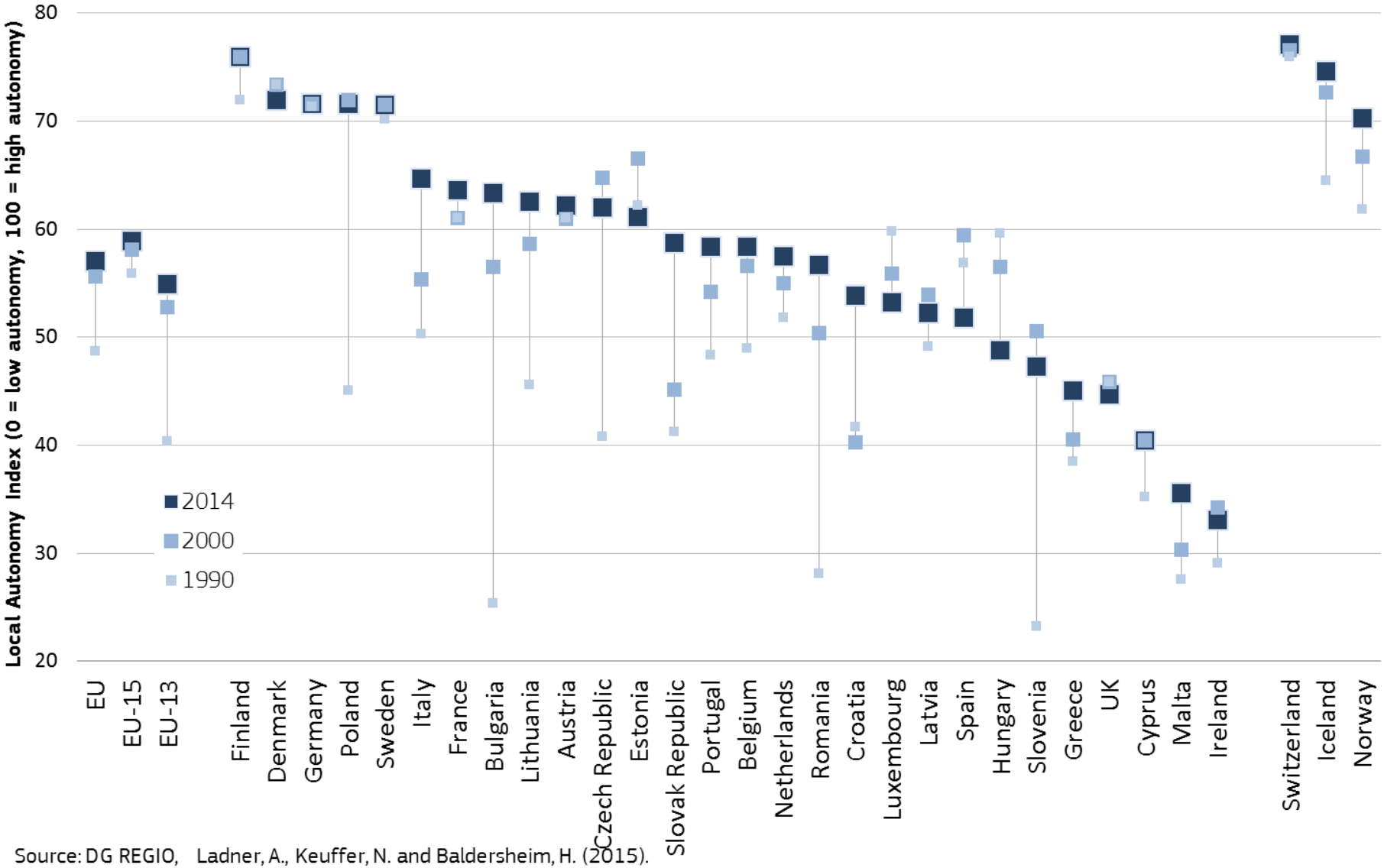
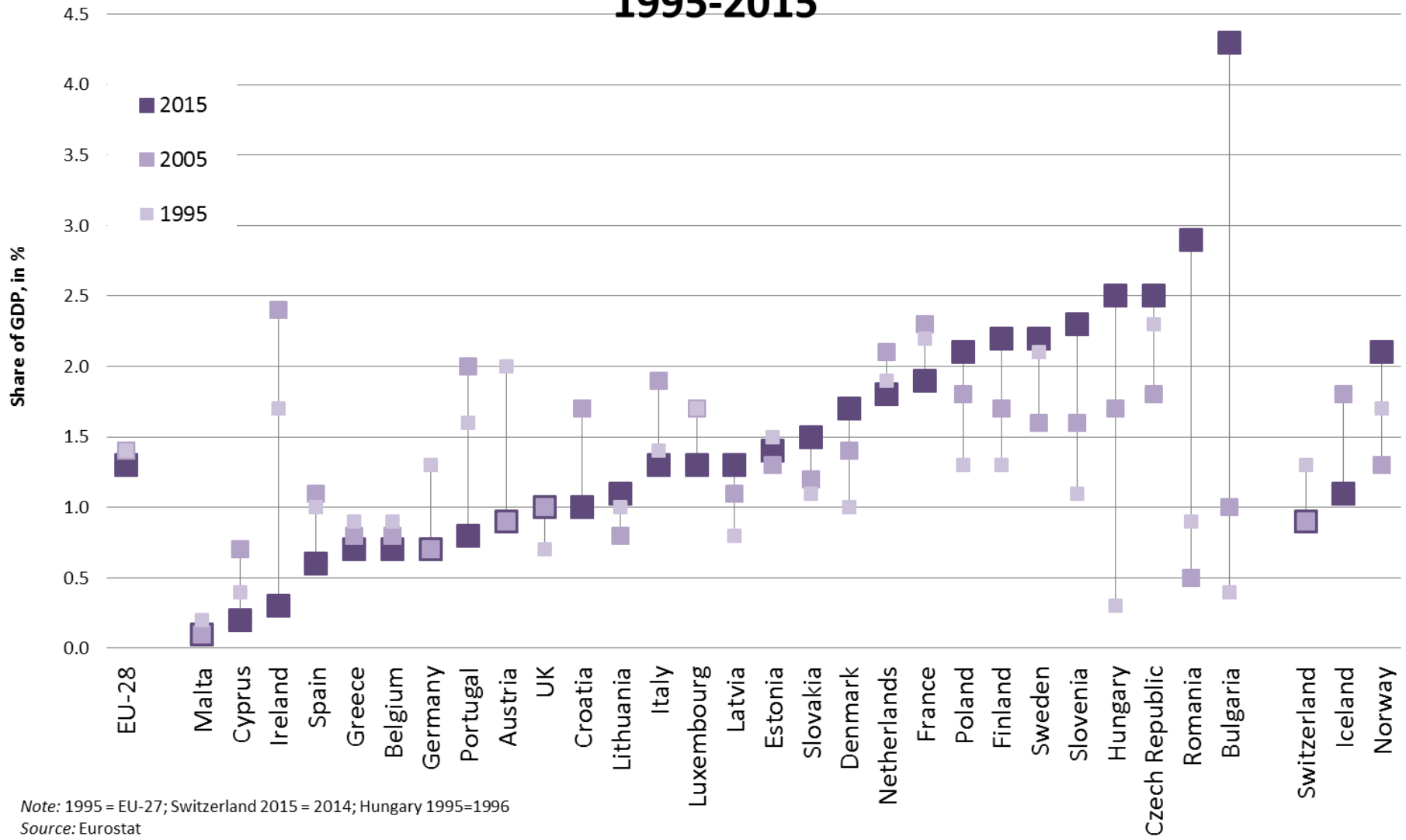
Local Autonomy Index in 1990, 2000 and 2014



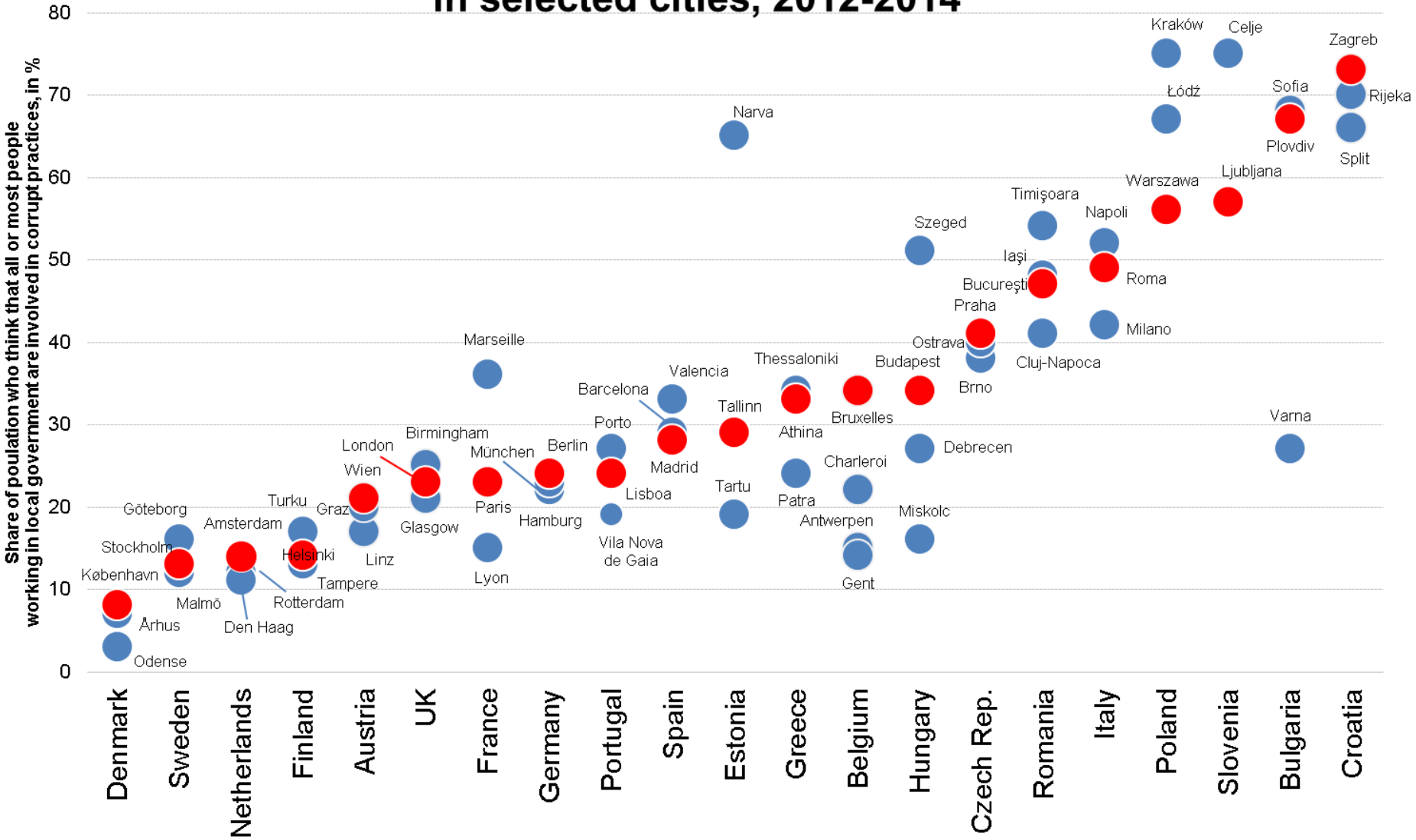
Source: DG REGIO, Ladner, A., Keuffer, N. and Baldersheim, H. (2015).

Local public investment relative to GDP per country, 1995-2015

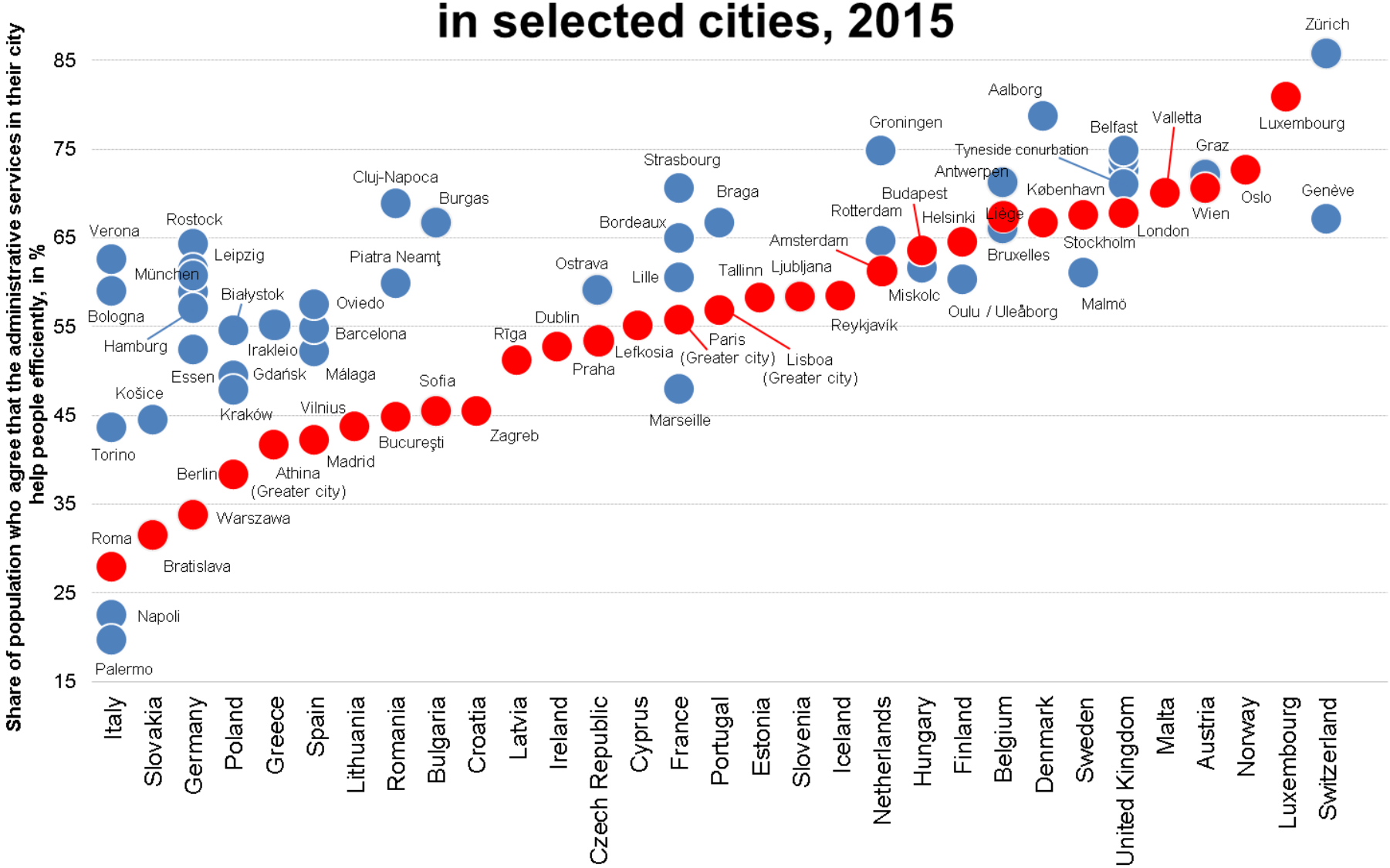


Note: 1995 = EU-27; Switzerland 2015 = 2014; Hungary 1995=1996
Source: Eurostat

Perceived corrupt practices in local government in selected cities, 2012-2014



Efficiency of public administration in selected cities, 2015



Conclusions

- *European cities are central to reaching key EU economic, social and environmental goals*
- *European cities already have many benefits but they can further improve their performance with*
  - **sufficient funding,**
  - **enough autonomy and**
  - **a strong metropolitan government**

European Commission

Links

- *State of European Cities Report: http://ec.europa.eu/cities-report*
- *Urban Data Platform: http://urban.jrc.ec.europa.eu*
- *Global Human Settlement Layer: http://ghsl.jrc.ec.europa.eu*