



# Measuring regional development in OECD countries

**COESIONET SEMINAR - Indicators and integrated approach in EU cohesion policy**

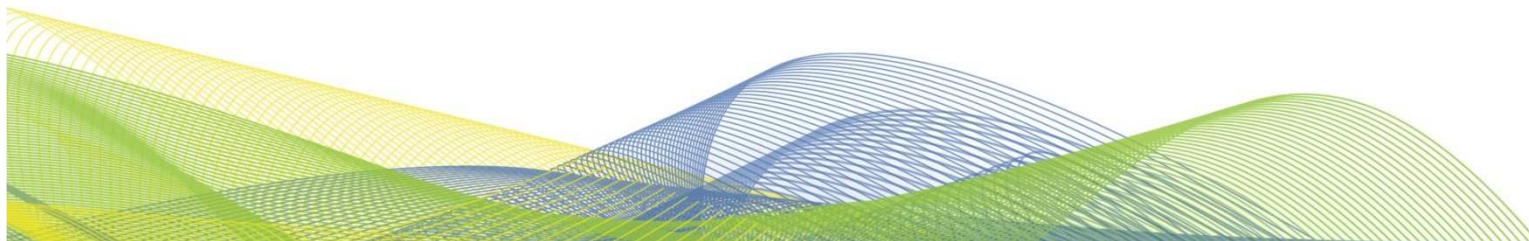
**30 May, 2011**

**Monica Brezzi**

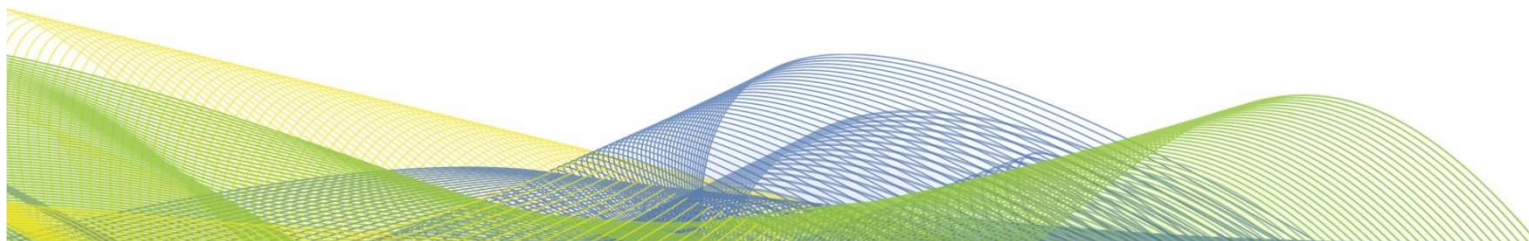
**Head Regional analysis and Statistics, OECD  
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# Agenda

1. Indicators for regional development in OECD countries
2. Which tools we use
3. Is there enough “territory” in our indicators?  
(Looking forward to improve evidence base)



# 1. Indicators for what?



# 1. Indicators for what?

- **Enable international comparison to assess economic performance of territories and quality of life of people living there**

Harmonized definitions and methods

- **Help make informed choices and orient policy**

Relevant for a certain place, debatable, timely

- **Enter in the evaluation of policies (what worked and why)**

Explicit connections and causality



# OECD Regions at a Glance 2011

Concentration of resources and contribution of regions to change

Persistence of regional disparities

Common characteristics of regions achieving a certain outcome



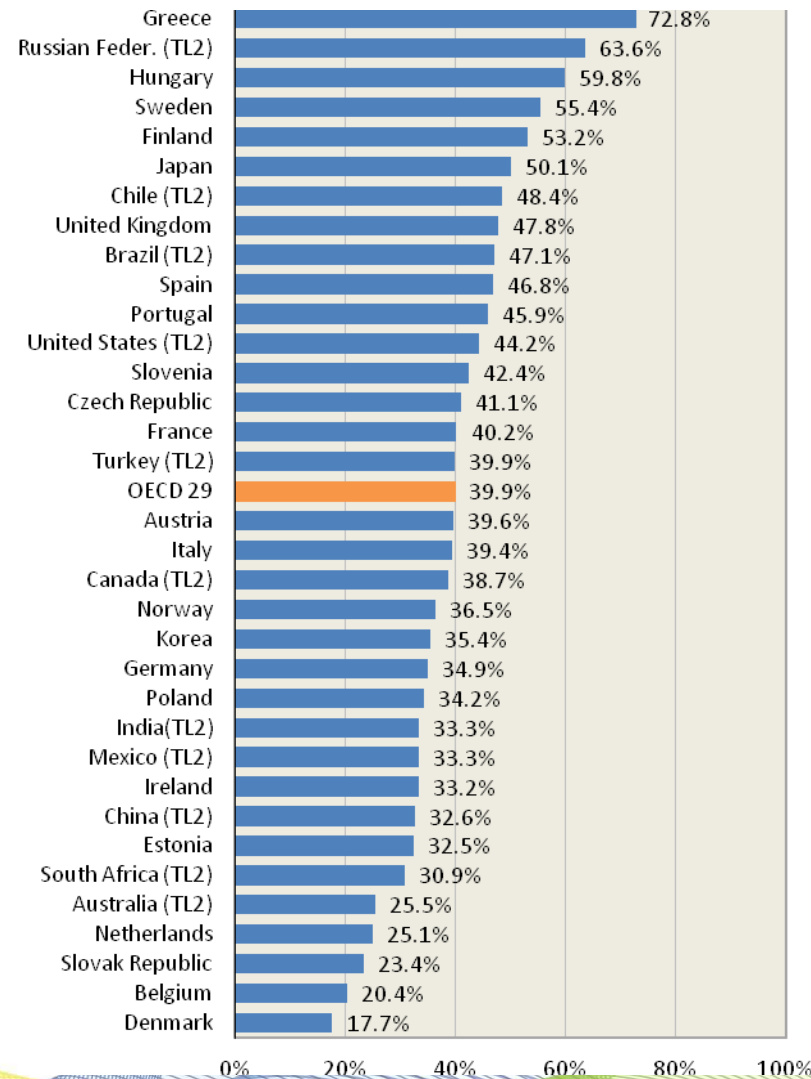
Efficiency

Equity

Environmental sustainability

Internationally comparable statistics on about 2000 regions in the 34 OECD countries + emerging economies. Yearly time-series (1995-2009) for around 40 indicators of demography and migration, economic accounts, labour market, social indicators, environmental and innovation

# 40% of the increase in total GDP between 1995 and 2007 was driven by 10% of regions

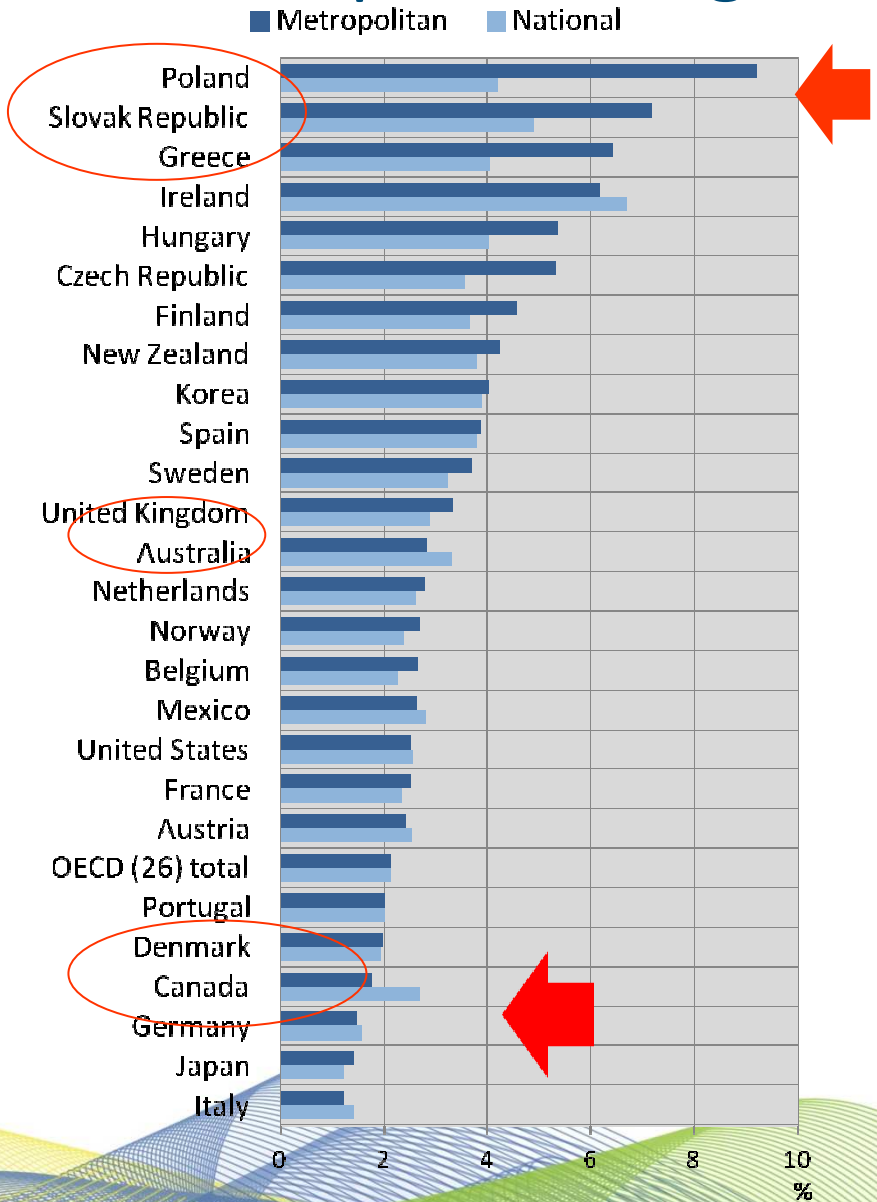


Percent of national GDP growth contributed by the top 10% TL3 regions; 1995- 2007

Source: OECD Regions at a Glance 2011



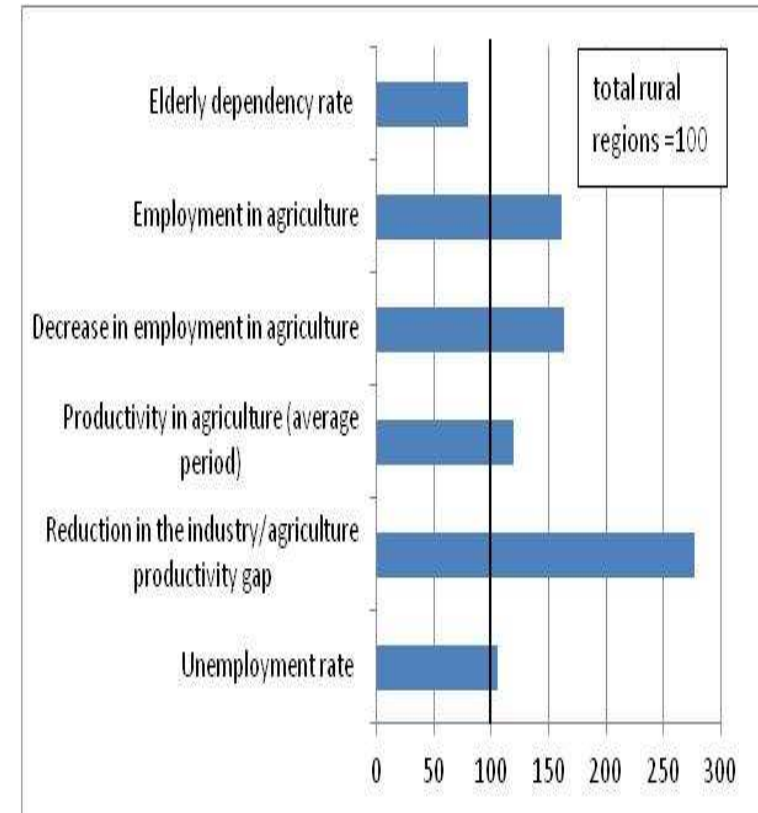
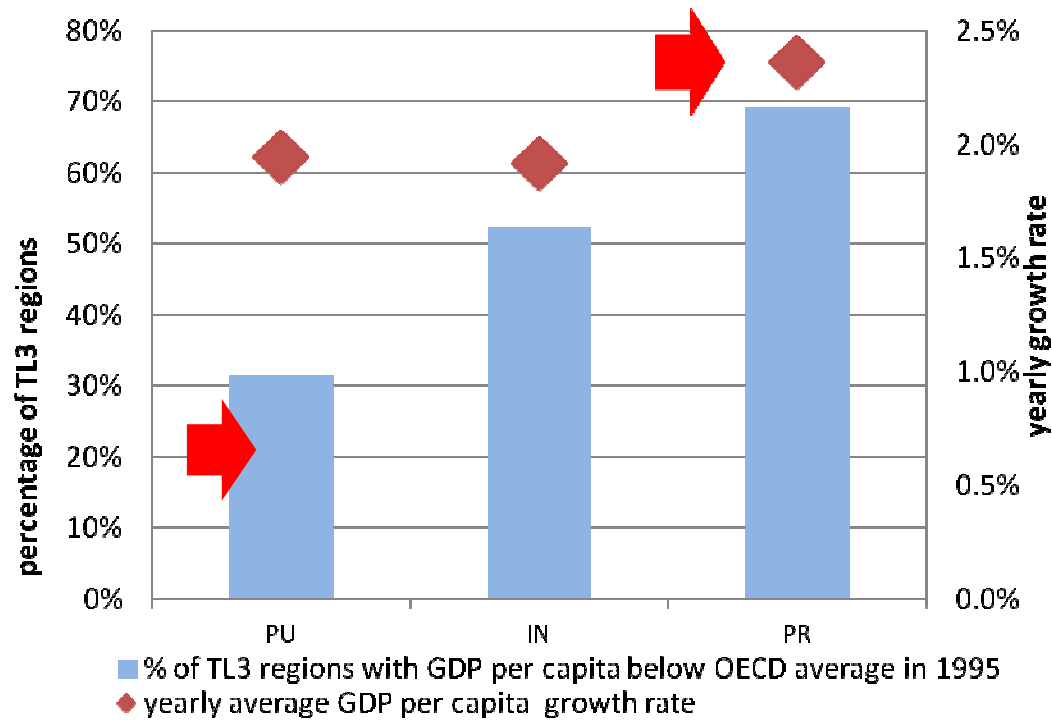
# Large metropolitan regions are not always the competitive regions



GDP growth rate in metropolitan regions; 1997-2007



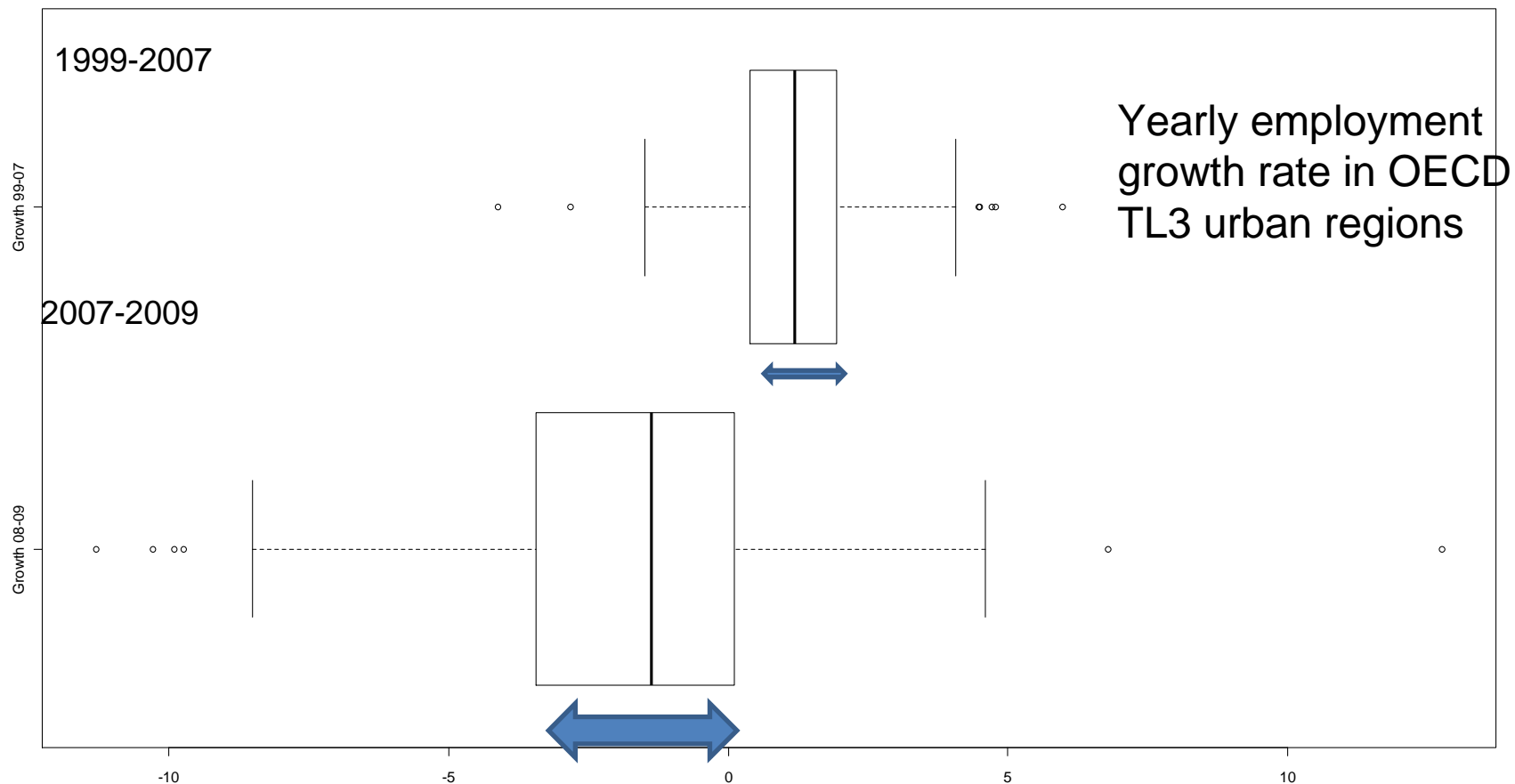
# On average rural regions grew faster than urban, especially when improvement in productivity of agriculture





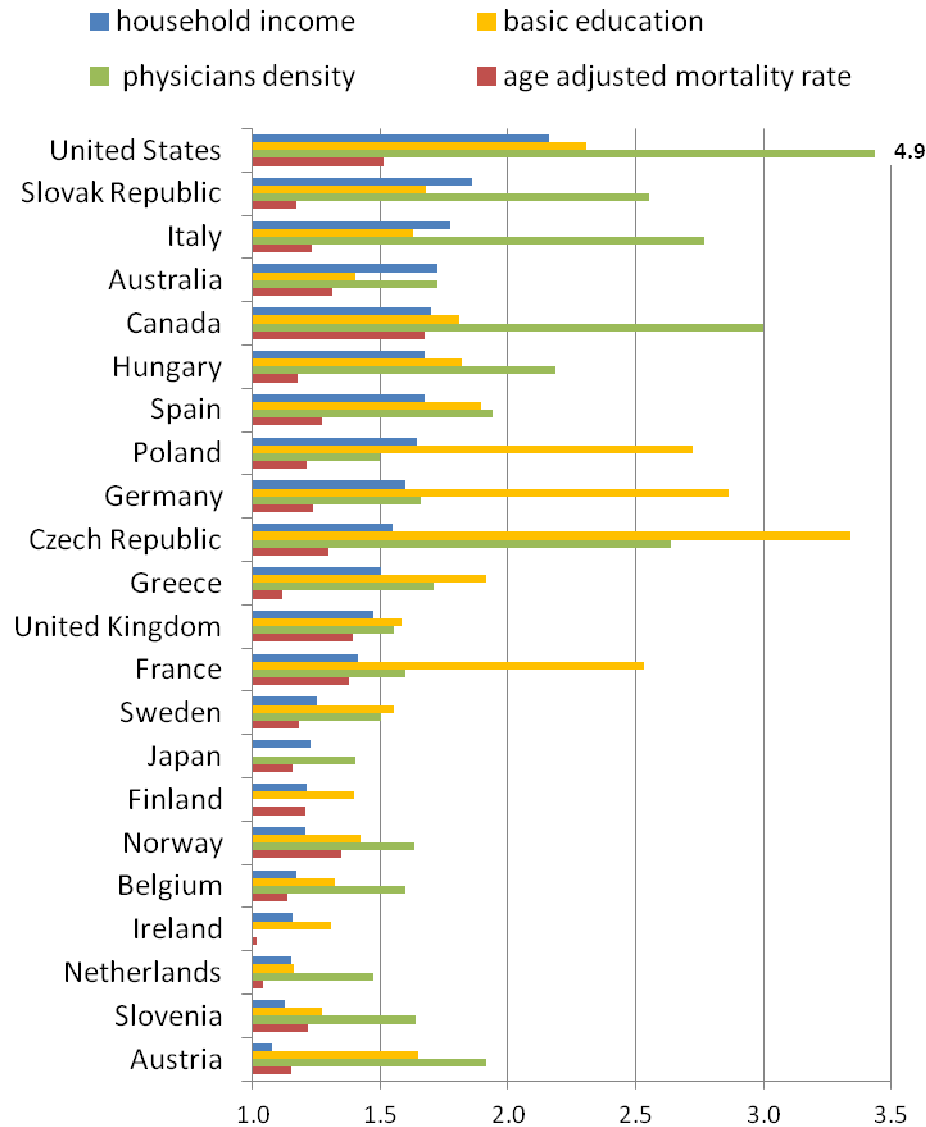
# Need for a differentiated approach targeted at different typologies of regions

B) Growth rate distribution: PU



Source: *Regions at a Glance, 2011*

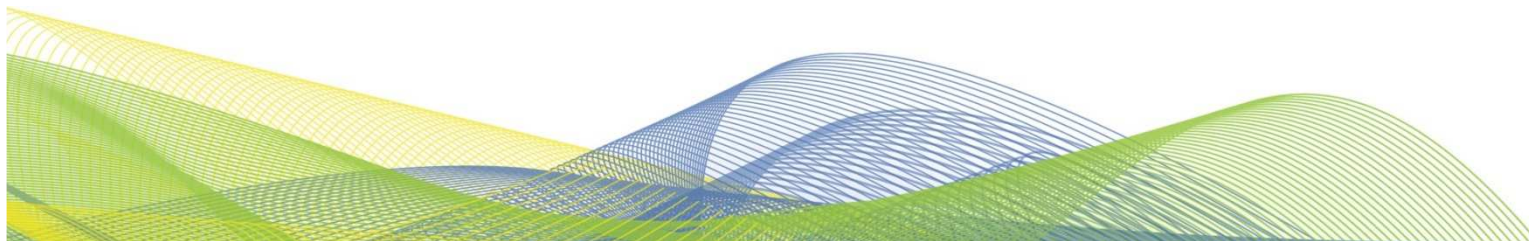
# Regional disparities in access to education and health can't be explained just by income differentials



Ratio between the largest and smallest TL2 regional values: household income, basic education attainment, age-adjusted mortality rate and density of physicians; 2007



## 2. Which tools we use

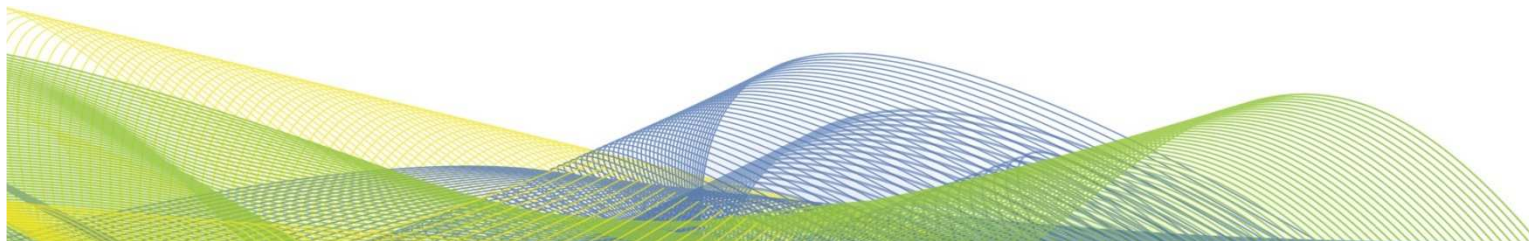


- The OECD Regional Database <http://stats.oecd.org>
- Regions in each country are classified at two territorial levels (TLs): Territorial Level 2 (335 large regions) and territorial Level 3 (1679 small regions).
- OECD classifies TL3 regions into **predominantly urban, intermediate or predominantly rural** on the basis of density of population in small communities (included in the region)
- The large metropolitan regions database <http://stats.oecd.org>
- Regional typology of knowledge and innovative regions
- Territorial Development Policy Committee and Working Party on Territorial Indicators: policy insight, peer reviews, advancement in the measurement agenda

[www.oecd.org/gov/regional/statisticsindicators](http://www.oecd.org/gov/regional/statisticsindicators)



3. Is there enough “territory” in our indicators?



# New definitions for new measures

Integration of GIS data (land cover, road networks, location of key infrastructure and services), and socio-economic data on population distribution and on flows



Produce new knowledge to address policy questions: type of urbanisation, carbon emissions of cities, air quality in regions, income distribution, poverty etc.

1. Extended OECD territorial classification: Remote rural regions
2. New definition of functional urban areas
3. Framework on different functional linkages between urban and rural areas

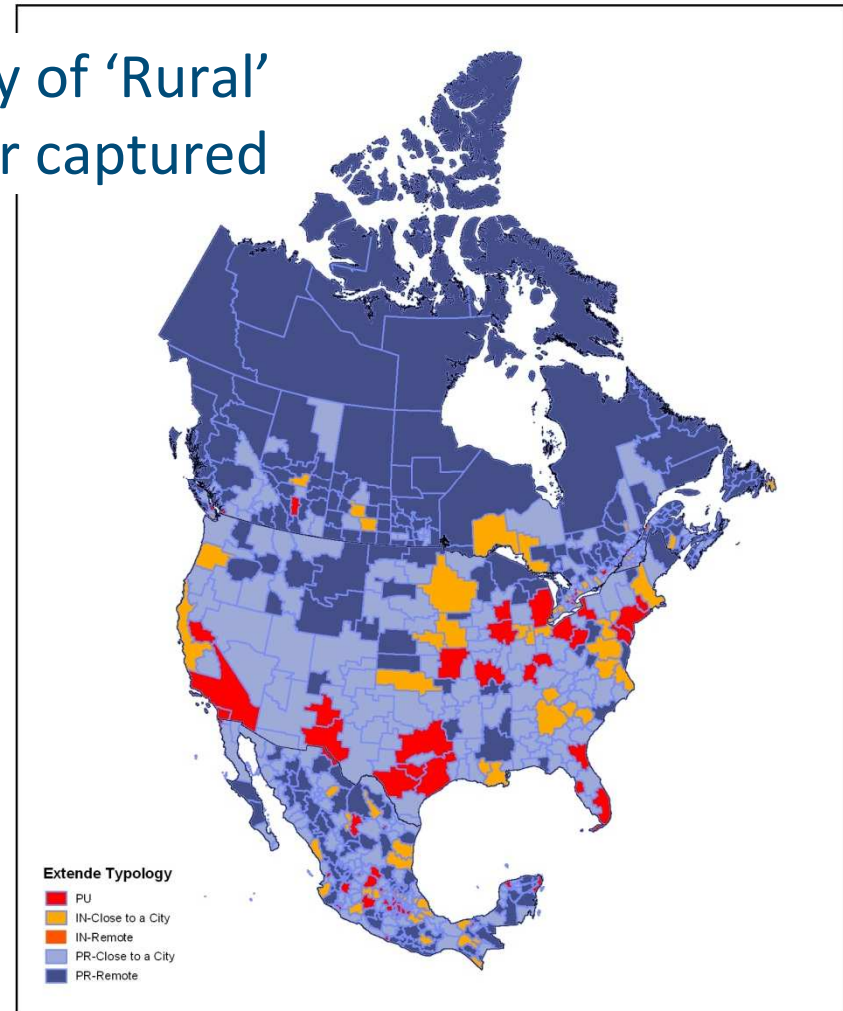
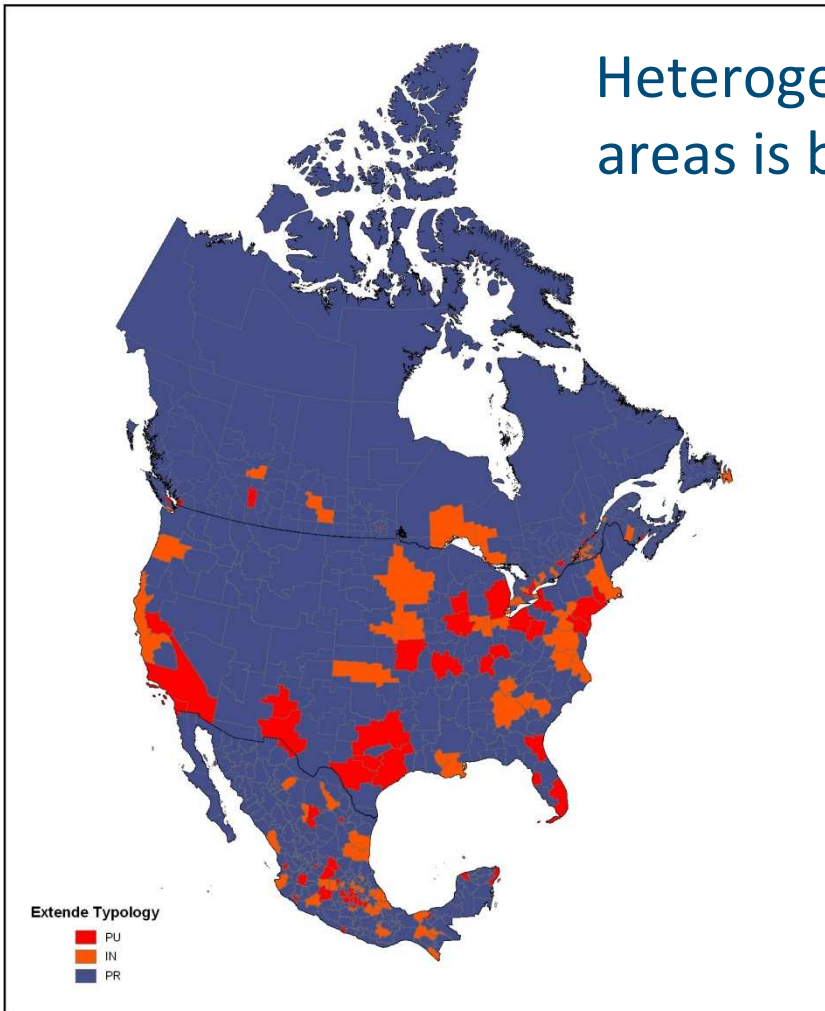
# Extended OECD territorial typology: Remote rural regions

Remoteness proxied by time needed to reach an urban center

OECD Typology: North America

Extended Typology: North America

Heterogeneity of 'Rural' areas is better captured



## And the distinction is meaningful

Remote rural regions experience significant drains of their labour force, while rural to urban migration is not longer significant in OECD regions

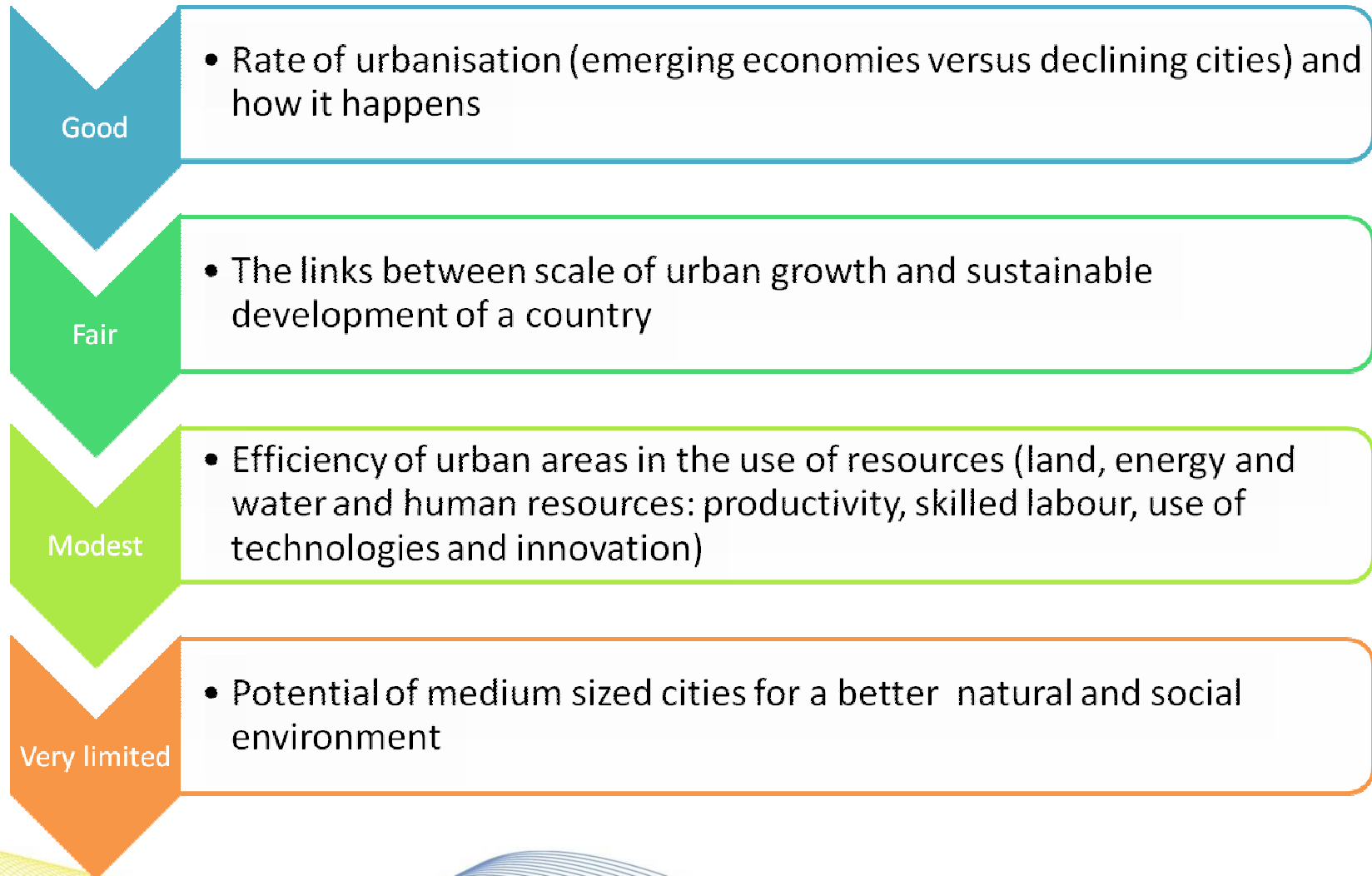
	Net inter-regional migration	Net inter-regional migration
<b>Rural region</b>	-0.522	
Population	-2.74e-06***	-3.56e-06***
Unemployment rate	-0.194***	-0.183***
Elderly dependency rate	-0.139***	-0.146***
Employ. Agriculture	-24.88***	-26.98***
Employ. Manufacture	-7.029**	-14.41***
Employ. Construction	46.01***	47.11***
<b>Remote rural regions</b>		-2.783***
Rural regions close to urban		-0.328

in red significant coefficients

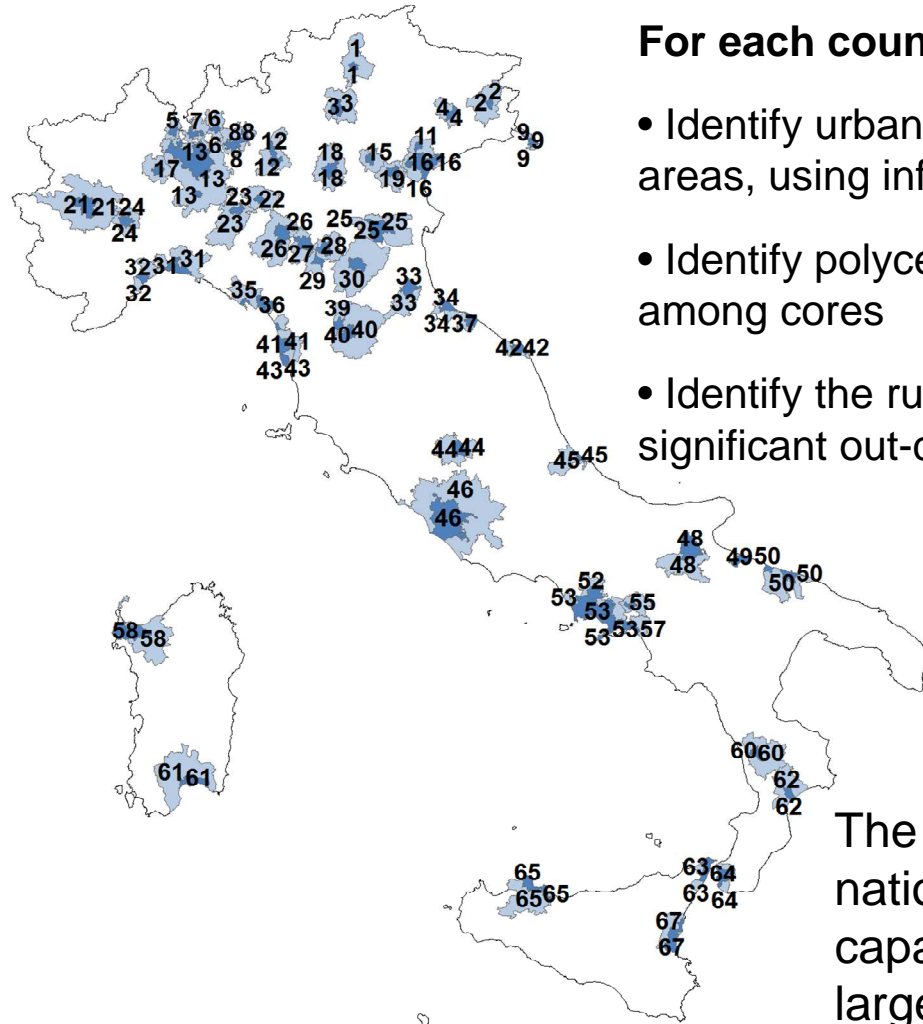


# Questions that require more analysis

Level of our knowledge



# Functional definition of urban areas



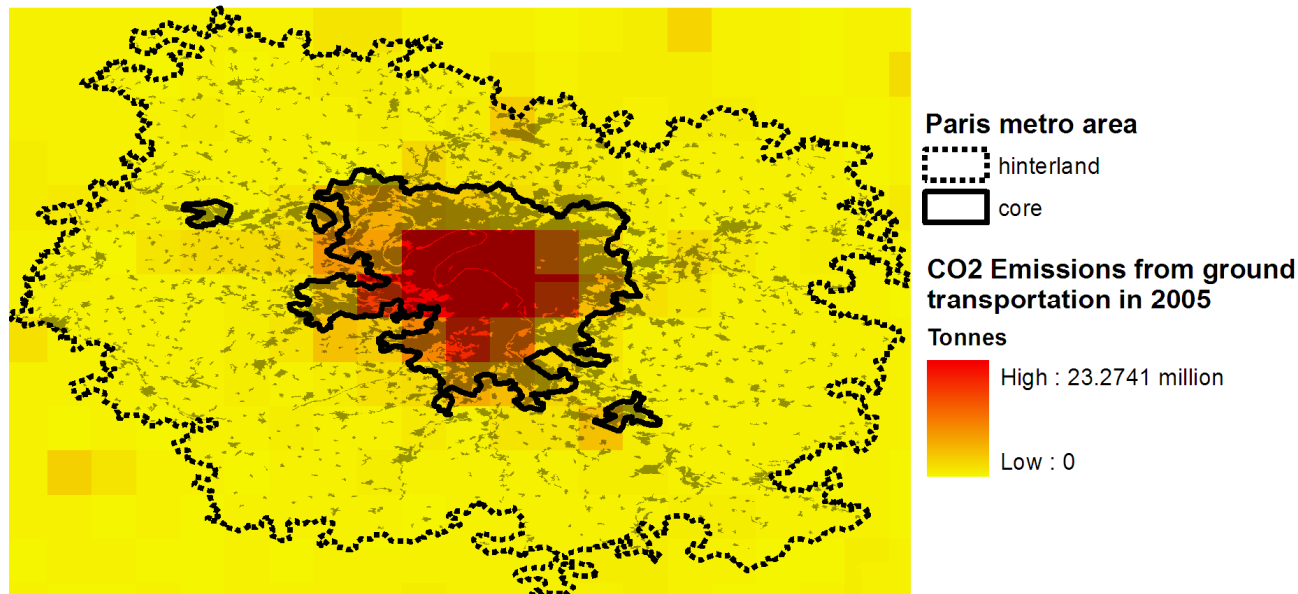
## For each country:

- Identify urban cores as contiguous highly densely inhabited areas, using information from 1km population grids
- Identify polycentric metro-areas looking at commuting flows among cores
- Identify the rural-urban hinterlands, as municipalities with significant out-commuting towards the cores

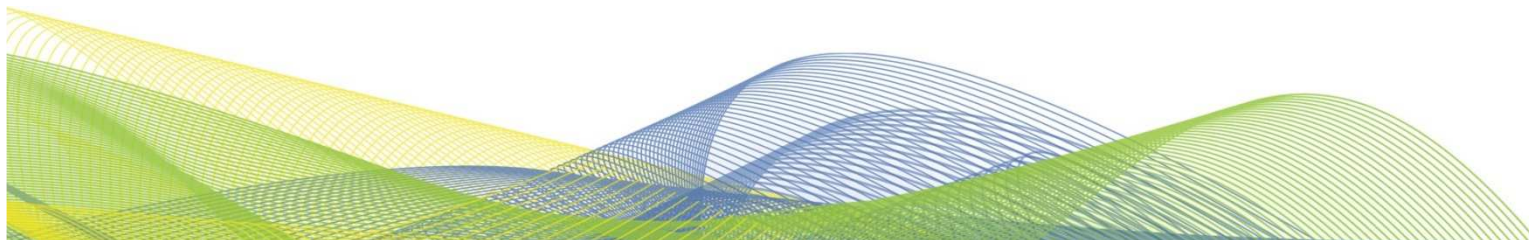


The result is a comprehensive picture of national, urban system that enhances our capacity to study the relative importance of large vs medium-sized cities and the interconnections among cities of different sizes

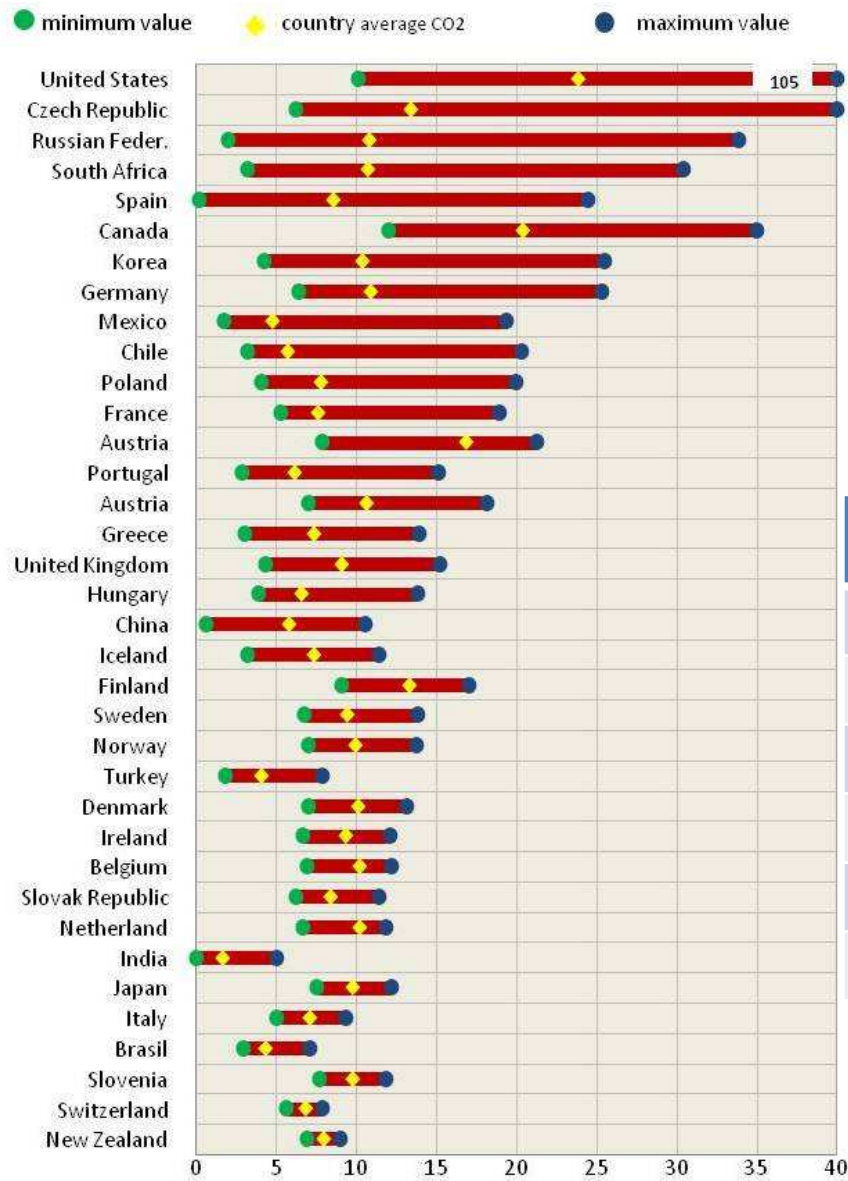
# Integrating spatial and socio-economic data to understand urban systems: Urban emissions



Adopt similar techniques to other indicators: air quality, urbanisation, GDP in cities etc.



## Regional (TL2) range in Co2 carbon emissions per capita



Coming soon: Co2 carbon emissions in metropolitan areas and cities

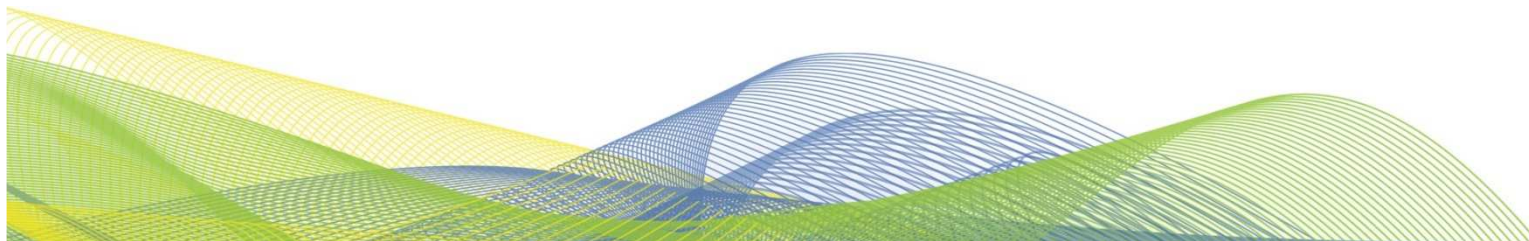
Metropolitan area	CO2 per capita 2000	CO2 per capita 2005
Milan	3,255	3,210
Cagliari	1,144	1,186
Barcelona	2,136	2,275
Oviedo	4,372	4,945
Paris	3,240	2,734
Grenoble	1,974	1,788

OECD Regions at a Glance 2011



# Conclusions

- **Shift to integrate socio-economic data with spatial data (GIS data: land cover/location of key infrastructure and services), to increase our knowledge of territories**
- **Constraints on inputs: availability of information (be creative) and “labour intensive” task. Agree on methods with countries, use estimations.**



# References

[www.oecd.org/gov/regional/statisticsindicators](http://www.oecd.org/gov/regional/statisticsindicators)

[www.oecd.org/regional/regionsataglance](http://www.oecd.org/regional/regionsataglance)

OECD Regions at a Glance 2011 (forthcoming June)

Measuring the economic, social and environmental performance of city regions (forthcoming December 2011)

Regions and Innovation policy (2011)

OECD Regional grids

OECD Metropolitan database

The economic performance of remote rural regions (OECD working paper 2011)

Defining city-regions for comparison of economic and environmental performance (OECD working paper 2011)

Labour mobility in OECD regions and regional development (OECD working paper 2011)

