BUILDING SOUND AND COMPARABLE METRICS FOR SDGS: THE CONTRIBUTION OF THE OECD DATA AND TOOLS FOR CITIES AND REGIONS

STATISTICAL CAPACITY BUILDING FOR MONITORING OF SUSTAINABLE DEVELOPMENT GOALS

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- 2. OECD regional and urban indicators in relation to SDGs
- 3. The harmonised definition of cities and the OECD Metropolitan Database
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To increase comparability among regions, they have been classified

Regional typology (Predominantly Urban, Intermediate, Predominantly Rural) at TL3 level is defined through three steps:

- 1. Define urban clusters
- 2. % population living in (1)
- 3. Urban centres criteria
- Define urban clusters based on population grid density of 1km², where clusters are contiguous cells with a density of at least 300 inhab./km2 and 5000 inhab. (600 inhab./km2 and 10000 inhab. in Japan and Korea)

2) Proportion of urban population in the region: ≥ 80% ⇒ Predominantly urban (PU) < 50% ⇒ Predominantly rural (PR) Between 50 and 80% ⇒ Intermediate (IN) 3) Reallocation of the typology, if more than 25% population of the region lives in urban cluster with at least: 200 000 inhab.: Rural ⇒ Intermediate 500 000 inhab.: Intermediate ⇒ Urban





- Regions in each member country have been classified based on two administrative territorial levels (TLs):
- Territorial Level 2 (TL2), consists of 398 OCDE large regions, while the lower level, Territorial Level 3 (TL3), is composed of 2 241 small regions.
 - Classified by regional typology OECD definition: (Predominantly Urban, Intermediate, Predominantly Rural) and extended regional typology
 - Covers 6 wide topics

OECD Statistical portal: http://stats.oecd.org

Since 2015 : statistics on subnational government public finance, expenditure, revenues, investment, debt etc. by level of government.

Indicators collected

| DEMOGRAPH IC | Resident Population by age and gender |
|-------------------------|--------------------------------------------------------------------------------|
| | Deaths by age and gender |
| | Number of private households |
| | Inter-regional migration |
| ECONOMI C | GDP ; GVA by industry (ISIC rev.4) |
| | Primary Household Income ; Disposable Household Income |
| | Deflators (regional accounts) |
| LABOUR | Employment ; Labour force ; Young labour force |
| | Unemployment ; Long term unemployment ; Youth unemployement |
| | Employment at place of work by industry |
| | Part-time employment by gender |
| INNOVATION EDUCATION | Labour force attainment by ISCED level |
| | Students enrolment by ISCED level |
| | R and D by sector (expenses and number of personnel) |
| | Percentage of households with broadband access |
| | Rate of young NEET; Rate of early leavers from education |
| SOCIAL | Number of physicians ; Number of hospital beds |
| | Life expectancy at birth ; Infant mortality ; Transport-related mortality rate |
| | Number of motor vehicles theft ; Number of homicides |
| | Private vehicles |
| | Voters |
| | Municipal waste ; Recycled municipal waste |
| IVIRON 1ENT | Air pollution (PM2.5 level) ; CO2 emissions by sector |
| | CO2 emissions by sector |
| 2 Z Ш | Share of land by type of coverage |

Building on the OECD Regional well-being framework and OECD regional statistics

- All 392 OECD regions can be compared in terms of 11 dimensions that matter for people lives and that include quality of life and material conditions
- Regions and cities can use this metrics to start a discussion on how to use wellbeing indicators in policy making



Explore the map to find out how life is across OECD regions and discover regions with similar well-being.

Each region is measured in eleven topics important for well-being. The values of the indicators are expressed as a score between 0 and 10. A high score indicates better performance relative to the other regions.



Regions with similar well-being in other countries



Sweden Netherlan
Småland with Islands Drenthe

Norua



Norway South-Eastern Norway



Finland **Helsinki-Uusimaa**





OECD regional and urban indicators in relation to SDGs

| SDGs | OECD Database | Indicators | |
|---------------------------------------------|-------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| 1 ⁿ⁰ ₽0verty ∄*††*† | Regional Income Distribution Database | Poverty rate after taxes and transfers, poverty line 60% and 50%, poverty rate before taxes and transfers, poverty line 60% and 50%; | |
| 3 GOOD HEALTH AND WELL-BEING | Regional Database Regional Well-being Database Key data on sub-national government | Access to health (e.g. distance to the closest hospital) Mortality and life expectancy at birth, share of people with unmet medical needs Subnational expenditure for health | |
| 4 quality Education | Regional Database Regional Well-being Database Key data on subnational government | Educational attainment of the labour force Student enrolment by level of education Share of labour force with at least secondary education Subnational expenditure for education | |
| 5 GENDER EQUALITY | Regional Database | Population by age and gender Death by age and gender Labour market outcomes by gender | |
| 6 CLEAN WATER AND SANITATION | OECD Survey on Stakeholder Engagement in Water Governance OECD Survey on Water in Cities | Stakeholder engagement indicatorsInclusiveness and equity; clarity of goals transparency and accountability; capacity and information; efficiency and effectiveness; institutionalisation, structuring and integration; adaptiveness.Water Governance in CitiesShare of population with access to: a) safe drinking water; b) sanitation; c) waste water treatment. Share of water lossPer capita domestic water consumption; number of employees 1000 connections; average price of drinking water for households. | |
| 8 DECENT WORK AND ECONOMIC GROWTH | Regional Database Regional Well-being Database Metropolitan Database Key data on subnational governments | Regional economy Regional GDP; Regional GVA by industry and per worker; Regional employment by industry; Labour utilisation rate; Regional well-being database Regional income per equivalised household Key data on subnational government Subnational expenditures for economic affairs | |
| 11 SUSTAINABLE CITIES | Metropolitan Database | Air quality (exposure to PM 2.5) Land consumption rate to the population growth rate Household disposable income Gini index for income inequality | |





Source: OECD calculations based on population density disaggregated with Corine Land Cover.

OECD-EU city definition: the concept of Functional Urban Areas (FUAs)

Why a harmonised definition of cities?

- Policies need to reflect the reality of where people live and work
- Individual cities can be compared with other cities in across the OECD
- It helps understand the linkages between core cities and their surrounding areas

The approach

- It identifies cities as economic entities, beyond administrative boundaries
- It allows comparisons among the different forms that urbanisation takes

The harmonised definition of cities and the OECD Metropolitan Database

Main characteristics

- A **functional approach** → based on people and their daily behaviour instead of administrative or purely morphological approach
- Overcome administrative boundaries
- Facilitate international comparisons
- Support the design of urban policy and governance solutions

Methodology developed in cooperation with the EU in 2012.

- Identified 1 197 functional urban areas (281 metropolitan areas) in OECD countries
- Replicated and replicable methodology in non-OECD countries
 - Colombia (8 metropolitan areas computed along with indicators)
 - Morocco (Casablanca, in progress)
 - Vietnam (in progress)
 - Tunisia (in progress)

Defining functional urban areas A three step approach



Metropolitan database (for those FUAs above 500 000 inhabitants)

| † Demographic | Ourban form | → Territorial organisation |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| Population (level and growth) Population density Population by age | -Total Area -Urbanised area (share and change) -Concentration of population in core areas - Sprawl index | Local units Local units in core area Territorial fragmentation |
| • Economic and innovation | 🛠 Labour market/Social | Environmental |
| GDP (level and growth) GDP per capita and per worker Disposable income per equivalent household Gini index Entropy-based segregation index Patents application | Employment (level and change) Employment rate Labour force (level and change) Unempl. (level and change) Unempl. rate Participation rate | Air pollution CO2 emissions per capita CO2 emissions from transport and energy sector |
| | | 11 |

Visualising data: the metropolitan eXplorer http://measuringurban.oecd.org/#









Regions at a Glance

• Publication (English): <u>http://www.oecd.org/regional/oecd-regions-at-a-glance-19990057.htm</u>

• Databases:

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Metropolitan Areas Database <u>http://stats.oecd.org/Index.aspx?Datasetcode=CITIES</u> Regional Database <u>http://stats.oecd.org/Index.aspx?DataSetCode=REGION_DEMOGR</u>

Data Visualisation:

Metropolitan explorer <u>http://measuringurban.oecd.org</u> Regional well-being: <u>http://www.oecdregionalwellbeing.org</u>



Making cities work for all

- Full publication (English): https://www.oecd.org/gov/making-cities-work-for-all-9789264263260-en.htm
- **Policy Highlights** (available in English, French and Spanish): <u>http://www.oecd.org/gov/making-cities-work-for-all-policy-brief-en.pdf</u>

Well-being in Danish cities

• **Publication** (English): <u>http://www.oecd.org/fr/publications/well-being-in-danish-cities-</u> <u>9789264265240-en.htm</u>



OECD (2016) *Regions at a Glance 2016*, OECD Publishing, Paris. http://dx.doi.org/10.1787/reg_glance-2016-en

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Brezzi, M, Veneri, P. (2015) "Assessing Polycentric Urban Systems in the OECD: Country, Regional and Metropolitan Perspectives", *European Planning Studies*, 23:6, 1128-1145

Veneri P. (2016) City size distribution across the OECD: Does the definition of cities matter?, *Computers, Environment and Urban Systems* 59: 86-94.

Veneri P. (2017) "Urban Spatial Structure in OECD Cities: is Urban Population Decentralising or Clustering?", *Papers in Regional Science (forthcoming)*. WP version: <u>http://dx.doi.org/10.1787/5js3d834r3q7-en</u>

THANK YOU

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