

Luxembourg

Regions and Cities at a Glance provides a comprehensive assessment of how regions and cities across the OECD are progressing in a number of aspects connected to economic development, health, well-being and the net zero-carbon transition. It presents indicators on individual regions and cities to assess disparities within countries and their evolution since the turn of the new millennium. Each indicator is illustrated by graphs and maps. The report covers all OECD countries and, where data is available, partner countries and economies.

Territorial definitions

The data in this note reflect different sub-national geographic levels in OECD countries:

- **Regions** are classified on two territorial levels reflecting the administrative organisation of countries: large regions (TL2) and small regions (TL3). Small regions are classified according to their access to metropolitan areas (Fadic et al. 2019).
- **Functional urban areas** consist of cities – defined as densely populated local units with at least 50 000 inhabitants – and adjacent local units connected to the city (commuting zones) in terms of commuting flows (Dijkstra, Poelman, and Veneri 2019). Metropolitan areas refer to functional urban areas above 250 000 inhabitants.

In addition, some indicators use the degree of urbanisation classification (OECD et al. 2021), which defines three types of areas:

- **Cities** consist of contiguous grid cells that have a density of at least 1 500 inhabitants per km² or are at least 50% built up, with a population of at least 50 000.
- **Towns and semi-dense areas** consist of contiguous grid cells with a density of at least 300 inhabitants per km² and are at least 3% built up, with a total population of at least 5 000.
- **Rural areas** are cells that do not belong to a city or a town and semi-dense area. Most of these have a density below 300 inhabitants per km².

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Well-being, liveability and inclusion in regions

Regional well-being

Luxembourg performs above the OECD median region in nine out of eleven well-being dimensions, particularly in terms of civic engagement, safety, access to services and income.

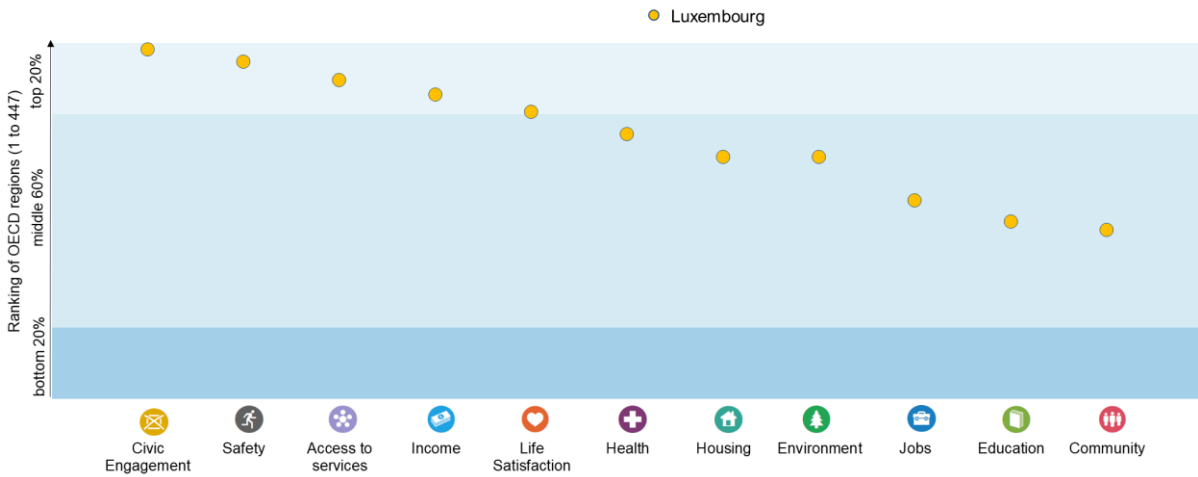


Figure 1: Regional gaps in well-being

Note: Regional indices provide a first comparative glance of well-being in OECD regions. The figure shows the relative ranking of the regions with the best and worst outcomes in the eleven well-being dimensions, relative to all OECD regions. The eleven dimensions are ordered by decreasing regional disparities in the country. Each well-being dimension is measured by the indicators in the table below.

In terms of well-being indicators, Luxembourg does particularly well in voter turnout, ranking among the top 10 OECD regions in terms of the share of voters casting a ballot in the last national election.

	Country average	Median OECD region
Civic engagement		
Voters in last national election (%), 2018	89,7	66,8
Safety		
Homicide Rate (per 100 000 people), 2017	0,3	1,4
Access to services		
Households with broadband access (%), 2021	97,0	86,0
Internet download speed: deviation from OECD average (%), 2021-Q4	+16,2	..
Income		
Disposable income per capita (in USD PPP), 2020	34 698	20 616
Life Satisfaction		
Life satisfaction (scale from 0 to 10), 2016-20	7,2	6,6
Health		
Life Expectancy at birth (years), 2020	82,2	80,3
Age adjusted mortality rate (per 1 000 people), 2021	7,0	8,0
Housing		
Rooms per person, 2012	2,0	1,7
Environment		
Level of air pollution in PM 2.5 (µg/m³), 2020	8,7	10,8
Jobs		
Employment rate 15 to 64 years old (%), 2021	69,4	68,6
Unemployment rate 15 to 64 years old (%), 2021	5,3	5,8
Education		
Population with at least upper secondary education, 25-64 year-olds (%), 2021	80,3	80,4
Community		
Perceived social network support (%), 2016-20	90,1	90,6

Figure 2: How do the top and bottom regions fare on the well-being indicators?

Note: Regional well-being indices are affected by the availability and comparability of regional data across OECD countries. The indicators used to create the indices can therefore vary across OECD publications as new information becomes available. For more visuals, visit <https://www.oecdregionalwellbeing.org>.

The digital divide

Fixed Internet connections in Luxembourgish cities and rural areas deliver speeds significantly faster than the OECD average (46% and 7%, respectively). This gap (39 percentage points) is smaller than in most other OECD countries.

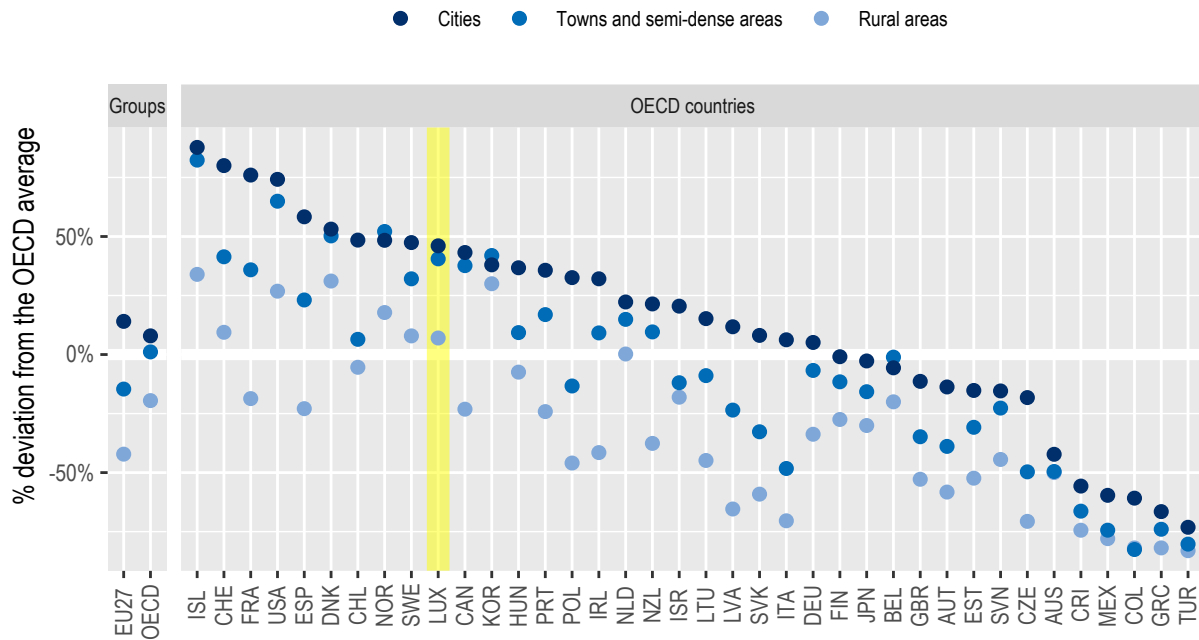


Figure 3: Speed of fixed Internet connections relative to the OECD average, by degree of urbanisation, 2021Q4

Note: Cities and rural areas are identified according to the degree of urbanisation (OECD et al. 2021). Internet speed measurements are based on speed tests performed by users around the globe via the Ookla Speedtest platform. As such, data may be subject to testing biases (e.g. fast connections being tested more frequently), or to strategic testing by ISPs in specific markets to boost averages. For a more comprehensive picture of Internet quality and connectivity across places, see OECD (2022), *“Broadband networks of the future”*.
 Source: OECD calculations based on [Speedtest by Ookla Global Fixed and Mobile Network Performance Maps](#) for 2021Q4.

Demographic trends in regions and cities

Population projections by type of regions across OECD countries

Luxembourg will see its population increase by 18 % over the next two decades. This rate is among the highest in OECD metropolitan regions.

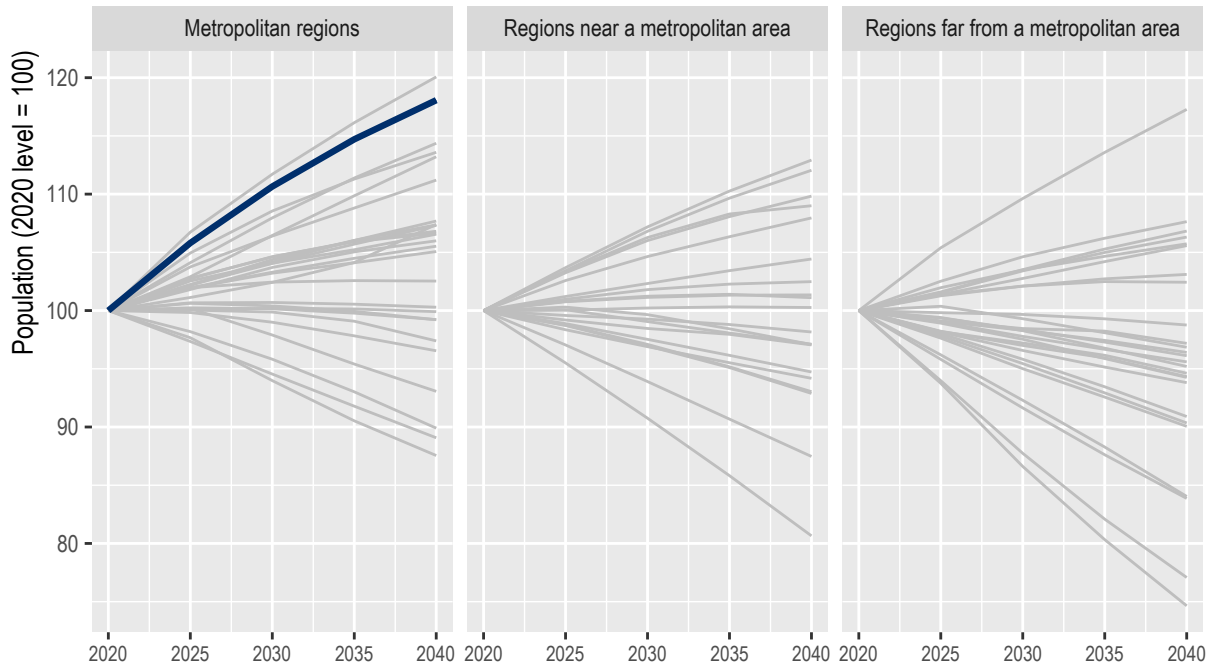


Figure 4: Population projections across OECD countries, by type of regions

Note: Lines represent the population projection in OECD countries per type of region (Fadic et al. 2019). Luxembourg is highlighted in blue.

Proportion of the elderly

In the coming two decades, Luxembourg will see its elderly population increase from 15% to 22%. This share will remain low compared to other OECD metropolitan regions.

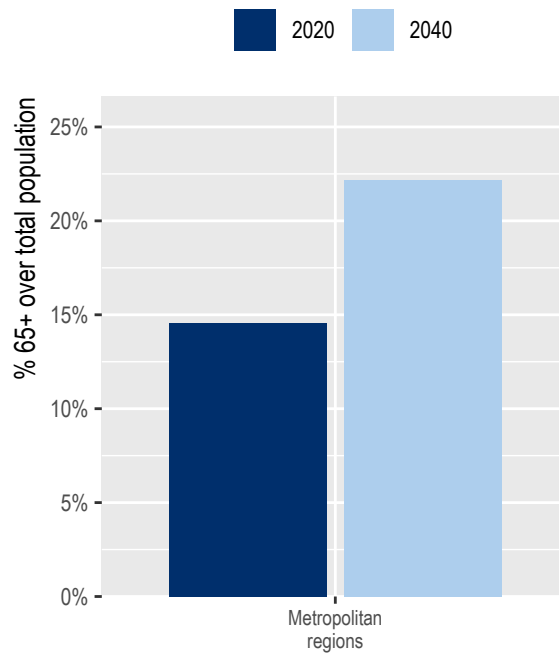


Figure 5: Evolution of the elderly population by type of region

Population in cities

Between 2010 and 2021, Luxembourg experienced a rise in population averaging 2.2% per year.

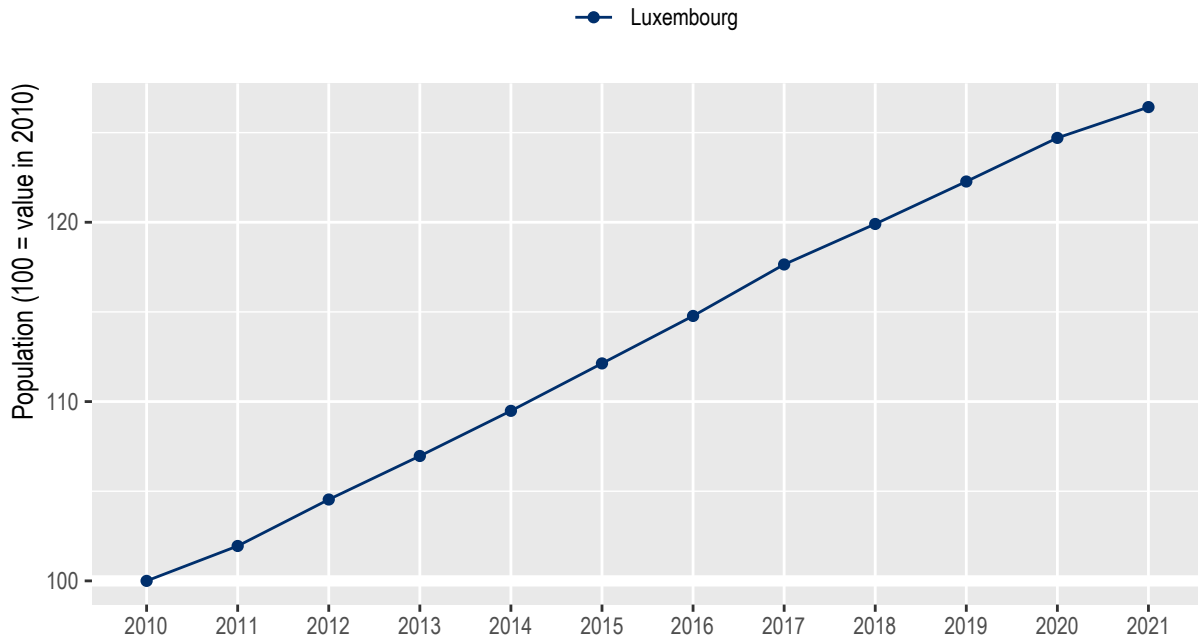


Figure 6: Population by size of functional urban area (100 = value in 2010), 2010-2021

Environmental challenges in regions and cities

Urban heat island effect

In Luxembourg, the difference in temperature between the city and its surrounding areas (i.e. urban heat island intensity) reaches on average 3.7 degrees Celsius (°C).

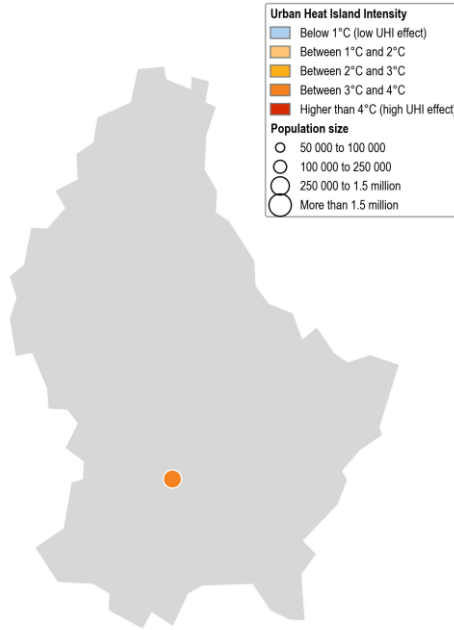


Figure 7: Urban heat island intensity index, 2021

Note: The Urban Heat Island Intensity (UHI) index is defined as the difference in land surface temperature between built-up areas and non-built-up areas within functional urban areas. This index can be affected by the type of vegetation and climate in non-built-up areas.

Source: OECD calculations, based on land surface temperature data from NASA's Moderate Resolution Imaging Spectroradiometer (MODIS) (Wan, Hook, and Hulley 2021a, 2021b)

References

Source of administrative boundaries: © OECD, © EuroGeographics, National Statistical Offices, © UN-FAO Global Administrative Unit Layers (GAUL)

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