

Regions and Cities at a Glance 2020 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 net zero-carbon transition. In the light of the health crisis caused by the COVID-19 pandemic, the report analyses outcomes and drivers of social, economic and environmental resilience. Consult the full publication [here](#).

OECD REGIONS AND CITIES AT A GLANCE - COUNTRY NOTE

NETHERLANDS

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C. Well-being in regions

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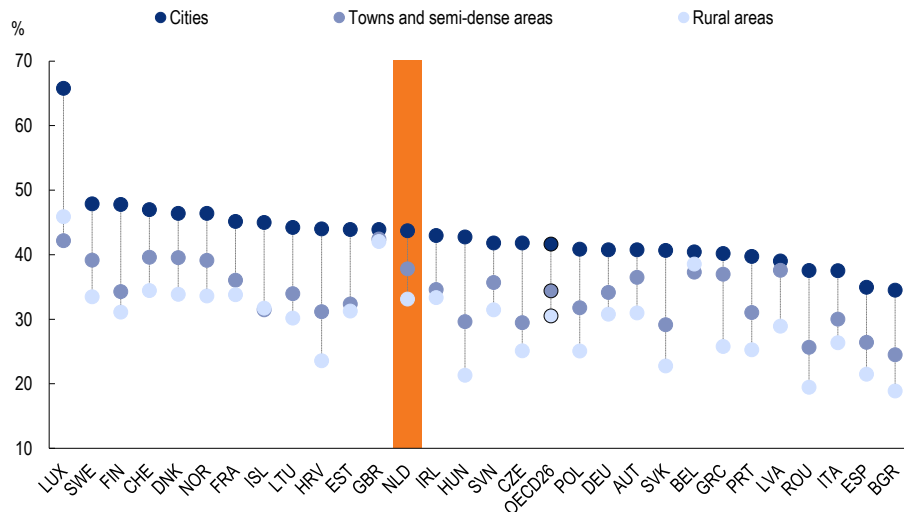
The data in this note reflect different subnational geographic levels in OECD countries:

- **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 (see <https://doi.org/10.1787/b902cc00-en>).
- **Functional urban areas** consists 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 (see <https://doi.org/10.1787/d58cb34d-en>). Metropolitan areas refer to functional urban areas above 250 000 inhabitants.

A. Resilient regional societies

Cities have 11-percentage points higher share of jobs amenable to remote working than rural areas in the Netherlands.

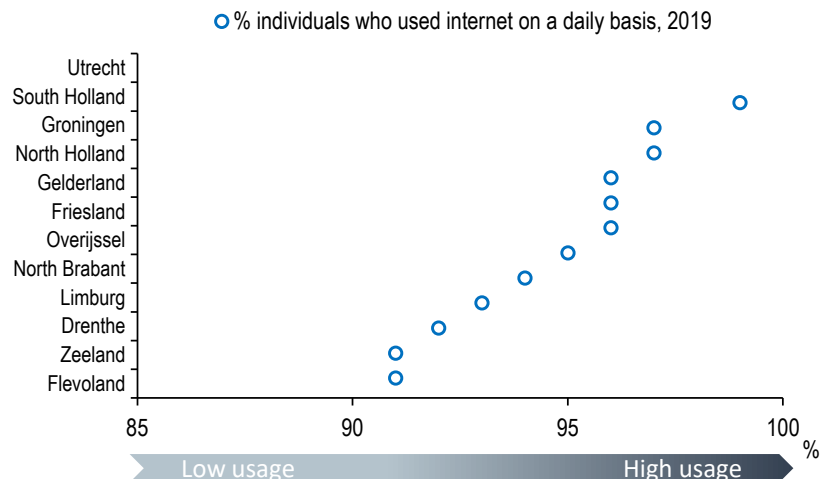
A1. Share of jobs amenable to remote working, 2018
by degree of urbanisation



The share of jobs that are amenable to remote working in the Netherlands ranges from 44% in cities to 33% in rural areas. In towns and semi-dense areas, the share of workers who can potentially work remotely is 38%. Overall, these shares are consistently higher than the OECD average (Figure A1). The extent to which workers can potentially work remotely depends on the task content of the occupations. As in most OECD countries, occupations more amenable to remote working tend to be more concentrated in cities, especially in the capital.

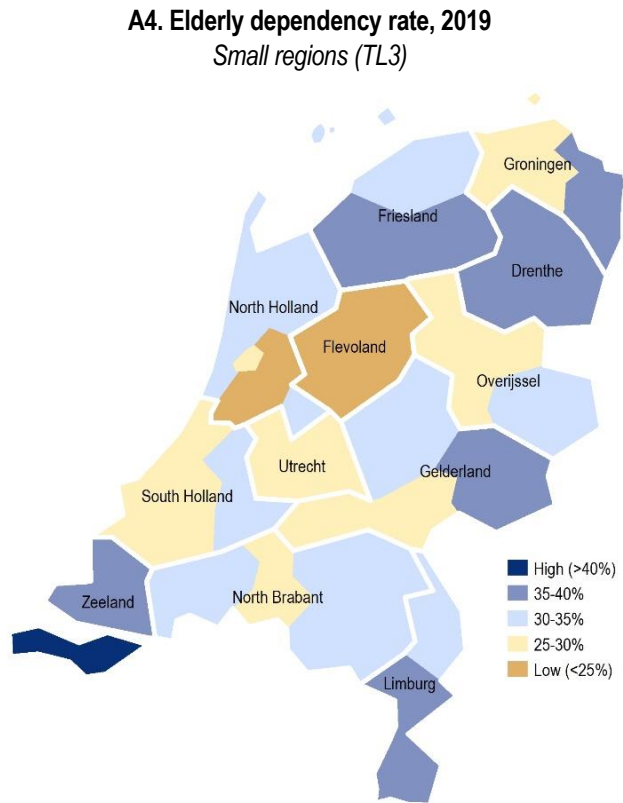
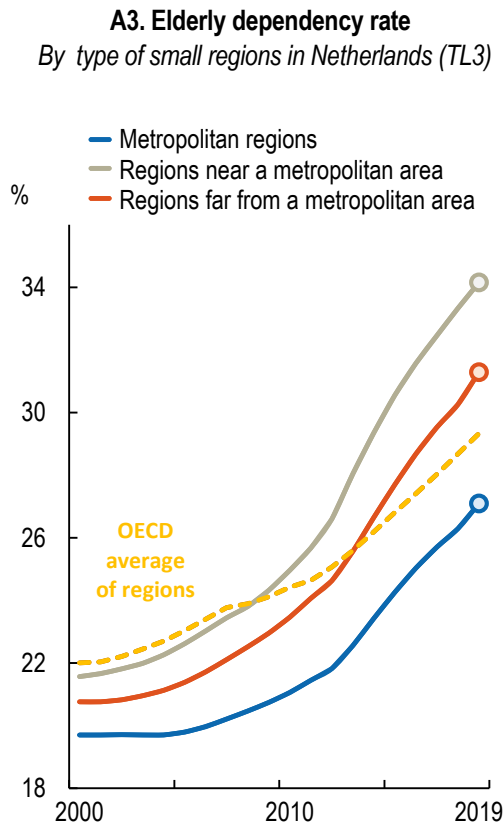
Basic digital take up is crucial to ensure people seize the opportunity of digitalisation, including remote working. While almost all people living in the region of Utrecht used internet on a daily basis in 2019 (Figure A2), people living Zeeland and Flevoland are less intensive users, with slightly more than 90% of their population using internet every day.

A2- Internet infrastructure



Ageing challenges regions near a metropolitan area more strongly

The elderly dependency rate has been increasing in all types of regions in the Netherlands since 2000. Regions near a metropolitan area display a higher elderly dependency rate (35% on average) compared to other types of regions (Figure A3). In one small region in the Netherlands (Zeeuwsch-Vlaanderen), there are two elderly for every five persons in their working-age in 2019, making it the region that faces the greatest challenges in terms of ageing (Figure A4).



The Netherlands has high regional disparities in terms of hospital beds per capita

The relative availability of hospital beds in the Netherlands is comparable to the OECD overall. However, regional disparities in hospital beds per capita in the Netherlands are above the OECD average, with Flevoland having the lowest number of hospital beds per capita in 2002, 4.7 less than in Drenthe.

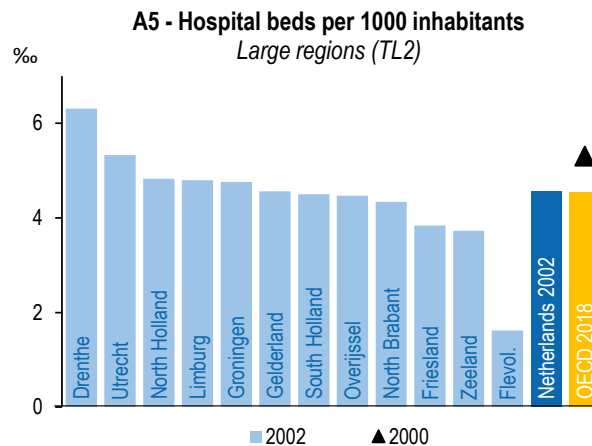


Figure notes. [A3]: OECD (2019), Classification of small (TL3) regions based on metropolitan population, low density and remoteness <https://doi.org/10.1787/b902cc00-en>. Two-year moving averages. [A4]: Small (TL3) regions contained in large regions. TL3 regions in Netherlands are composed by 40 COROP regions.

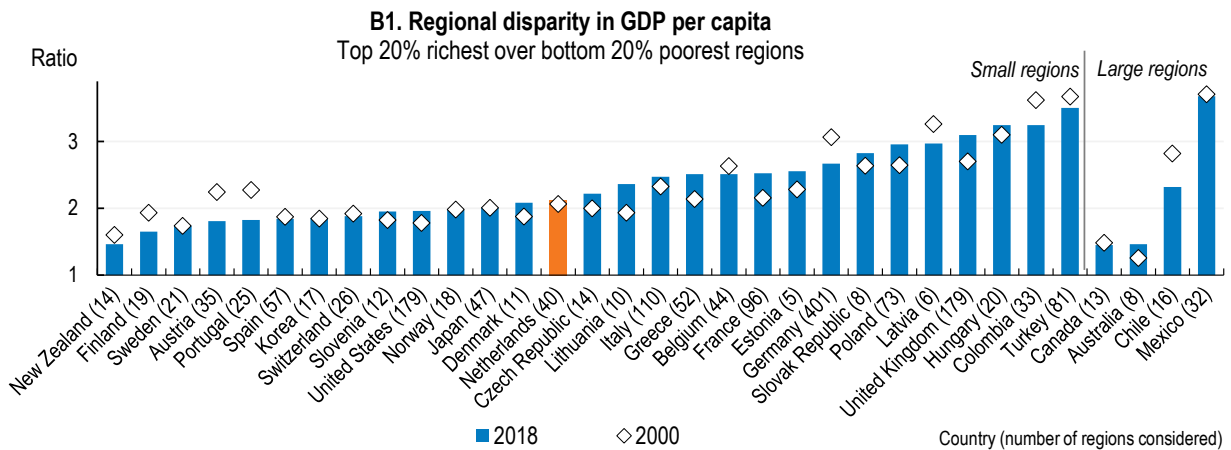
B. Regional economic disparities and trends in productivity

Regional economic gaps in the Netherlands have remained stable since 2000, with the poorest regions growing at similar pace than richest regions

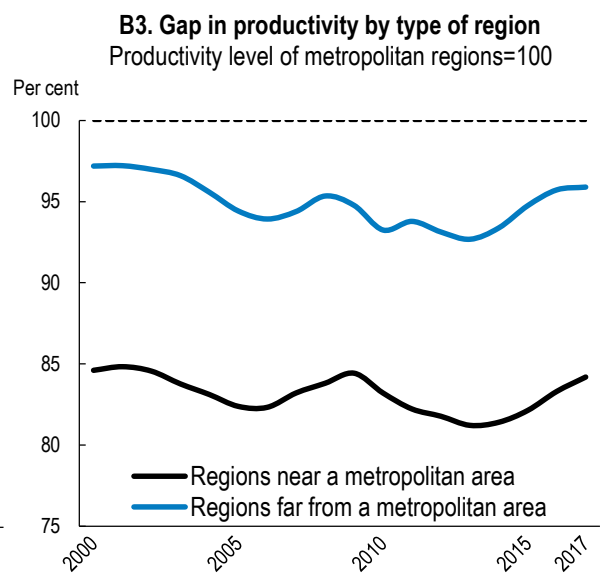
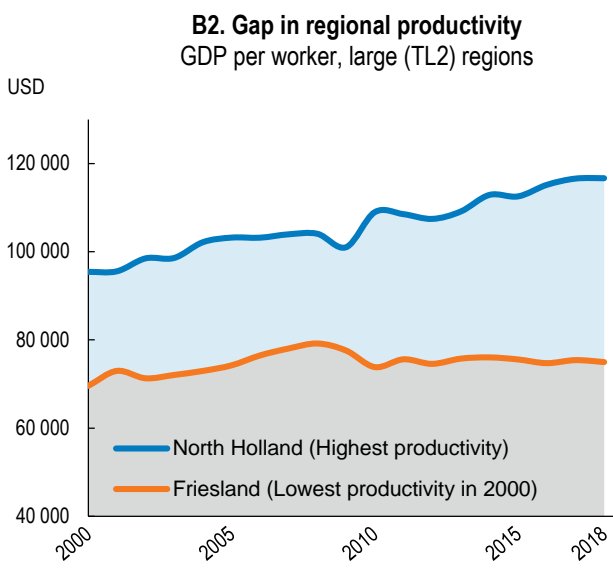
Differences between Dutch regions in terms of GDP per capita remain moderate compared to other OECD countries. North Holland had a 92% higher GDP per capita than Friesland, also due to the exploitation of natural resources in the former region (Figure B1).

With a productivity growth of 0.4% per year over the period 2000-18, Friesland has narrowed its productivity gap to North Holland, the frontier region in terms of productivity in the country. Groningen was the only region to experience a productivity decline in the same period (-0.1% per year) (Figure B2).

The productivity in regions far from a metropolitan area of at least 250 000 inhabitants in 2017 was equivalent to 85% of the productivity level of metropolitan regions, meaning that this difference has remained constant since 2000 (Figure B3).

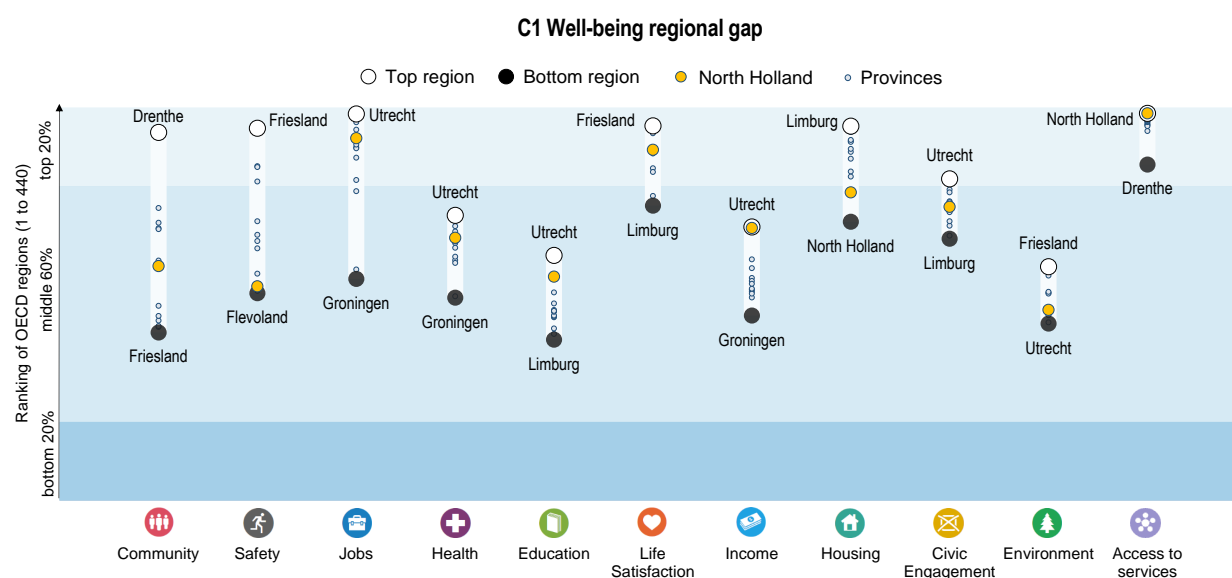


Note: A ratio with a value equal to 2 means that the GDP of the most developed regions accounting for 20% of the national population is twice as high as the GDP of the poorest regions accounting for 20% of the national population.



C. Well-being in regions

The largest regional disparities in people's well-being in the Netherlands concern community, safety, and jobs



Note: Relative ranking of the regions with the best and worst outcomes in the 11 well-being dimensions, with respect to all 440 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.

Dutch provinces rank in the top 20% of OECD regions in terms of access to services (access to broadband). Well-being across Dutch provinces is very unequal in the area of safety. While Drenthe is among the 20% safest OECD regions, Friesland has safety level close the OECD median (Figure C1).

Well-being in the top performing Dutch regions is above the top 20% of OECD regions in 6 out of 13 well-being aspects. In the case of access to services, all Dutch regions fare better than the top 20% of OECD regions (Figure C2).

C2. How do the top and bottom regions fare on the well-being indicators?

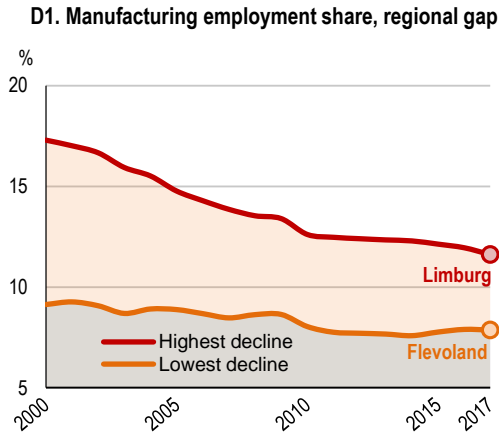
| | Country Average | OECD Top 20% regions | Dutch regions | |
|---|-----------------|----------------------|---------------|------------|
| | | | Top 20% | Bottom 20% |
| Community | | | | |
| Perceived social network support (%), 2014-18 | 91.5 | 94.1 | 93.6 | 89.7 |
| Safety | | | | |
| Homicide Rate (per 100 000 people), 2016-18 | 0.9 | 0.7 | 0.5 | 1.2 |
| Jobs | | | | |
| Employment rate 15 to 64 years old (%), 2019 | 78.2 | 76.0 | 80.3 | 75.7 |
| Unemployment rate 15 to 64 years old (%), 2019 | 3.5 | 3.3 | 3.0 | 4.4 |
| Health | | | | |
| Life Expectancy at birth (years), 2018 | 81.8 | 82.6 | 82.2 | 81.6 |
| Age adjusted mortality rate (per 1 000 people), 2018 | 7.6 | 6.6 | 7.4 | 7.8 |
| Education | | | | |
| Population with at least upper secondary education, 25-64 year-olds (%), 2019 | 79.6 | 90.3 | 83.0 | 76.9 |
| Life Satisfaction | | | | |
| Life satisfaction (scale from 0 to 10), 2014-18 | 7.4 | 7.3 | 7.5 | 7.3 |
| Income | | | | |
| Disposable income per capita (in USD PPP), 2018 | 21 410 | 26 617 | 22 931 | 20 174 |
| Housing | | | | |
| Rooms per person, 2018 | 2.0 | 2.3 | 2.6 | 2.3 |
| Civic engagement | | | | |
| Voters in last national election (%), 2019 or latest year | 81.6 | 84.2 | 83.9 | 79.5 |
| Environment | | | | |
| Level of air pollution in PM 2.5 (µg/m³), 2019 | 13.8 | 7.0 | 11.2 | 12.7 |
| Access to services | | | | |
| Households with broadband access (%), 2019 | 97.7 | 91.3 | 98.3 | 96.8 |

Note: OECD regions refer to the first administrative tier of subnational government (large regions, Territorial Level 2); the Netherlands is composed of 12 large regions. Visualisation: <https://www.oecdregionalwellbeing.org>.



D. Industrial transition in regions

Manufacturing employment has declined in all Dutch regions since 2000, especially in Drenthe, Groningen and Limburg, where the share of manufacturing employment has fallen by one third or more



Between 2000 and 2017, all large regions in the Netherlands experienced a decline in the share of employment in manufacturing. With a reduction of 5.7 percentage points, Limburg recorded the largest decline in manufacturing employment (Figure D1).

Decline in employment in manufacturing has coincided with a reduction in manufacturing gross value-added in all Dutch regions, except for Flevoland where it slightly increased. North Holland recorded the largest decline in the share of manufacturing gross value-added, with a decline of 4 percentage points between 2000 and 2017 (Figure D2).

D2. Manufacturing trends, 2000-17

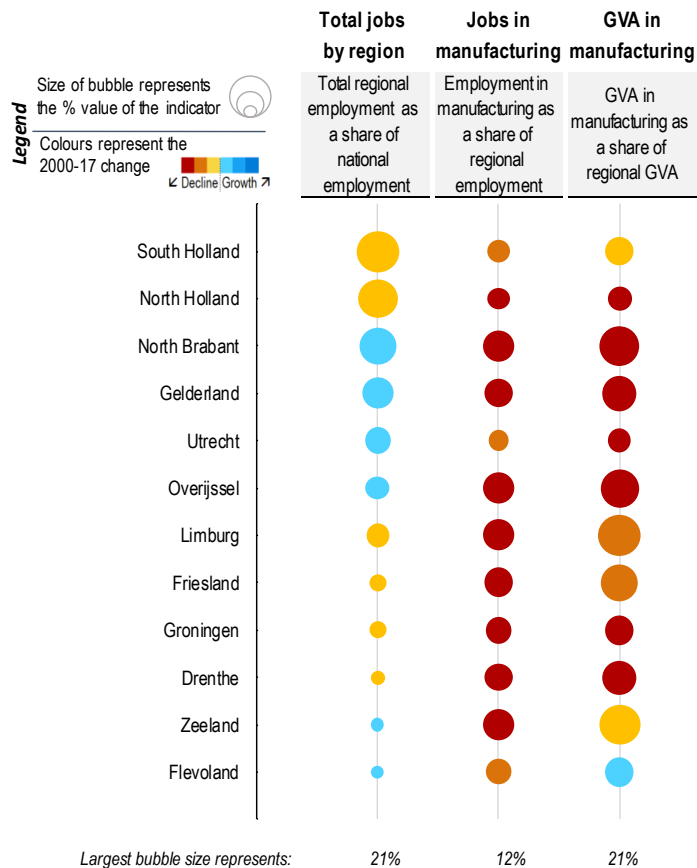


Figure [D.2]: Regions are ordered by regional employment as a share of national employment. Colour of the bubbles represents the evolution of the share over the period 2000-17 in percentage points: red: below -2 pp; orange: between -2 pp and -1 pp; yellow: between -1 pp and 0; light blue: between 0 and +1 pp; medium blue: between +1 pp and +2 pp; dark blue: above +2 pp over the period.



E. Transitioning to clean energy in regions

Groningen and South Holland, which contribute to half of the Netherlands' electricity production, generate most electricity using coal and have a limited use of renewables

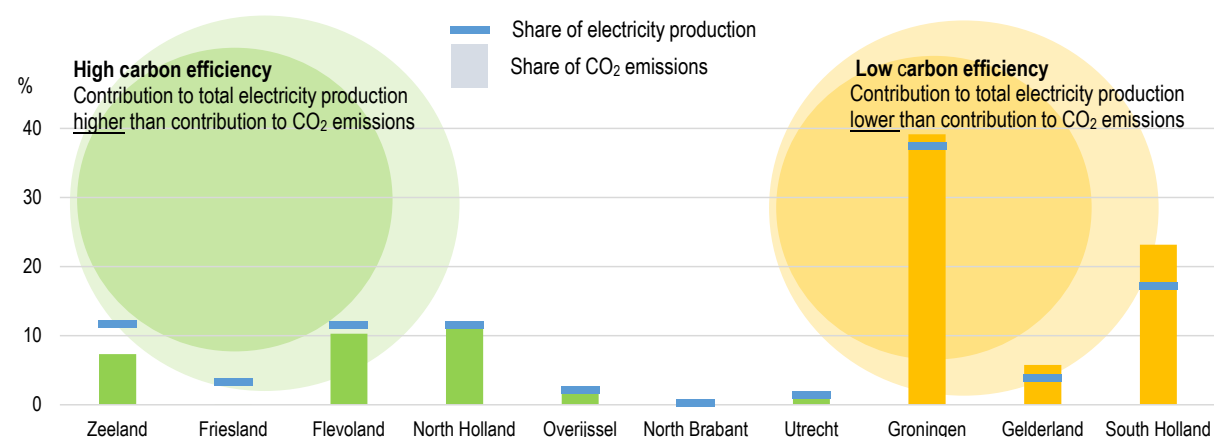
The largest producers of electricity in the Netherlands relied significantly on coal for electricity generation in 2017. Groningen and South Holland – which generate 55% of electricity in the country – produce 27% and 79% of their electricity using coal, respectively. In addition, their use of renewable sources is very limited. In 2017, less than 6% of the electricity generated in these regions came from renewables (Figure E1). Yet, other regions such as North Brabant and Friesland have fully moved towards using renewable sources for energy generation.

E1. Transition to renewable energy, 2017

| | Total electricity generation (in GWh per year) | Regional share of renewables in electricity generation (%) | Regional share of coal in electricity generation (%) | Greenhouse gas emissions from electricity generated (in Ktons of CO ₂ eq.) | |
|---------------|---|--|--|--|------|
| Groningen | 39 913 | 4% | 27% | 22 378 | Gro. |
| South Holland | 18 295 | 6% | 79% | 13 254 | Sou. |
| Zeeland | 12 465 | 5% | 0% | 4 192 | Zee. |
| North Holland | 12 348 | 21% | 38% | 6 334 | Nor. |
| Flevoland | 12 220 | 2% | 0% | 5 875 | Fle. |
| Gelderland | 4 036 | 1% | 99% | 3 283 | Gel. |
| Friesland | 3 431 | 100% | 0% | 38 | Fri. |
| Overijssel | 2 226 | 0% | 0% | 1 091 | Ove. |
| Utrecht | 1 481 | 2% | 0% | 710 | Utr. |
| North Brabant | 195 | 100% | 0% | 2 | Nor. |

Carbon efficiency in the production of electricity is unequal across regions in the Netherlands. While Zeeland emitted 335 tons of CO₂ per gigawatt hour of electricity produced in 2017, South Holland released 725 tons of CO₂ per gigawatt hour. While Zeeland produced 12% of the national electricity, it only released 7% of total CO₂ emissions in the Netherlands. In contrast, South Holland generated 17% of electricity and releases 23% of total CO₂ emissions (E2).

E2. Contribution to total CO₂ emissions from electricity production, 2017



Note: Regions are arranged in Figure E1 by total generation, and in Figure E2 according to gap between share of electricity generation and share of CO₂ emissions (most positive to most negative). Only 91% of the total country's electricity production is covered. These estimates refer to electricity production from the power plants connected to the national power grid, as registered in the Power Plants Database. As a result, small electricity generation facilities disconnected from the national power grid might not be captured. Renewable energy sources include hydropower, geothermal power, biomass, wind, solar, wave and tidal and waste. See [here](#) for more details.

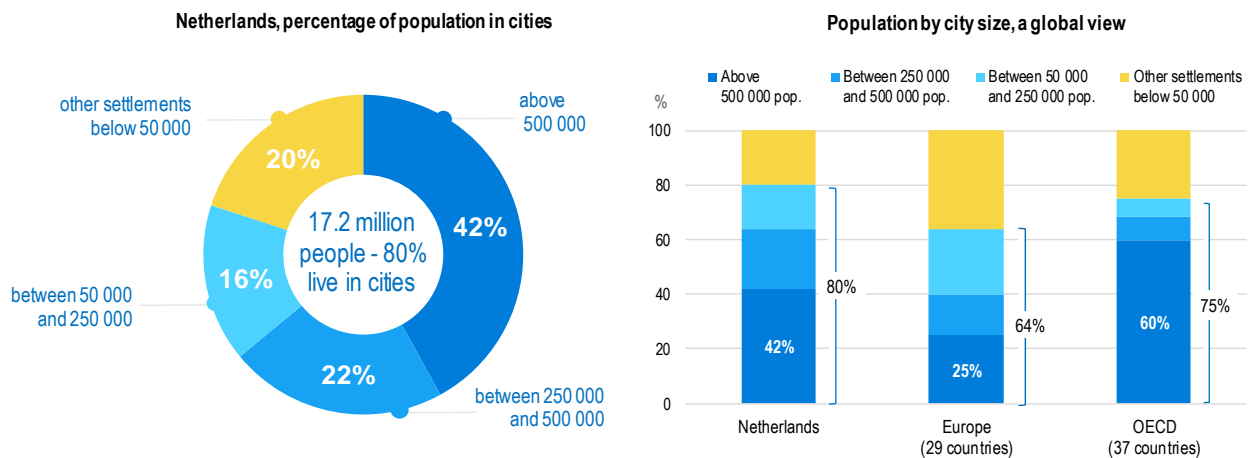


F. Metropolitan trends in growth and sustainability

Compared to the OECD average, the Netherlands has a higher concentration of people in cities and their commuting zones

In the Netherlands, 80% of the population lives in cities of more than 50 000 inhabitants and their respective commuting areas (functional urban areas, FUAs), which is above the OECD average of 75%. However, the share of population in FUAs with more than 500 000 people is only 42%, much lower than the OECD average of 60% (Figure F1).

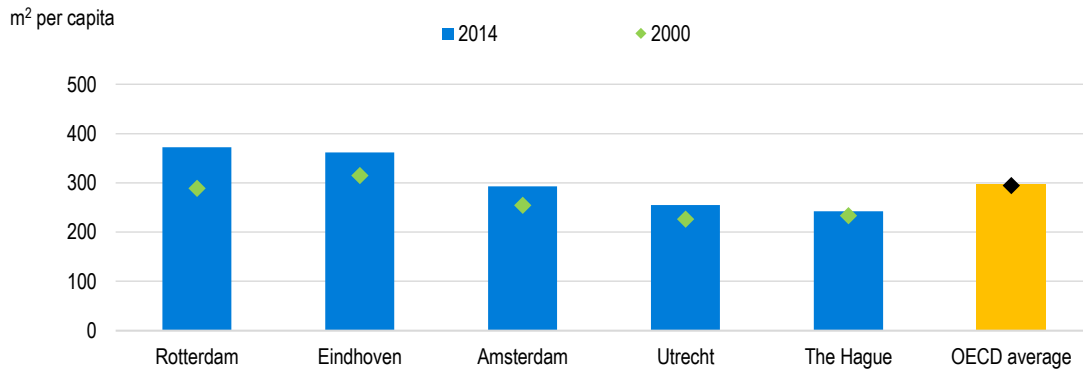
F1. Distribution of population in cities by city size
Functional urban areas, 2018



Built-up area has increased faster than population in most Dutch metropolitan areas

Built-up area per capita has increased in functional urban areas in the Netherlands since 2000, especially in Rotterdam and Eindhoven where the built-up area has grown significantly faster than the population (Figure F2).

F2. Built-up area per capita
Functional urban areas with more than 500 000 inhabitants



Source: OECD Metropolitan Database. Number of metropolitan areas with a population of over 500 000: five in the Netherlands compared to 349 in the OECD.

Rotterdam and Eindhoven have experienced the fastest economic growth among Dutch metropolitan areas since 2000.

Amsterdam, the metropolitan area with the highest GDP per capita in the Netherlands, ranks in the top 10% of OECD metropolitan areas in terms of GDP per capita and is also among the top third with respect to GDP per capita growth since 2000. However, GDP per capita growth among Dutch metropolitan areas since 2000 has been highest in Rotterdam and Eindhoven. In the same period, GDP per capita growth in Utrecht and The Hague has been below the OECD median of metropolitan areas.

F3. Trends in GDP per capita in metropolitan areas
Functional urban areas above 500 000 people

