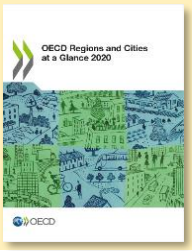


Regions and Cities at a Glance 2020 *provides a comprehensive assessment of how regions and cities across the OECD are progressing in a number of aspects connected to economic development, health, well-being and net zero-carbon transition. In the light of the health crisis caused by the COVID-19 pandemic, 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

NORWAY

A. Resilient regional societies to global crisis

B. Regional economic disparities and trends in productivity

C. Well-being in regions

D. Industrial transition in regions

E. Transitioning to clean energy in regions

F. Metropolitan trends in growth and sustainability

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

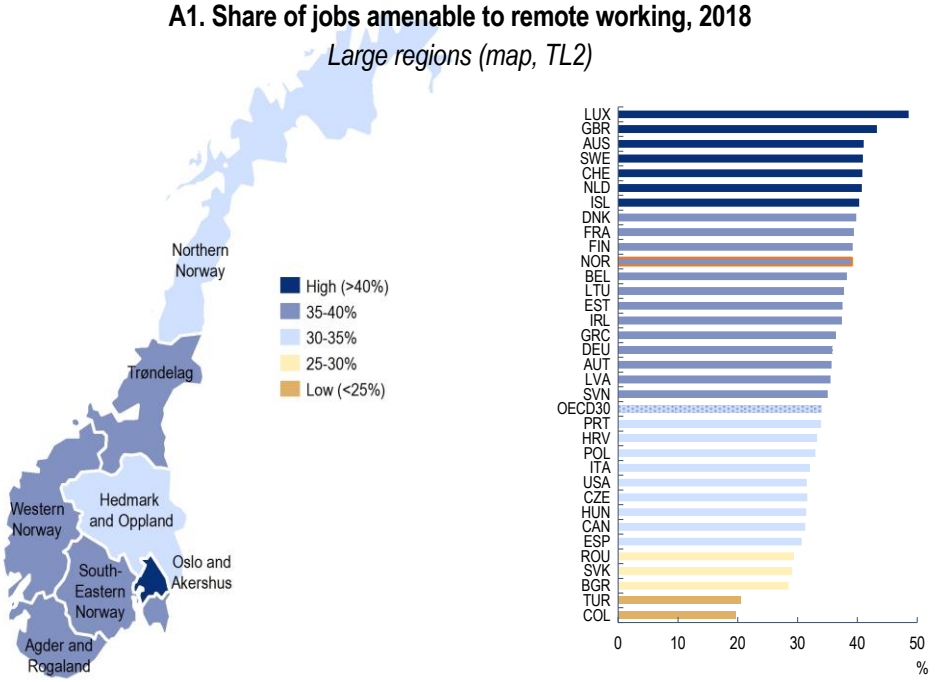
- **Regions** are classified on two territorial levels reflecting the administrative organisation of countries: large regions (TL2) and small regions (TL3). Small regions are classified according to their access to metropolitan areas (see https://doi.org/10.1787/b902cc00-en).
- **Functional urban areas** 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 to global crisis

The Oslo and Akershus region have the highest share of occupation amenable to remote working, although fiber internet is less available than in other regions

A1. Share of jobs amenable to remote working, 2018

Large regions (map, TL2)



The share of jobs amenable to remote working varies greatly across Norwegian regions, ranging from close to 48% in Oslo and Akershus 33% in Hedmark and Oppland and Northern Norway (Figure A1). Such differences depend on the task content of the occupations in the regions, which can be amenable to remote working to different extents. As for most OECD countries, the occupations available in cities, especially in capitals, tend to be more amenable to remote working than in other areas of the country.

Fast internet connections are crucial to ensure people seize the opportunity of digitalisation, including remote working. Agder and Rogaland has the highest fiber optic availability across large regions in Norway with 70% of the buildings connected to the network (Figure A2).

A2- Internet infrastructure

Share of buildings connected, 2017

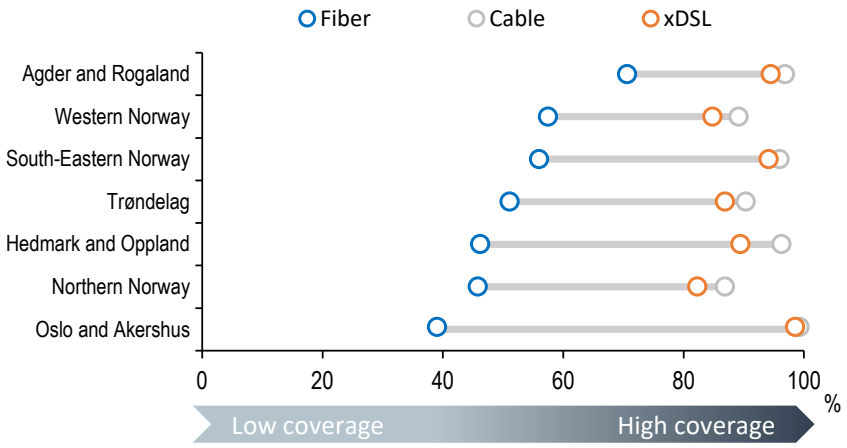
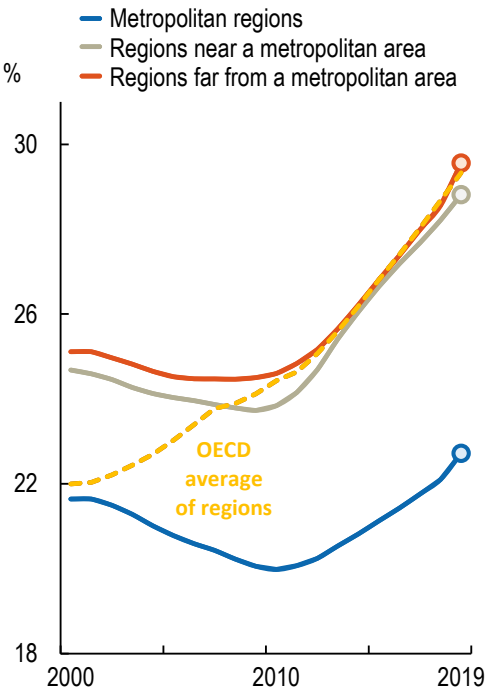


Figure [A1]: The lower percentage range (<25%) depicts the bottom quintile among 370 OECD and EU regions, the following ranges are based on increment of 5 percentage points. Further reading: OECD (2020), Capacity to remote working can affect lockdown costs differently across places, http://www.oecd.org/coronavirus/policy-responses/capacity-for-remote-working-can-affect-lockdown-costs-differently-across-places-0e85740e/

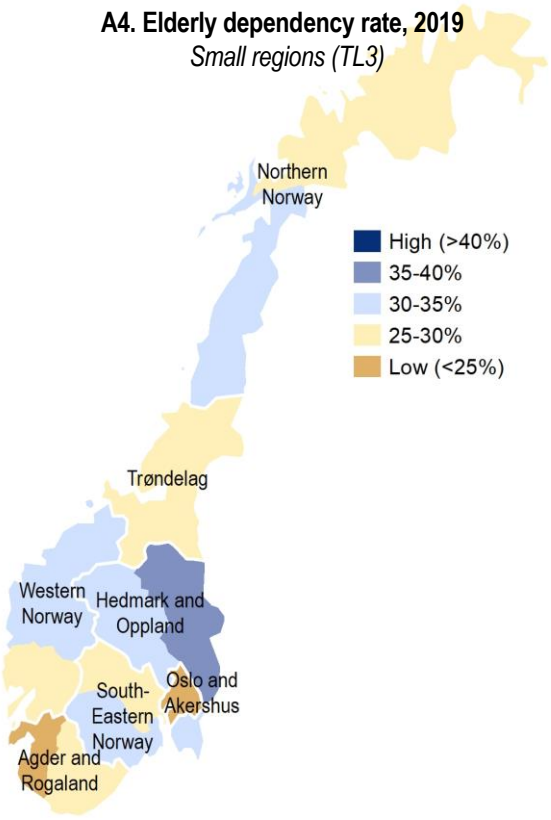
Ageing challenges regions far from metropolitan areas more strongly

The elderly dependency rate has increased in all types of regions in Norway since 2010. Regions far from metropolitan areas show the highest elderly dependency rate (30%) among different types of regions (Figure A3). In Hedmark and Oppland, the oldest region in the country, there was only one elderly for every three persons in their working-age in 2019 (Figure A4).

A3. Elderly dependency rate
By type of small regions in Norway (TL3)



A4. Elderly dependency rate, 2019
Small regions (TL3)



Hedmark and Oppland is the only Norwegian region with hospital beds per capita above OECD average

All regions in Norwegian regions have fewer hospital beds per capita than the OECD average, except Hedmark and Oppland (Figure A5). Regional disparities in hospital beds are above OECD average, with Agder and Rogaland having almost 2 beds per 1 000 inhabitants less than Hedmark and Oppland.

A5 - Hospital beds per 1000 inhabitants
Large regions (TL2)

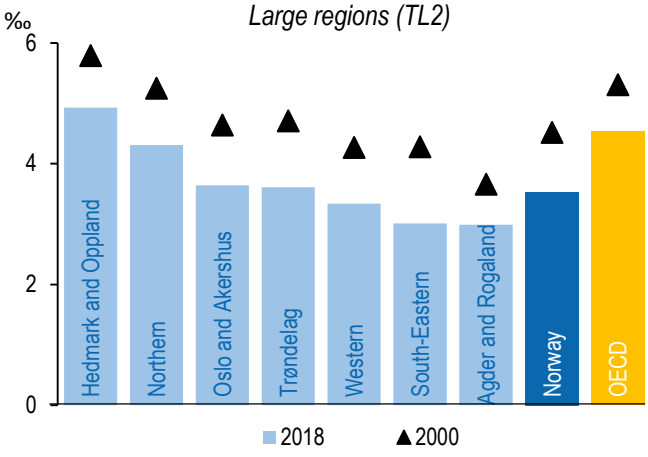


Figure notes. [A3]: OECD (2019), Classification of small (TL3) regions based on metropolitan population, low density and remoteness https://doi.org/10.1787/b902cc00-en. Two-year moving averages. [A4]: Small (TL3) regions contained in large regions. TL3 regions in Norway are composed by 18 Fylker. [A5]: hospital beds data first available year is 2009 for Norwegian regions.

B. Regional economic disparities and trends in productivity

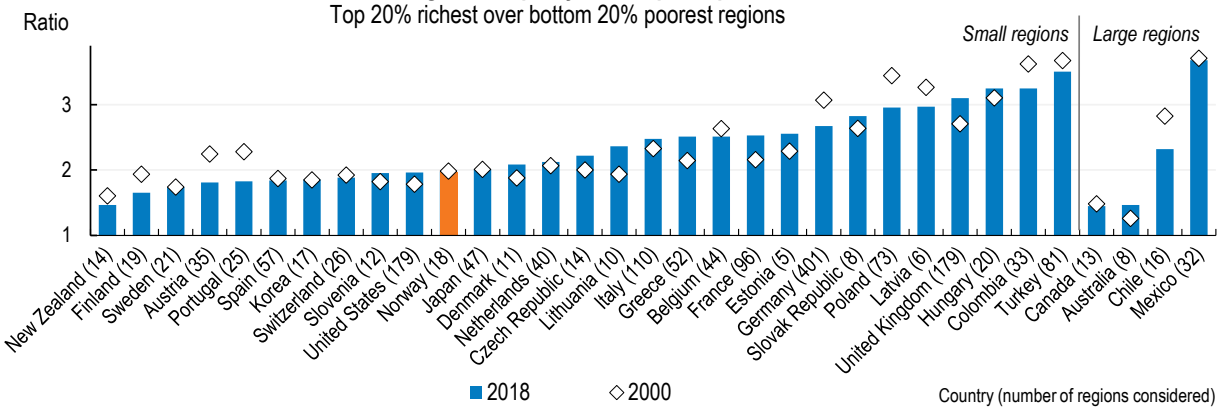
Regional economic gaps have been stable since 2008, with less productive regions growing at similar pace than Oslo region

The gap in GDP per capita between the richest (Oslo) and the poorest (Hedmark and Oppland) Norwegian regions has been stable since 2008. Norway remains below the OECD median country in terms of regional economic disparities (Figure B1).

With a productivity growth of 2.5% per year over the period 2008-17, Oslo region had the third highest productivity growth in Norway, behind Northern Norway and Trøndelag (respectively 3% and 2.7% per year). With an average productivity growth of 2.1% per year between 2008 and 2017, the region of Hedmark and Oppland widened its gap with Oslo, the productivity frontier region in Norway (Figure B2).

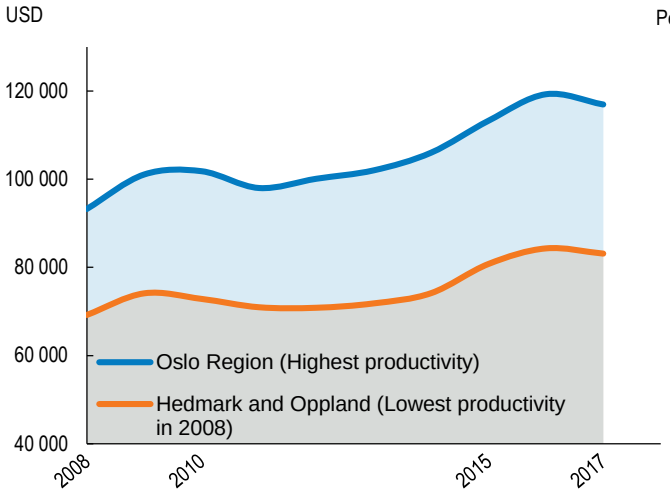
Regions near and far from metropolitan area of at least 250 000 inhabitants have not managed to catch up to metropolitan regions in terms of productivity since 2009, on average (Figure B3).

B1. Regional disparity in GDP per capita
Top 20% richest over bottom 20% poorest regions

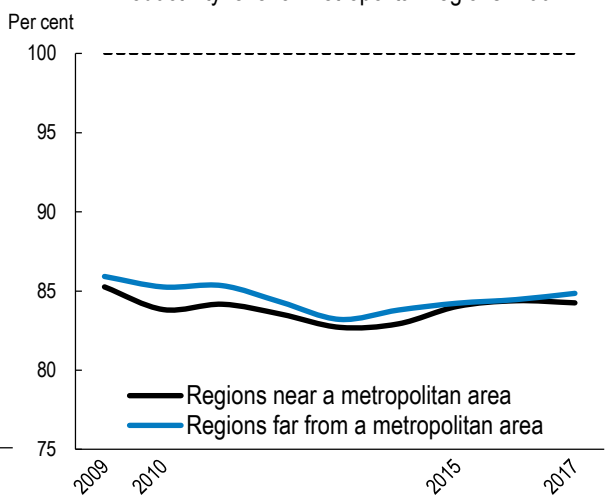


Note: A ratio with a value equal to 2 means that the GDP of the most developed regions accounting for 20% of the national population is twice as high as the GDP of the poorest regions accounting for 20% of the national population. For Norway 2008 is the first available year.

B2. Gap in regional productivity
GDP per worker, large (TL2) regions



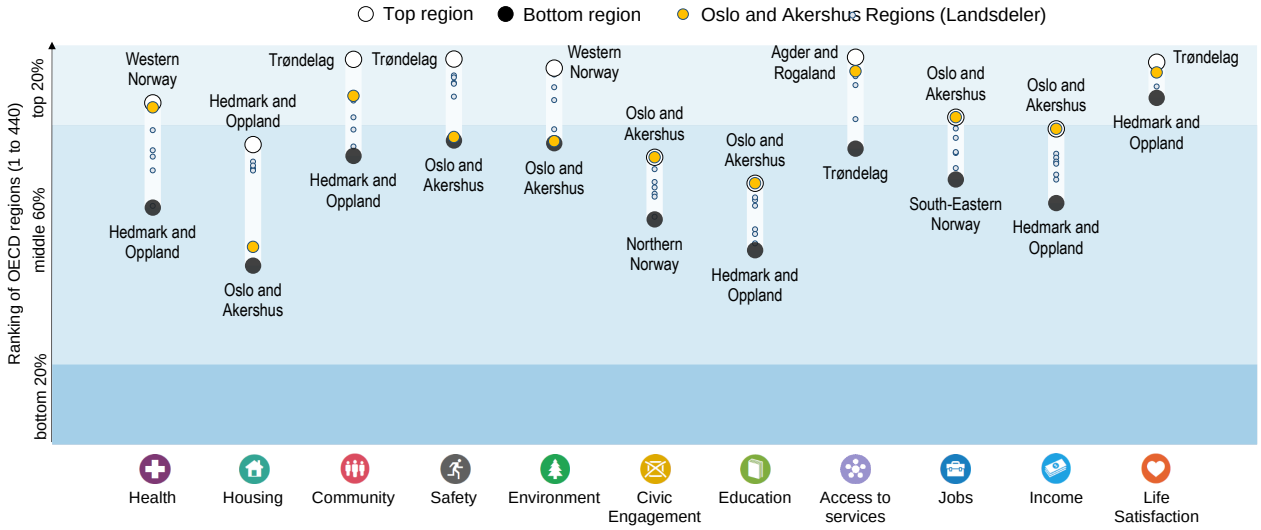
B3. Gap in productivity by type of region
Productivity level of metropolitan regions=100



C. Well-being in regions

Well-being in Norwegian regions is generally high, although disparities are large in health and housing

C1 Well-being regional gap



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.

Norwegian regions are leading in the top 30% of OECD regions in 5 out of 11 well-being dimensions – particularly in life satisfaction, environment and safety. In contrast, outcomes across regions are very unequal in the dimension of health, with Western Norway being in the top 20% and Hedmark and Oppland close to the median of OECD regions (Figure C1).

The top performing Norwegian regions is above the average of the top OECD regions in 7 out of 13 well-being indicators, particularly in terms of homicide rates and exposure to air pollution (Figure C2).

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

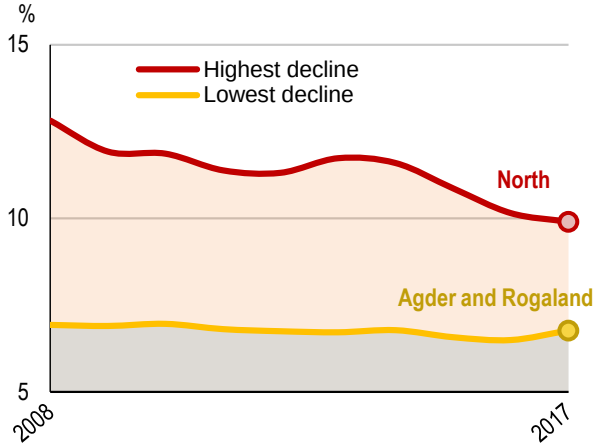
	Country Average	OECD Top 20% regions	Norwegian regions	
			Top 20%	Bottom 20%
Health				
Life Expectancy at birth (years), 2018	82.7	82.6	83.4	82.1
Age adjusted mortality rate (per 1 000 people), 2018	7.2	6.6	6.9	7.6
Housing				
Rooms per person, 2018	2.0	2.3	2.1	1.8
Community				
Perceived social network support (%), 2014-18	94.7	94.1	95.8	93.7
Safety				
Homicide Rate (per 100 000 people), 2016-18	0.5	0.7	0.4	0.7
Environment				
Level of air pollution in PM 2.5 (µg/m³), 2019	4.5	7.0	5.4	7.9
Civic engagement				
Voters in last national election (%), 2019 or latest year	78.2	84.2	80.7	75.4
Education				
Population with at least upper secondary education, 25-64 year-olds (%), 2019	83.2	90.3	85.5	80.3
Access to services				
Households with broadband access (%), 2019	95.0	91.3	97.1	92.7
Jobs				
Employment rate 15 to 64 years old (%), 2019	75.3	76.0	77.6	73.0
Unemployment rate 15 to 64 years old (%), 2019	3.8	3.3	3.3	4.1
Income				
Disposable income per capita (in USD PPP), 2018	23 868	26 617	26 319	22 597
Life Satisfaction				
Life satisfaction (scale from 0 to 10), 2014-18	7.5	7.3	7.6	7.5

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

D. Industrial transition in regions

Along with a decline in manufacturing employment in all Norwegian regions between 2008 and 2017, total employment further concentrated in the Oslo region

D1. Manufacturing employment share, regional gap



Between 2008 and 2017, all large regions in Norway experienced a decline in the share of manufacturing employment. With a reduction of three percentage points in the share of manufacturing employment, Agder and Rogaland recorded the largest decrease (Figure D1).

Decline in employment in manufacturing coincides with a reduction in manufacturing gross value-added in all Norwegian regions (Figure D2).

D2. Manufacturing trends, 2008-17

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 2008-17 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

Western Norway, and Adger and Rogaland, which account for 55% of Norwegian electricity, produce most electricity through renewable sources and without coal

All Norwegian regions are coal-free in electricity production. What is more, 4 out of 7 regions produce all their electricity using renewable sources. Western Norway, and Adger and Rogaland are the largest electricity producers – contributing to half of the total electricity produced in the country (Figure E1).

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 CO2 eq.)	
Western Norway	44 414	98%	0%	1 569	Wes.
Agder and Rogaland	36 852	98%	0%	1 300	Agd.
South-Eastern Norway	24 603	100%	0%	590	Sou.
Northern Norway	24 528	98%	0%	819	Nor.
Hedmark and Oppland	9 960	100%	0%	236	Hed.
Trøndelag	7 754	100%	0%	177	Trø.
Oslo and Akershus	376	100%	0%	9	Osl.

Relative to the average of OECD regions, carbon efficiency in the production of electricity is very high in Norwegian regions. While OECD regions emitted, on average, around 380 tons of CO_2 per gigawatt hour of electricity produced in 2017, South-Eastern and Western Norway – the top and bottom regions in terms of carbon efficiency – emitted 24 and 35 tons of CO_2 per gigawatt hour of electricity generated, respectively (E2).

E2. Contribution to total CO_2 emissions from electricity production, 2017

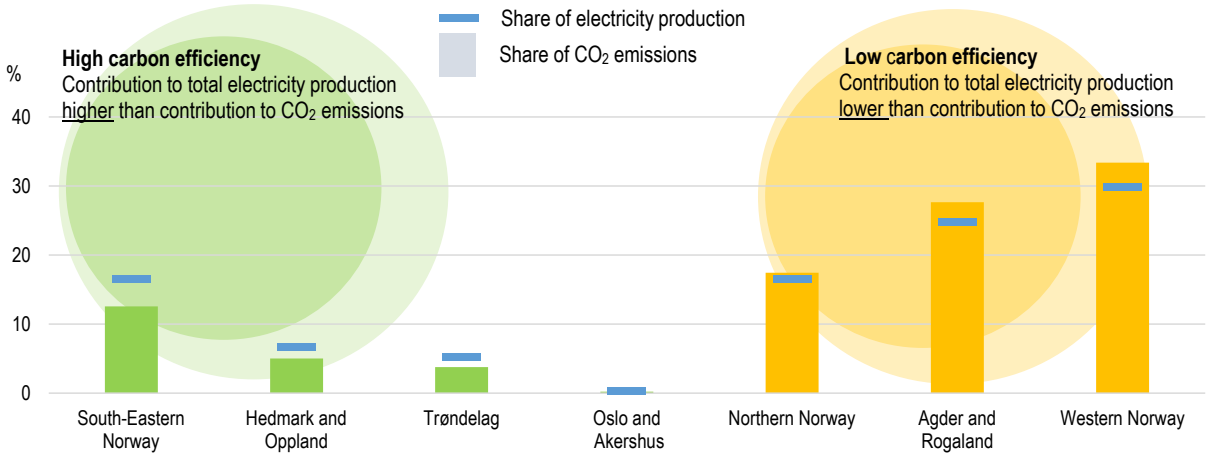


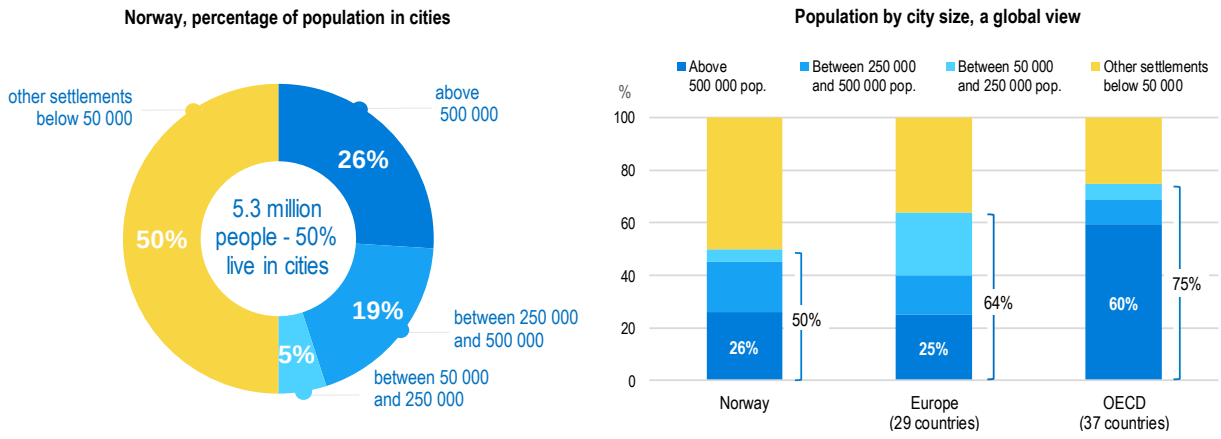
Figure notes: Regions are arranged in Figure E1 by total generation, and in Figure E2 according to gap between share of electricity generation and share of CO_2 emissions (most positive to most negative). These estimates refer to electricity production from the power plants connected to the national 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

Half of the Norwegian population lives outside functional urban areas, twice the OECD average.

In Norway, 50% of the population lives in cities of more than 50 000 inhabitants and their respective commuting areas (functional urban areas, FUAs), which is lower than the OECD average of 75%. About one quarter of the Norwegian population lives in the metropolitan area of Oslo, the only metropolitan area of at least half a million inhabitants in the country (Figure F1).

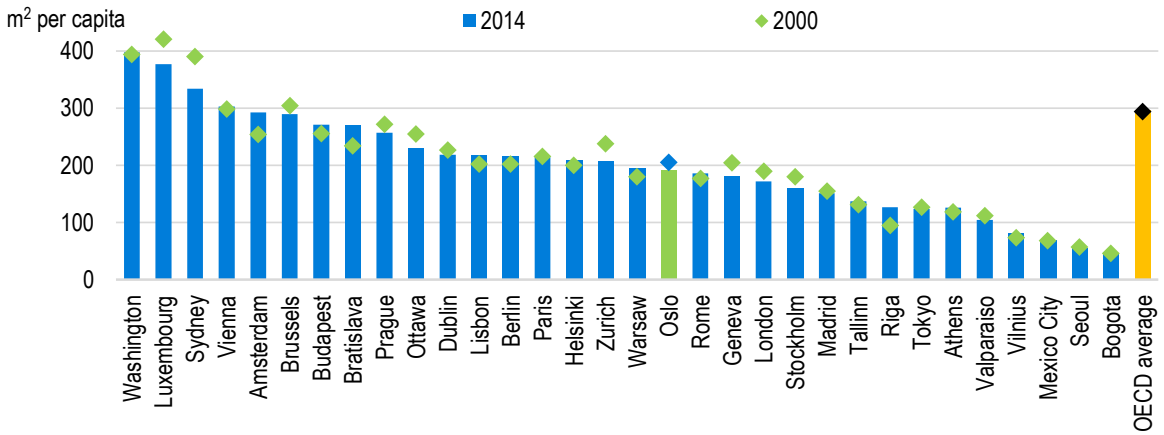
F1. Distribution of population in cities by city size
Functional urban areas, 2018



Built-up area in Oslo metropolitan area decreased

The amount of built-up area per capita in the metropolitan area of Oslo is approximately one third lower than the average of OECD metropolitan areas. Since 2000, population have increased faster than built-up areas in the Oslo metropolitan area, determining a further reduction in the amount of built-up area per capita (Figure F2).

F2. Built-up area per capita
Selection of functional urban areas with more than 500 000 population



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

Oslo ranks in the top 15% of OECD metropolitan areas of at least half a million in inhabitants in terms of GDP per capita, but in the second half in terms of GDP per capita growth since 2000

With a level of GDP per capita close to Los Angeles (United States) and London (United Kingdom), Oslo is the second metropolitan area in the Nordic countries in terms of GDP per capita. However, GDP per capita has increased at a slower rate in Oslo than in Swedish metropolitan areas and in Copenhagen (Denmark).

F3. Trends in GDP per capita in metropolitan areas
Functional urban areas above 500 000 people, Norway and surroundings OECD countries