



COP28 Seminar at Japan Pavilion

PROMOTING CLIMATE ACTION AND RESILIENCE THROUGH A TERRITORIAL APPROACH

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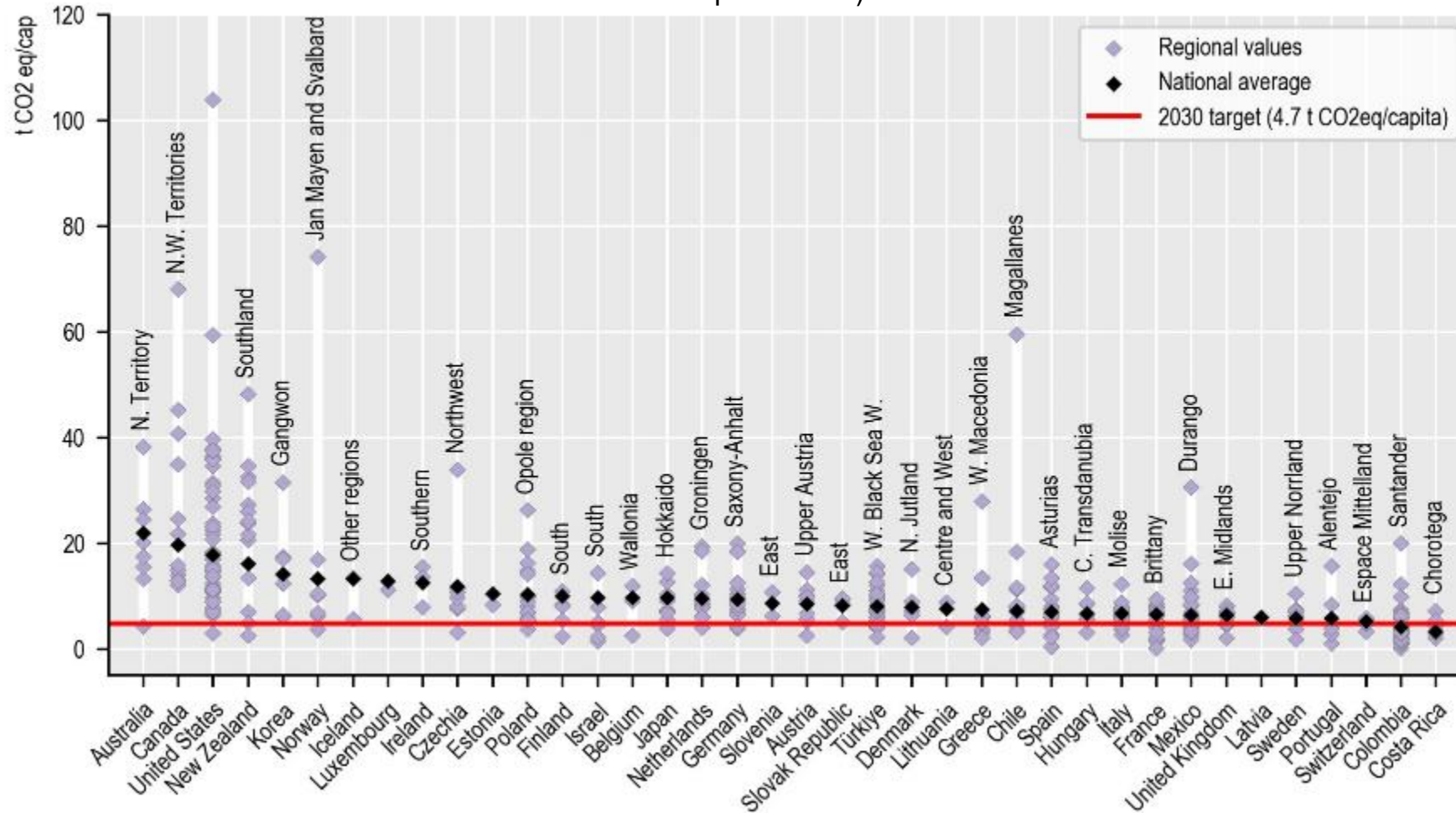


There is significant regional variation of CO₂ emissions within countries



Emissions indicator

Indicator: Emissions per capita in OECD regions, 2022 (t CO₂-eq/inhabitant)



OECD computations based on EDGAR (Emissions Database for Global Atmospheric Research) v8.0, EC-JRC IEA, 2023

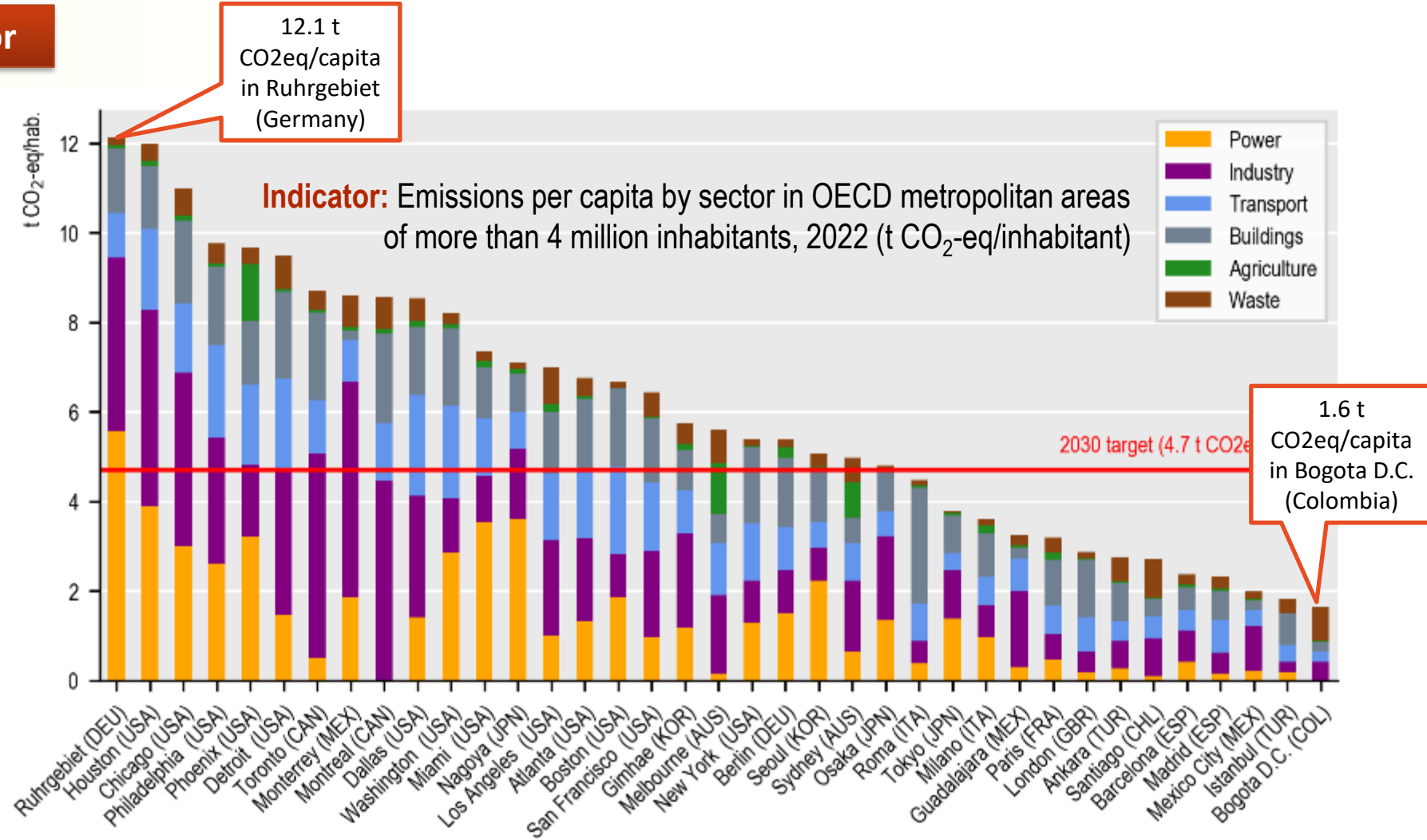


Wide disparities in progress to net-zero across cities and regions



Emissions indicator

- Almost 40% of OECD metropolitan areas with 500 000+ inhabitants met the 2030 global target in 2022, but their GHG emissions grew by 25% from 1990 to 2022.



OECD computations based on EDGAR (Emissions Database for Global Atmospheric Research) v8.0, EC-JRC IEA, 2023

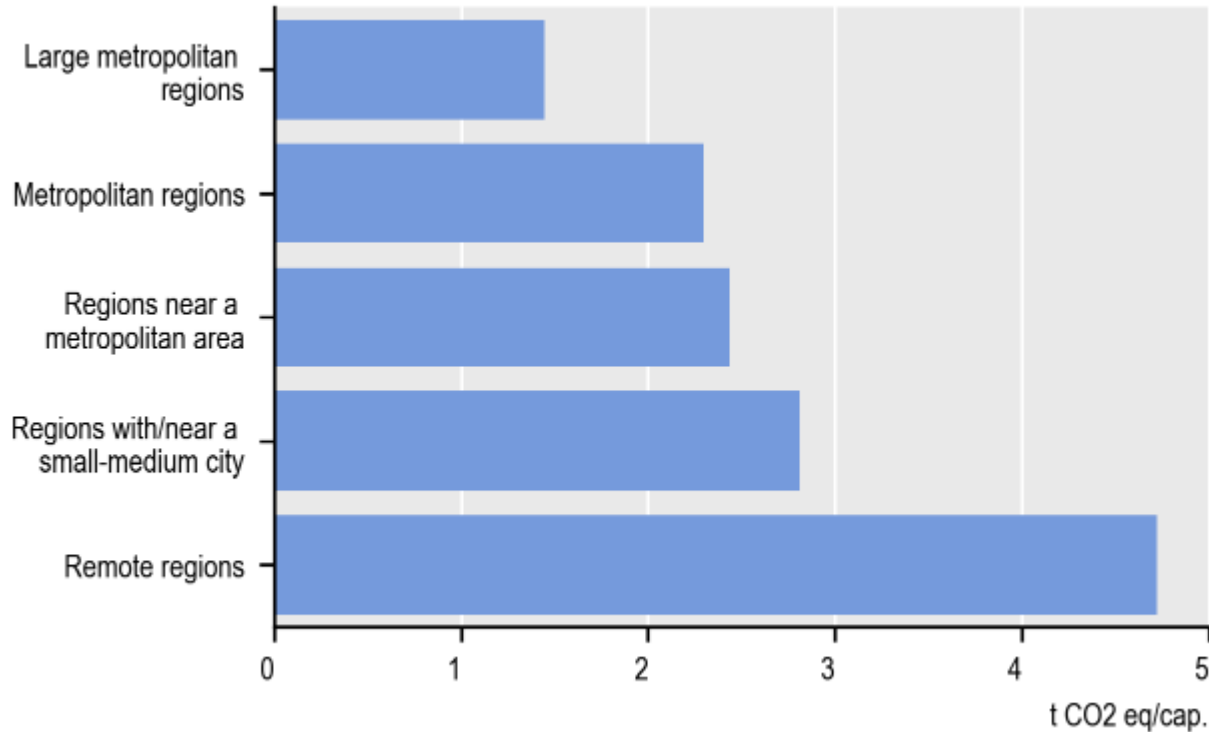


The volume and source of **GHG emissions** vary across places



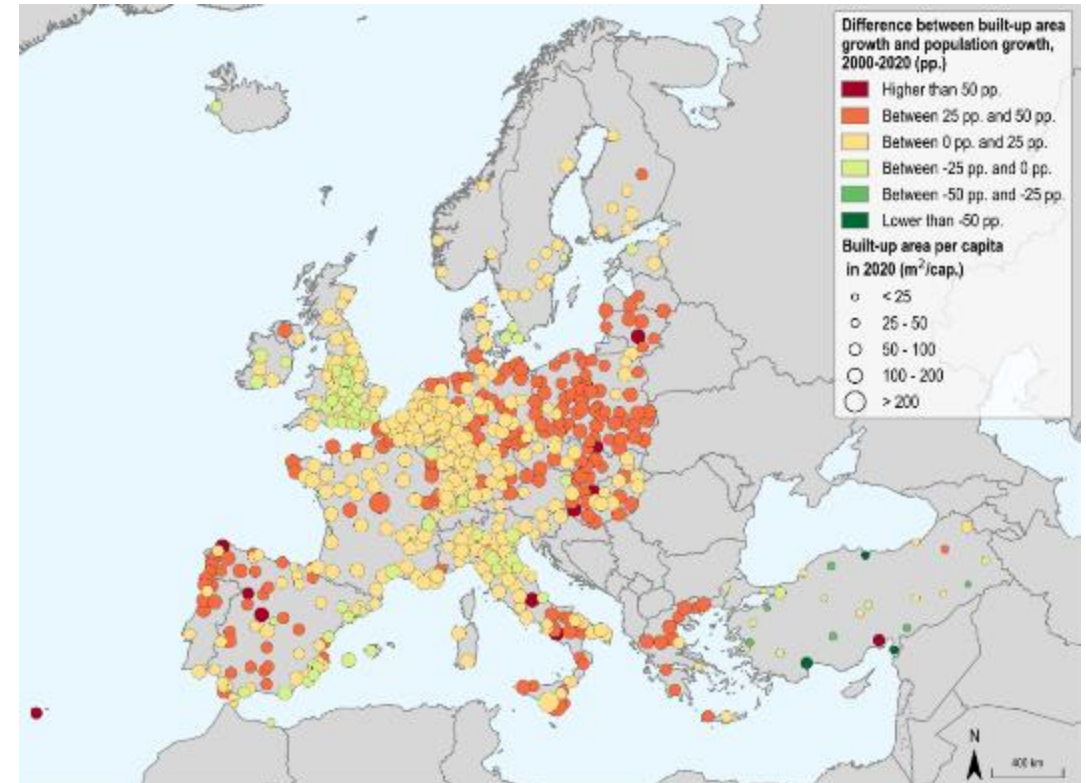
Emissions indicator

Indicator : Ground transport emissions per capita by type of small regions (TL3), 2022



OECD computations based on EDGAR (Emissions Database for Global Atmospheric Research) v8.0, EC-JRC IEA, 2023

Indicator: Difference in percentage points between built-up area growth and population growth, 2000-2020



OECD computations based on Global Human Settlement Layer GHS-POP and GHG-BUILT-S, EC-JRC, 2023



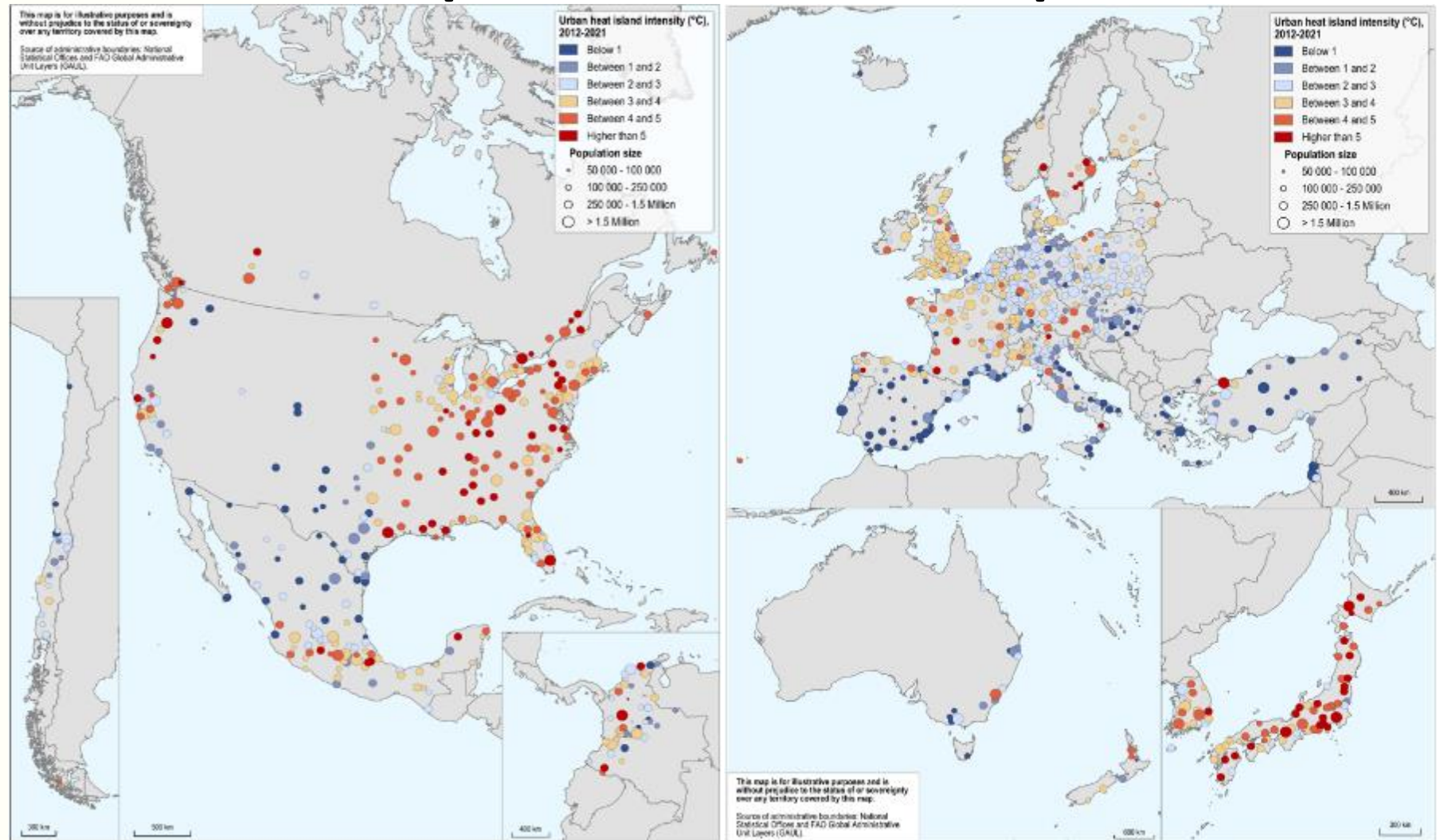
There are also territorial disparities in climate impacts



Risks indicator

Indicator: Urban Heat Island Intensity (summer, daytime, 2012-2021)

In 2021, the built-up areas in cities with more than 250 000 inhabitants are on average **3 degrees warmer than their surrounding area**, which is almost twice as high as in cities with less than 100 000 inhabitants.



OECD computations based on MODIS Aqua and Terra land surface temperatures and MODIS landcover, NASA

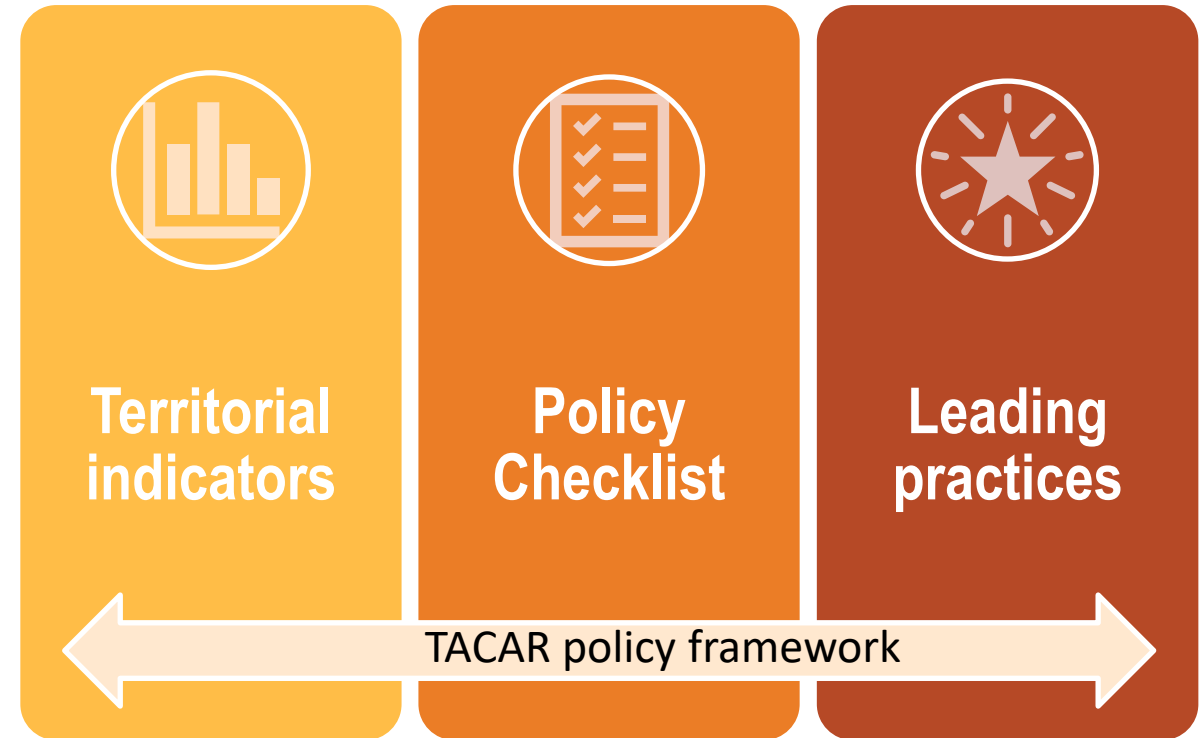
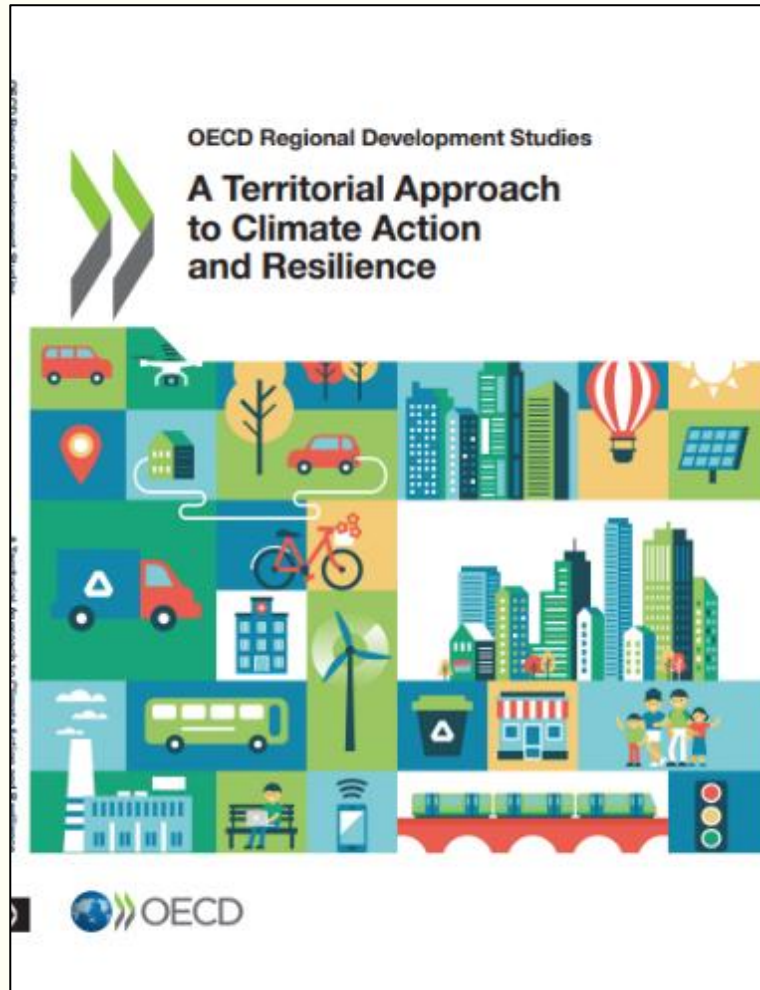


Challenges to adopt a territorial approach





Proposed framework for a territorial approach to climate action and resilience





Measuring local climate action and resilience

Proposed OECD territorial climate indicator framework

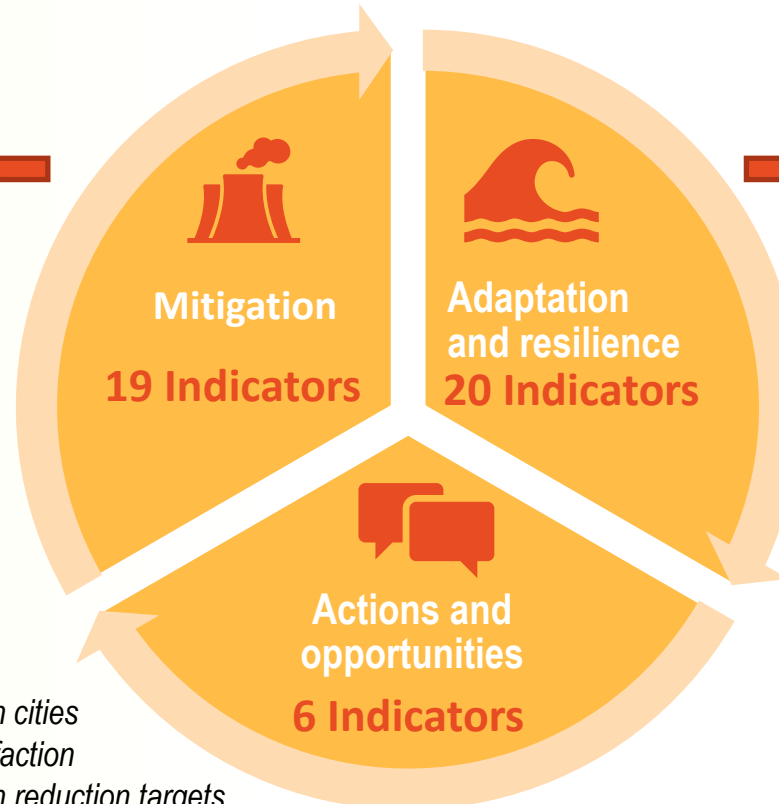
- Total GHG emissions, level and % change
- GHG emissions per capita, level and % change
- GHG emissions by sector per capita
- GHG emission intensities per unit of GDP
- Consumption based GHG emissions
- Electricity generation by source
- Carbon intensity of electricity generation
- Energy mix in total energy supply
- Total final energy consumption by source
- Emission intensity of the manufacturing industry
- Access to public transport
- Private vehicle ownership
- Electric and hybrid vehicle adoption
- Cooling and heating degree days
- Built-up area growth
- Waste generation
- Waste recovery

22 Indicators Available at regions (TL2 and TL3) and cities (Functional Urban Areas)

14 Indicators Available at regions (TL2 and TL3)

11 indicators available at other territorial scales

- Green areas in cities
- Citizens' satisfaction
- Local emission reduction targets
- Patent applications in climate
- Climate significant expenditure and investments
- climate-related funds, grants and subsidies



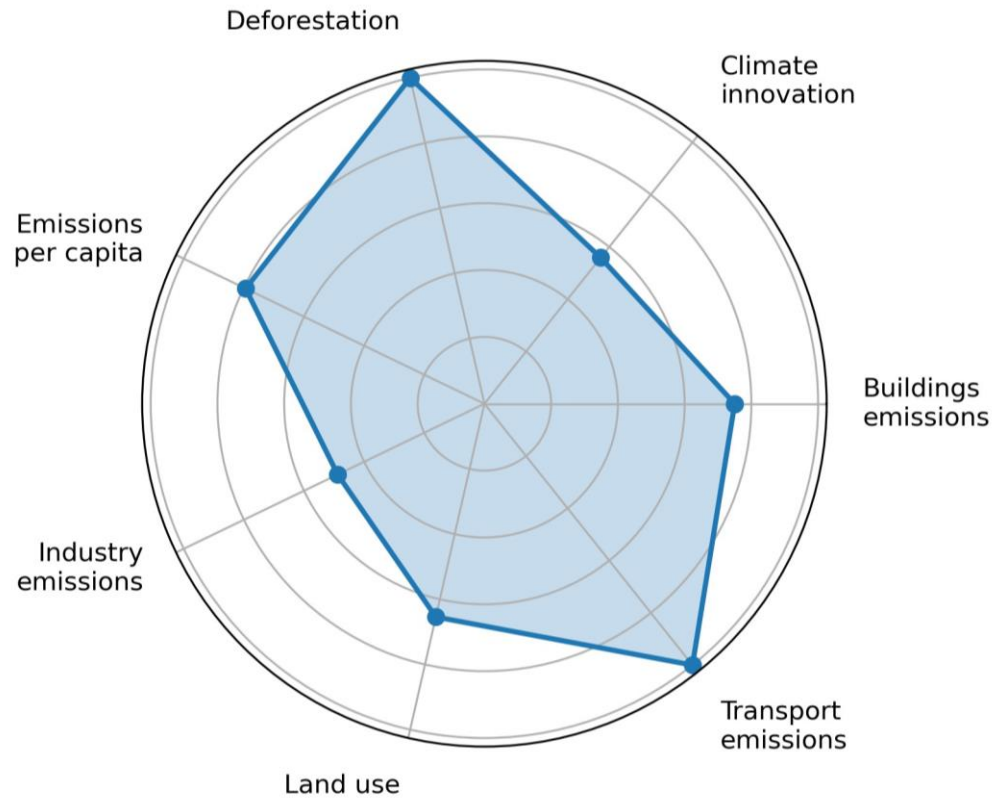
- Air temperature change
- Number of hot days and change
- Number of tropical nights
- Number of icing days and change
- Heat stress exposure
- Urban heat island intensity
- Population exposure to fire
- Burned area by land cover type
- Forest exposure to wildfire danger
- Population exposure to river flooding
- Population exposure to coastal flooding
- Agricultural drought
- Cumulated precipitation
- Extreme precipitation days
- Exposure to violent storms
- Population density
- Population aged < 5
- Population aged > 70
- Unemployment rate
- Poverty rate



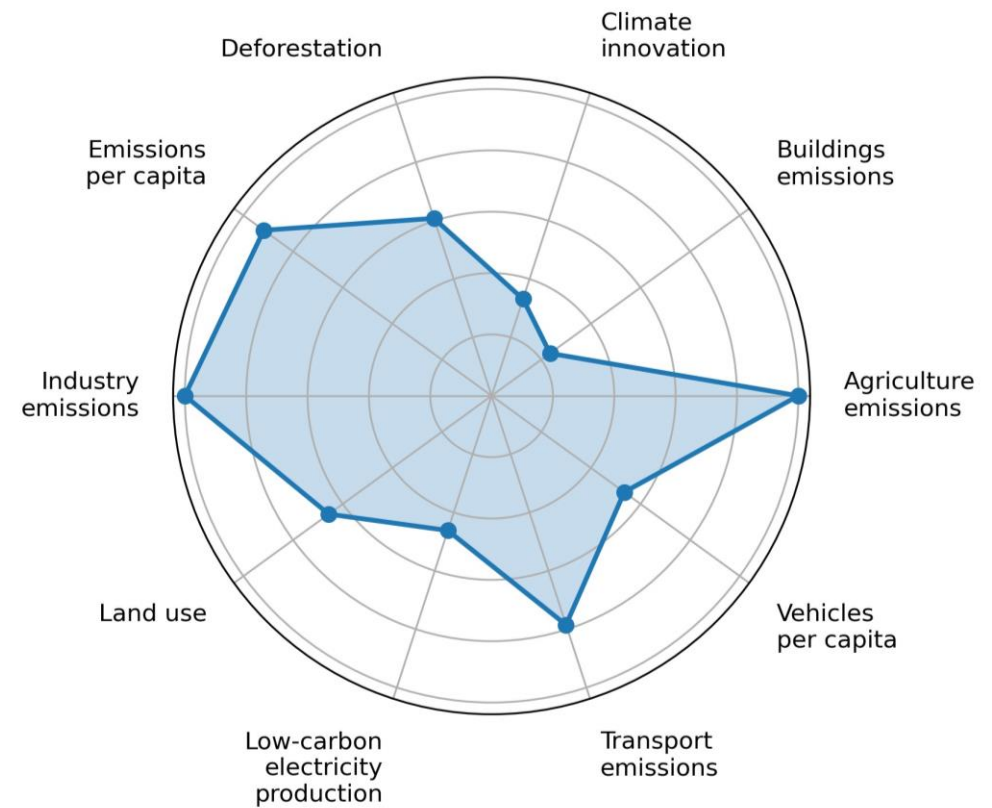
Snapshots using Territorial Indicator framework



Climate Indicators for Cities:
Bratislava (Slovakia)



Climate Indicators for Regions:
New York State (United States)

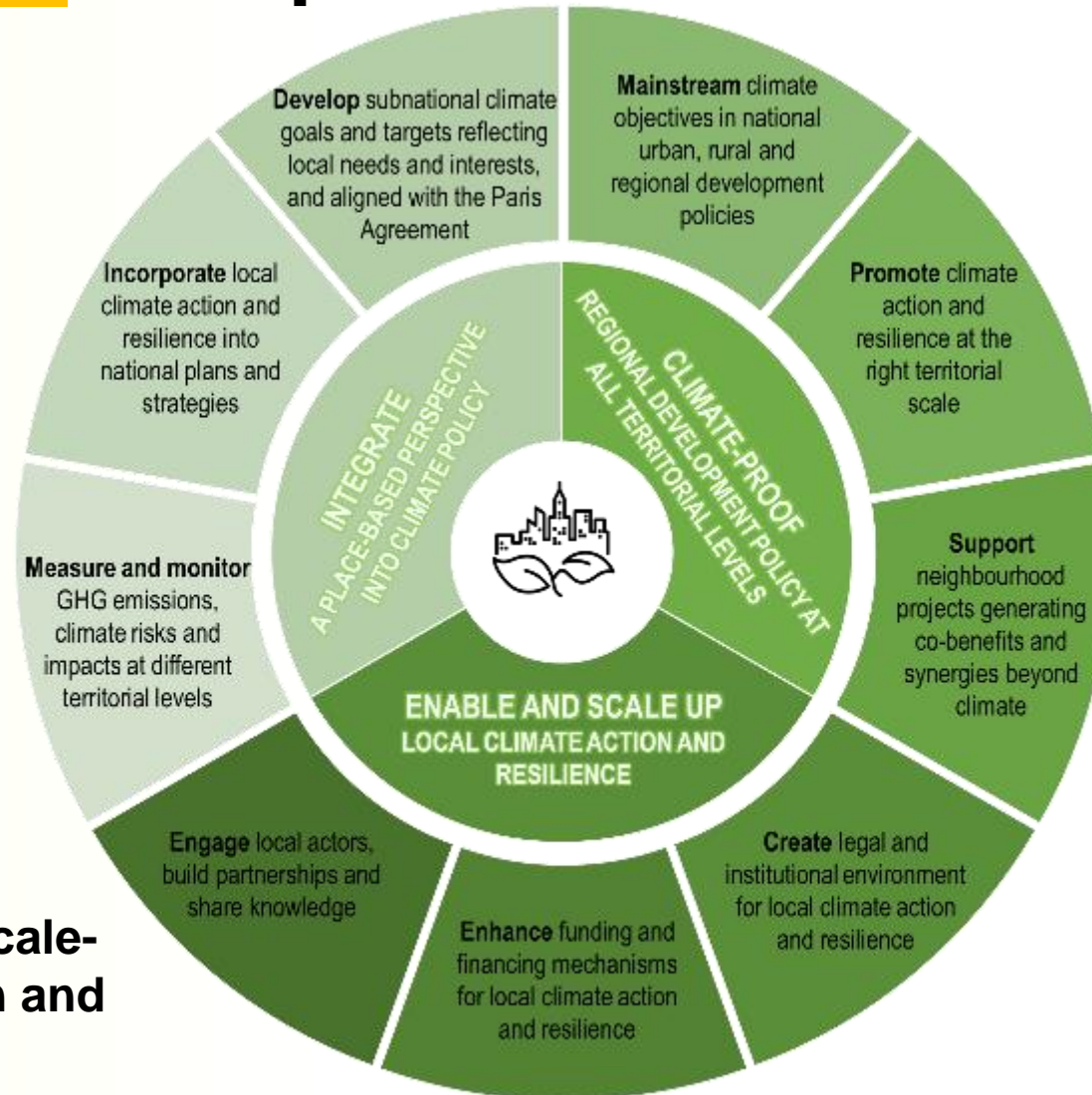


Source: OECD TACAR Indicators



Policy checklist to implement a territorial approach

Pillar I: Integrate a place-based perspective into climate policy



Pillar II: 'Climate-proof' regional development policy at all territorial levels

Pillar III: Enable and scale-up local climate action and resilience



Integrate a place-based perspective into **climate policy**



Pillar I: Integrate a place-based policy into climate policy

Measure and monitor
GHG emissions

Incorporate **climate action**
into national plans

Develop **subnational**
climate goals

- Among the **193 NDCs** that exist globally, **70 NDCs** have little or **no urban content**
- More than **10 000 cities** and regions from over **140 countries** have set **subnational targets for emission** reduction

Examples:



Japan's Council for National and Local Decarbonisation supports regions to set climate targets



Canada's Canada dedicated a section of its NDC plan to actions by its provinces and territories



'Climate-proof' regional development policy at all levels

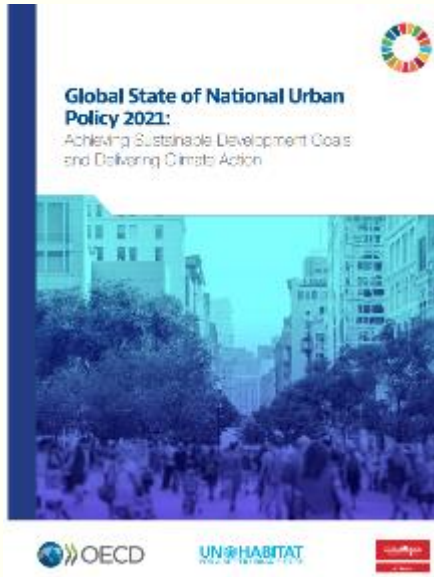


Pillar II: Climate-proof regional policy at all territorial levels

Strengthen urban policy with climate objectives

Mainstream **climate objectives** in rural policies

Support neighbourhood projects



- **81%** of responding countries report that their **National Urban Policies (NUP)** address climate change
- **69%** of **NUPs** contribute extensively or moderately to **SDG13 (climate change)**

Examples:



Colombia's Law 1391 establishes guidelines for the management of climate change.



Costa Rica's National Urban Development Policy 2018–2030 and corresponding Action Plan 2018–2022.



Enable and scale-up **local climate action** and resilience



Pillar III: Enable and scale up local climate action and resilience

Engage local actors,
build partnerships

Enhance funding and
financing mechanisms

Create legal and
institutional framework



- Subnational governments account for **69% of climate-significant investment**, but equivalent to **0.4% of GDP**.
- Municipal **sustainable bonds** only represent **25% of total public sustainable bond issuance** and **5% of global issuance**.

Examples:



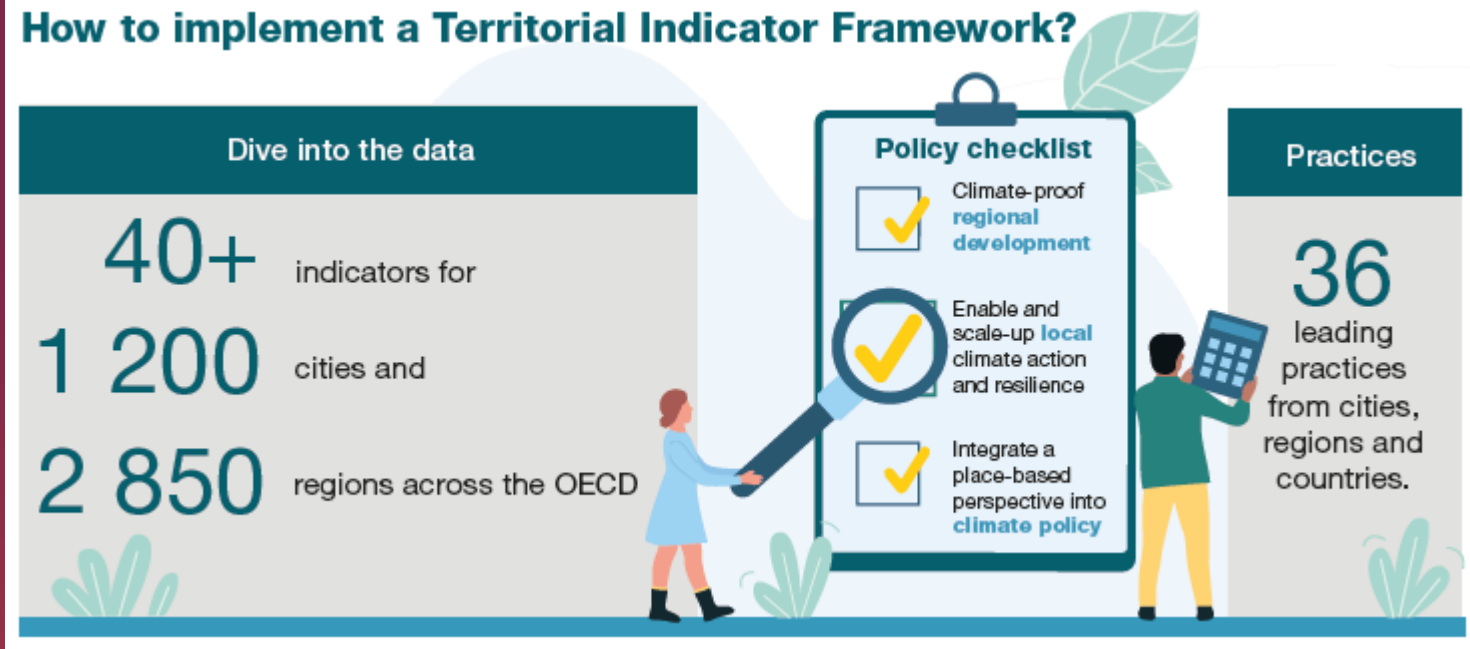
Mexico passed the General Law on Climate Change requiring municipalities to reduce emissions



Several regions in **France** have implemented green budgeting - Bretagne, Occitanie, Grand-Est

For more information

Find out more about our work: <https://oe.cd/5lw>



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