OECD PROGRAMME: A TERRITORIAL APPROACH TO CLIMATE ACTION AND RESILIENCE (TACAR)

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A Territorial Approach to Climate Action and Resilience: 4 pillars

Pilar 1. Localised indicator framework

- Localised benchmark on climate action and resilience

Pilar 2. Checklist for action

- Checklist for action
- Country-specific case studies

Pilar 3. Innovative climate policies/

- Compendium of leading examples of a territorial approach
- Country-specific case studies

Pilar 4. Subnational climate finance

- Database of financial flows and subnational green budgeting
- Self-assessment tool to introduce 'green-lens' into budgetary practices

Localised indicator framework

Why?

- ❑ National averages tend to **mask large territorial disparities**

- ❑ Lack of **'common languages'** between national and subnational governments

- ❑ Limited **international comparability** of existing climate subnational data

Proposed localised indicator framework

- ❑ **32 comparable** indicators

    - ❑ **25** indicators at **regional level** (TL2, TL3)

    - ❑ **7** indicators available at **city level** (FUA

- ❑ Follows **Pressure-State-Response** approach

- ❑ Builds on the OECD Regional and Metropolitan Database **allowing international comparability**

- ❑ Consistent with the dashboard of the **OECD International Programe for Action on Climate** offering a **common language** between national and subnational governments allowing for national

Proposed (major) indicators

Pressure indicators (drivers of emissions)

- (Cooling and heating degree days, levels and % change
- Land use: built-up area growth; built-up area per capita, and difference between built-up area growth and population growth
- GHG emissions per capita, level and % change
- GHG emissions by sector: share of total emissions, level, per capita and % change

State indicators (impacts and risks)

- Population exposure to heat stress
- Urban Heat Island Intensity
- Population exposure to coastal flooding
- Population exposure to fires

Response indicators (actions and opportunities)

- Green areas in cities
- Patent applications in climate mitigation technologies as % of total technologies
- Citizens' satisfaction with efforts to preserve the environment

Emission levels and trends are diverse across regions within a same country
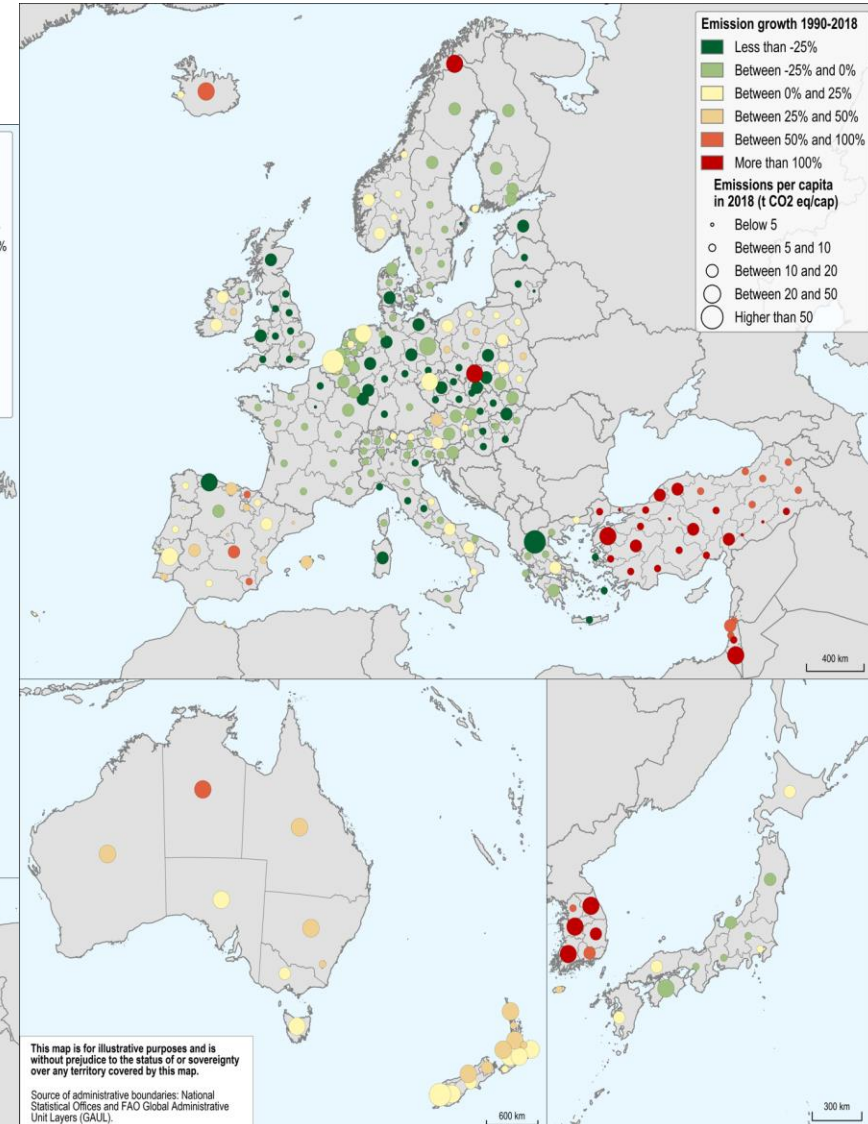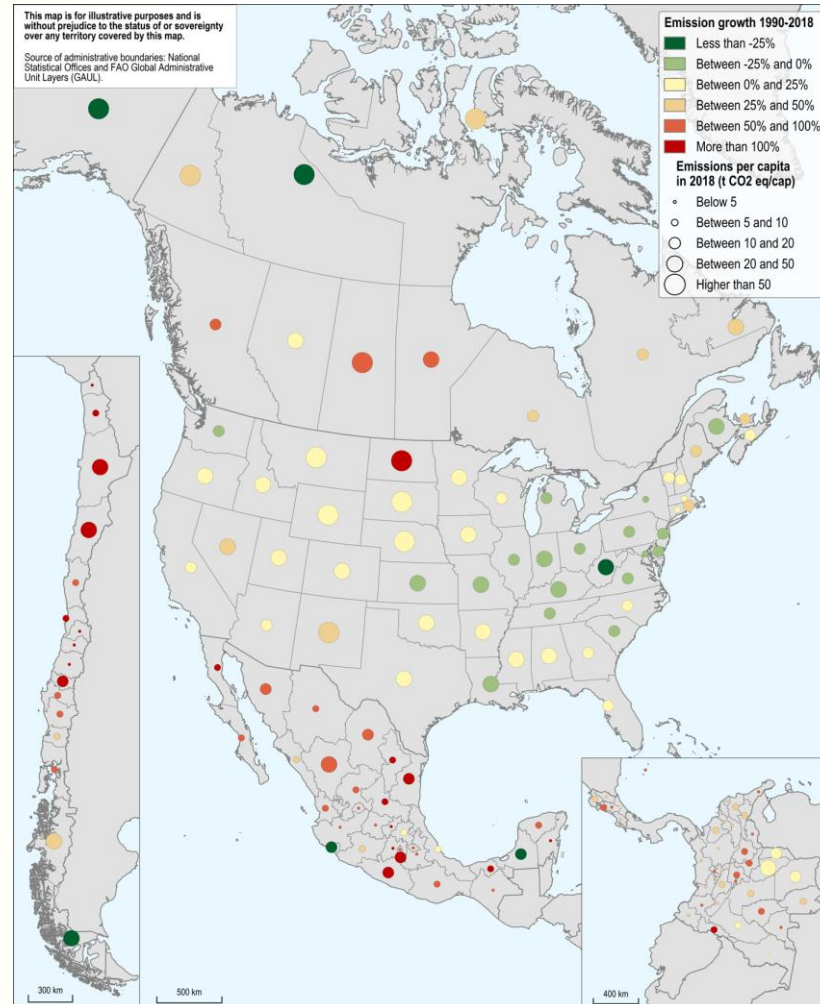
Southland (New Zealand)

83.2 t CO_2 eq/cap

Auckland (New Zealand)

6.5 t CO_2 eq/cap

Indicator: Total production-based greenhouse gas emissions per capita (t CO2-eq/capita), 2018; Emission growth (%) 1990-2018, OECD large regions (TL2)

This map is for illustrative purposes and is without prejudice to the status of or sovereignty over any territory covered by this map.

Source of administrative boundaries: National Statistical Offices and FAO Global Administrative Unit Layers (GAUL).

Emission growth 1990-2018
- Less than -25%
- Between -25% and 0%
- Between 0% and 25%
- Between 25% and 50%
- Between 50% and 100%
- More than 100%

Emissions per capita in 2018 (t CO2 eq/cap)
- Below 5
- Between 5 and 10
- Between 10 and 20
- Between 20 and 50
- Higher than 50

Difference in temperature between cities and their surrounding areas reaches almost 5°C, and even 7°C

Urban heat island intensity index, 2021 (FUA)

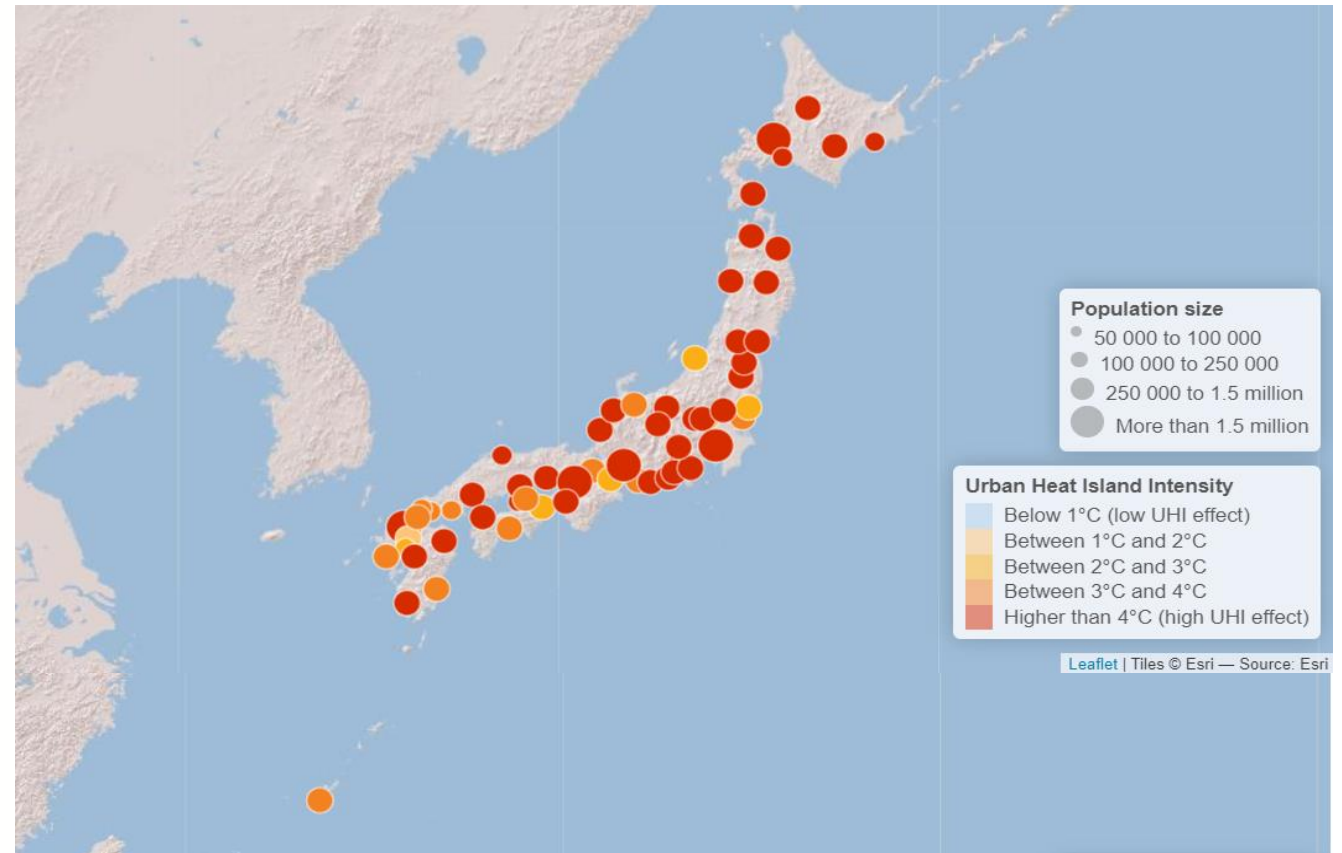**Asahikawa (Japan)**

7.1°C warmer than their surroundings

Kurume (Japan)

1.3°C warmer than their surroundings

Population size
· 50 000 to 100 000
· 100 000 to 250 000
● 250 000 to 1.5 million
● More than 1.5 million

Urban Heat Island Intensity
Below 1°C (low UHI effect)
Between 1°C and 2°C
Between 2°C and 3°C
Between 3°C and 4°C
Higher than 4°C (high UHI effect)
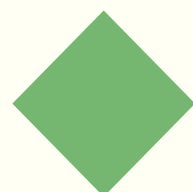
Leaflet | Tiles © Esri — Source: Esri
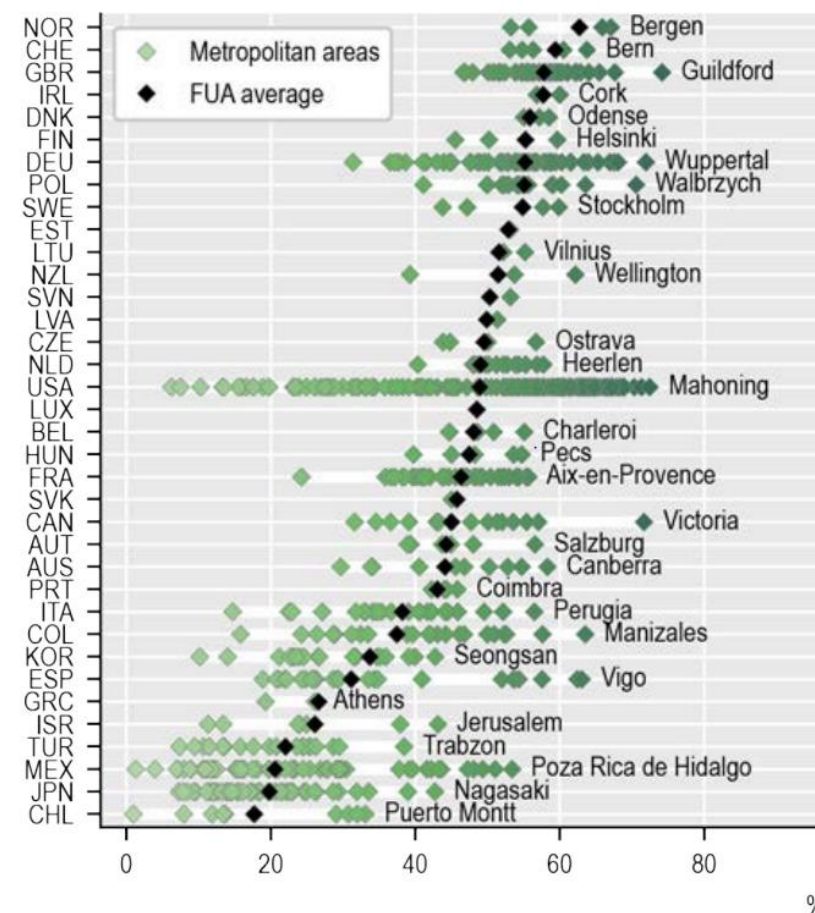
Green areas in urban centres

Green areas (trees, grasslands and shrublands) as % of the total area in FUA's urban centres, 2022

Puerto Montt (Chile)

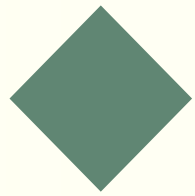**33.1%** of the total area in FUA centre

Antofagasta (Chile)

0.97% of the total area in FUA centre

Large territorial disparities in exposure to river flooding in Canada
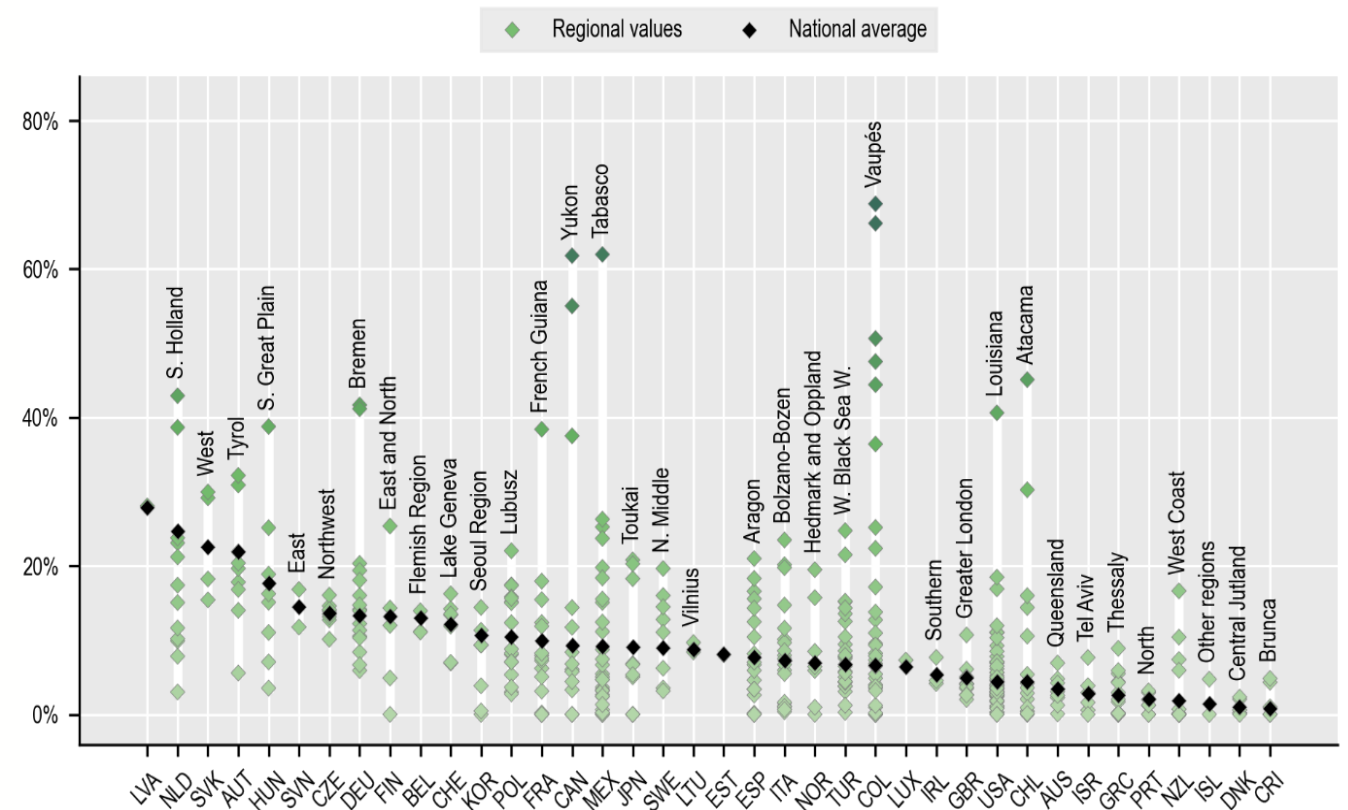
Yukon (Canada)

82.7 % of the total population exposed

Ontario (Canada)

7.68 t of the total population exposed

Population exposure to 100-year river floods in OECD large regions (TL2), 2015

Policy implications: better understanding of territorial disparity can promote multi-level climate action

❑ Setting **locally differentiated climate targets** in policy framework such as NDCs or NAPs

❑ Challenging **national investment toward places** with high mitigation potential / vulnerability to climate change

❑ Aligning and co-ordinating **national and subnational climate strategies**

❑ Promoting **knowledge sharing among regions and cities** with that have similar opportunities and challenges

TACAR - next steps (2023-)

❑ Finalising the **indicator framework**

❑ Developing a **policy checklist** for a territorial approach to climate action and resilience

❑ Collecting **leading examples of a territorial approach** and producing an international compendium

❑ Case studies (country, region and city scales)
  ❑ Applying the localised benchmarks to different geographies and scales
  ❑ Assessing policies by applying the policy checklist

For more information about OECD TACAR Programme visit
https://www.oecd.org/cfe/cities/tacar.htm

Thank you

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