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

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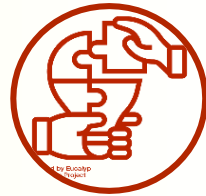


# A Territorial Approach to Climate Action and Resilience: 4 pillars



## 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 Programme for Action on Climate** offering a **common language** between national and subnational governments allowing for national



# Proposed (major) indicators

TL2 and TL3 regions

Functional Urban Areas (FUA)



## 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)



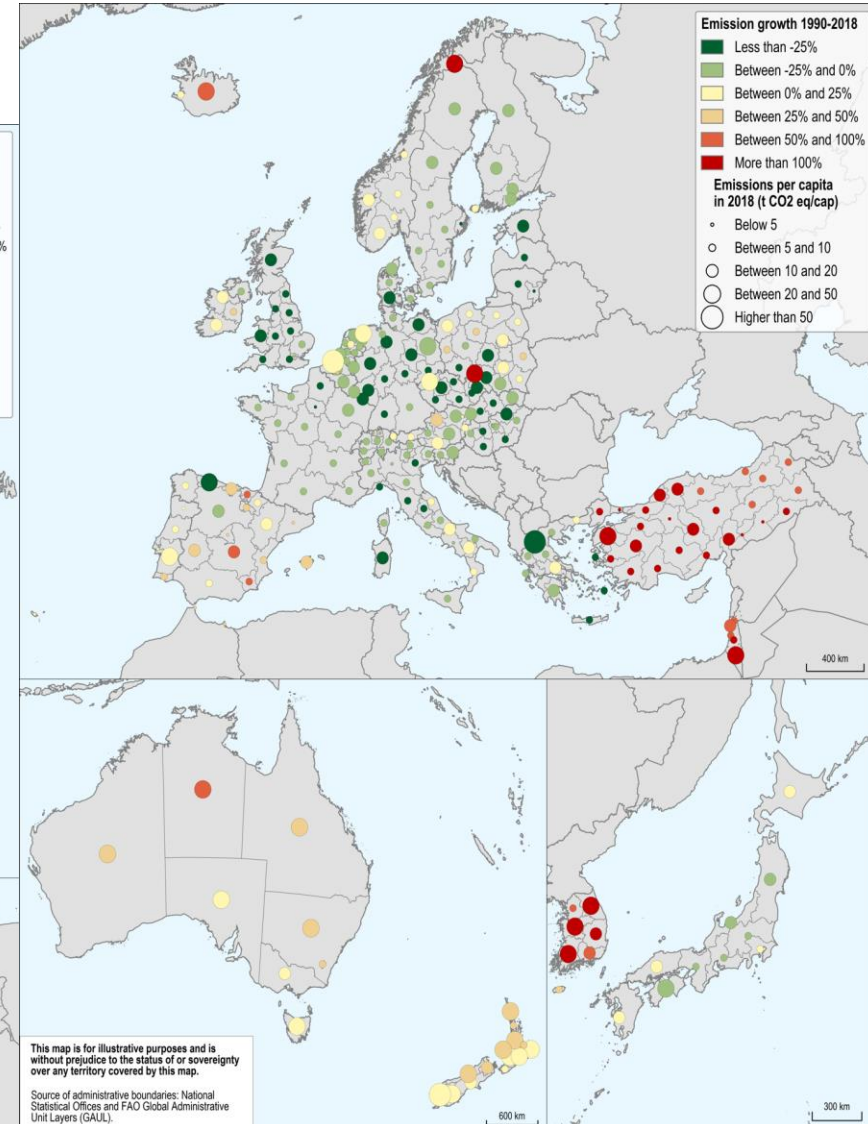
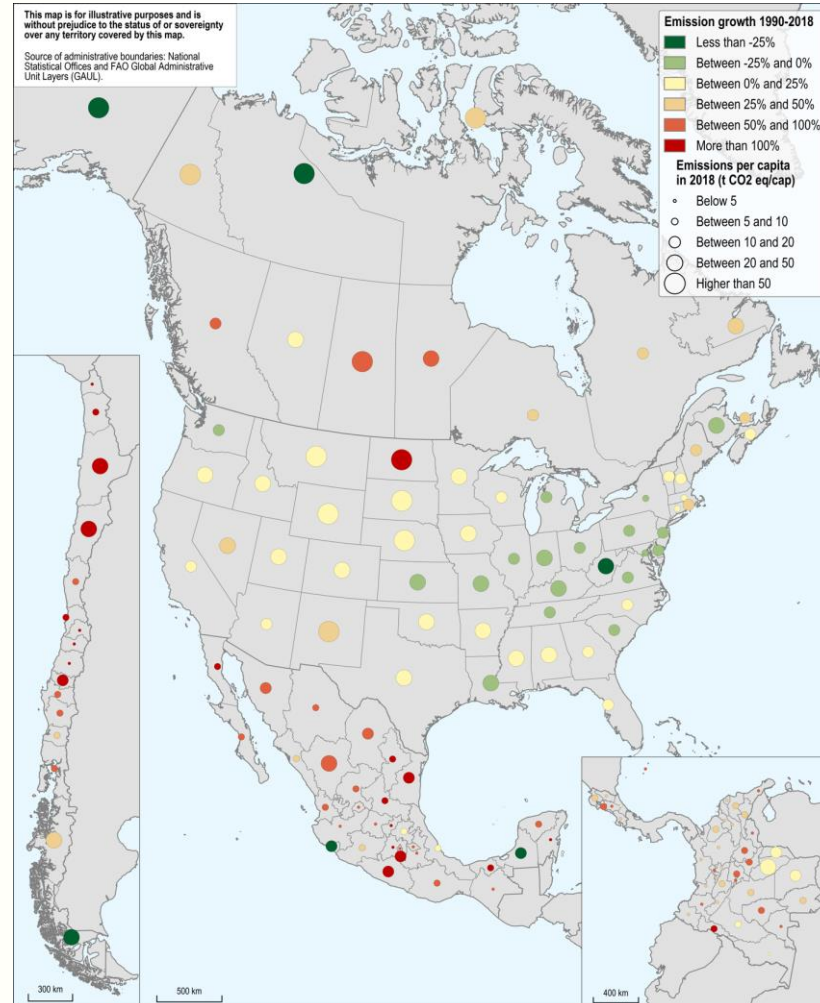
**83.2 t** CO<sub>2</sub> eq/cap

## Auckland (New Zealand)



**6.5 t** CO<sub>2</sub> eq/cap

**Indicator:** Total production-based greenhouse gas emissions per capita (t CO<sub>2</sub>-eq/capita), 2018; Emission growth (%) 1990-2018, OECD large regions (TL2)





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

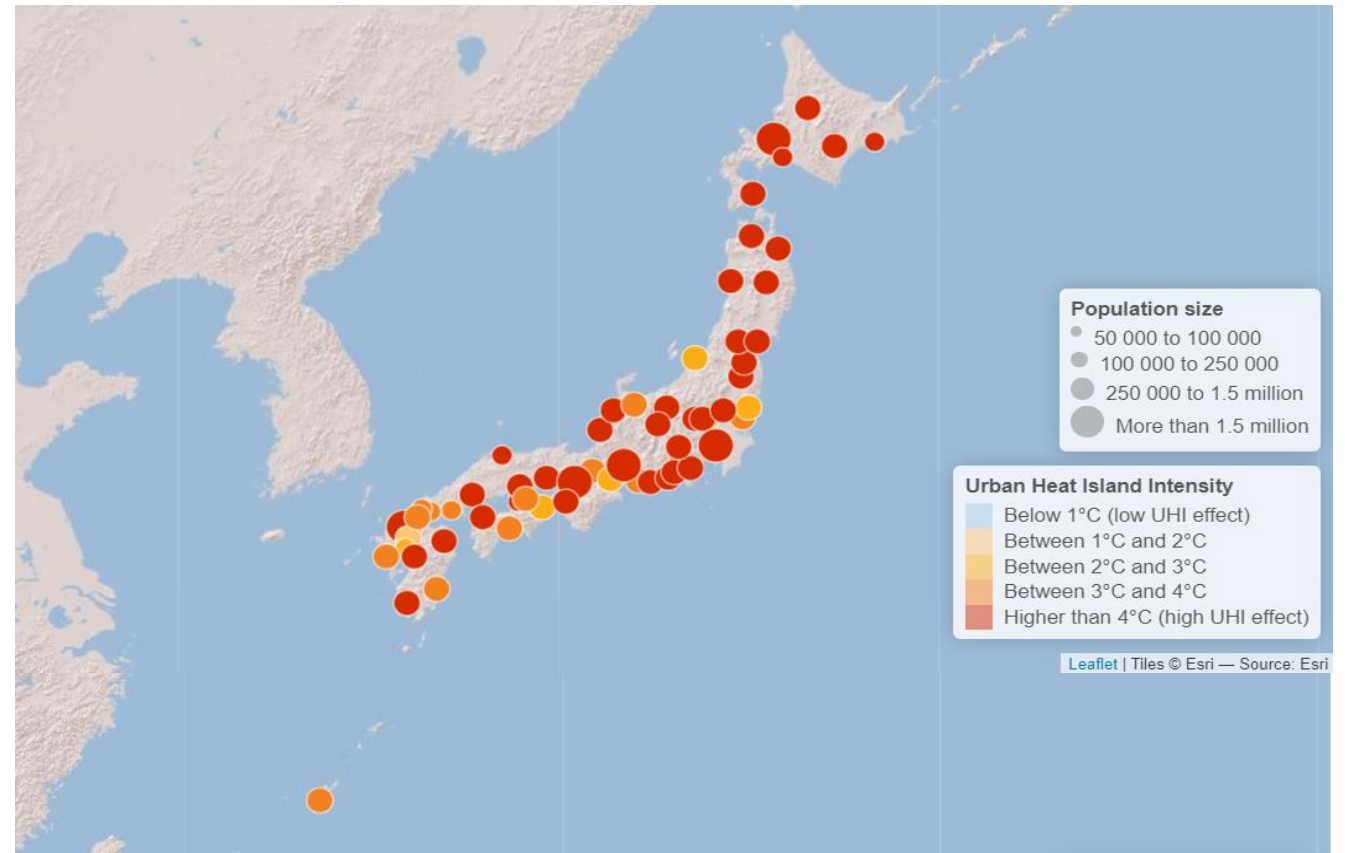
## Asahikawa (Japan)

 **7.1°C** warmer than their surroundings

## Kurume (Japan)

 **1.3°C** warmer than their surroundings

Urban heat island intensity index, 2021 (FUA)

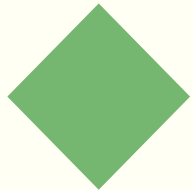




# Green areas in urban centres

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

## Puerto Montt (Chile)

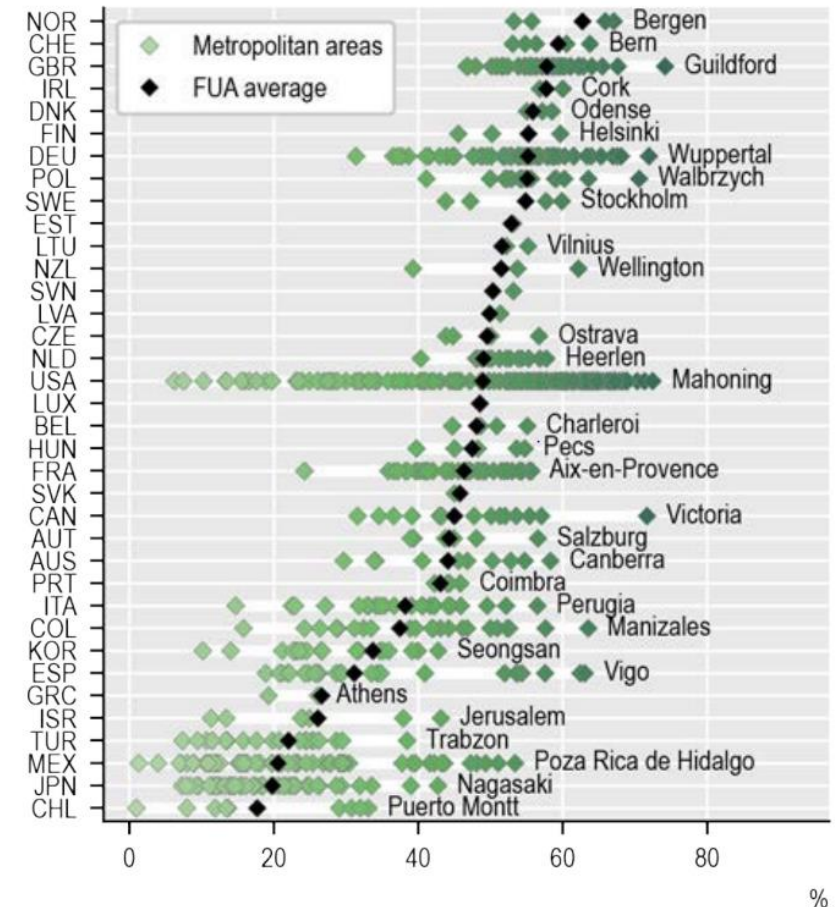


**33.1%** of the total area in FUA centre

## Antofagasta (Chile)



**0.97%** of the total area in FUA centre

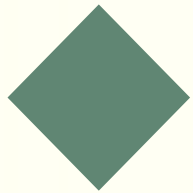




# Large territorial disparities in exposure to river flooding in Canada

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

## Yukon (Canada)

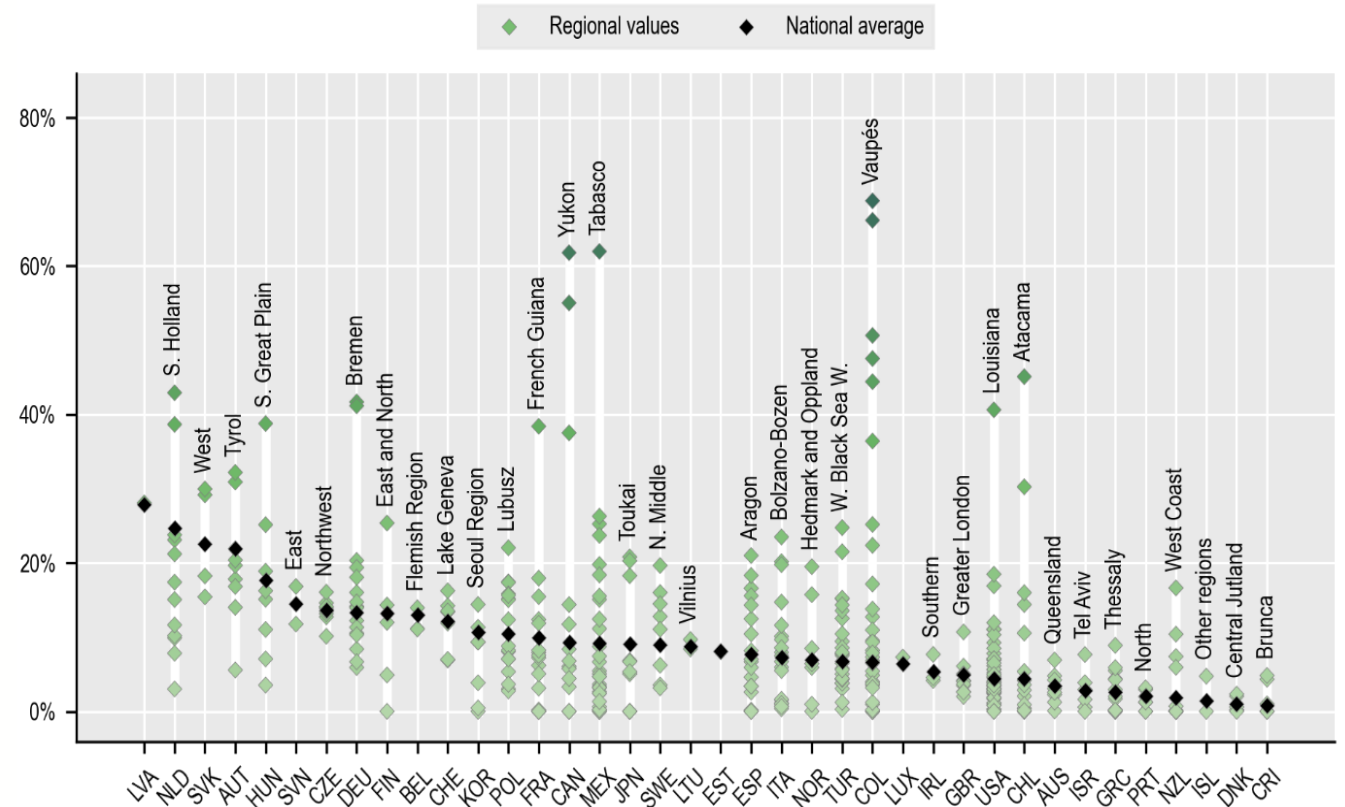


**82.7 %** of the total population exposed

## Ontario (Canada)



**7.68 t** of the total population exposed







# 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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