

# Alpine Towns

Findings from the 9th Report  
on the State of the Alps and  
ESPON InTerAlp

Dominik Bertram

13.01.2025, online

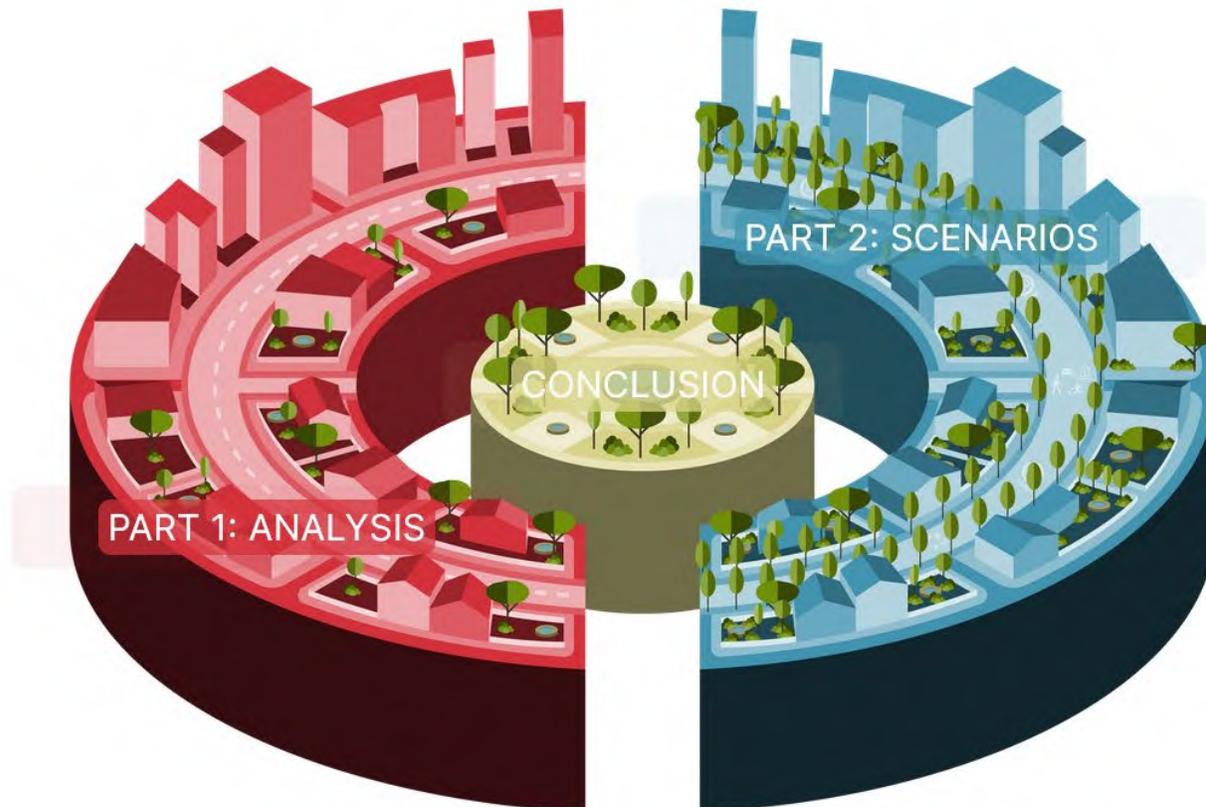


# 9th Report on the State of the Alps



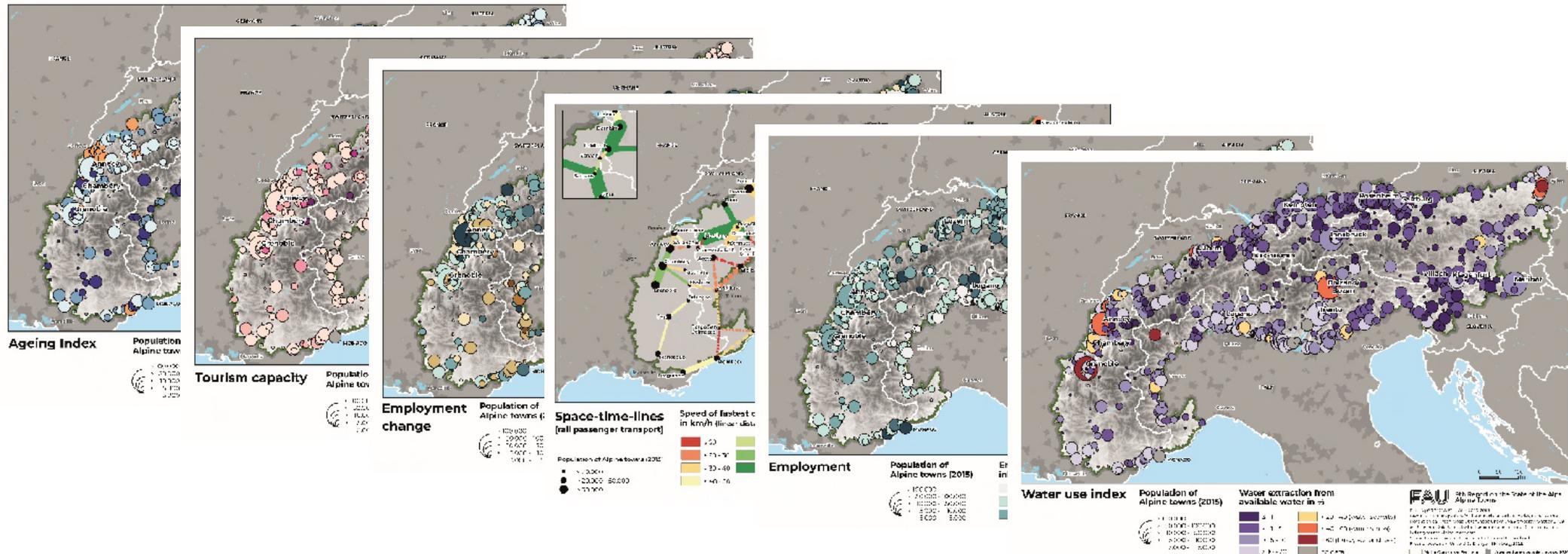
## ALPINE TOWNS

Key to sustainable development in the Alpine region



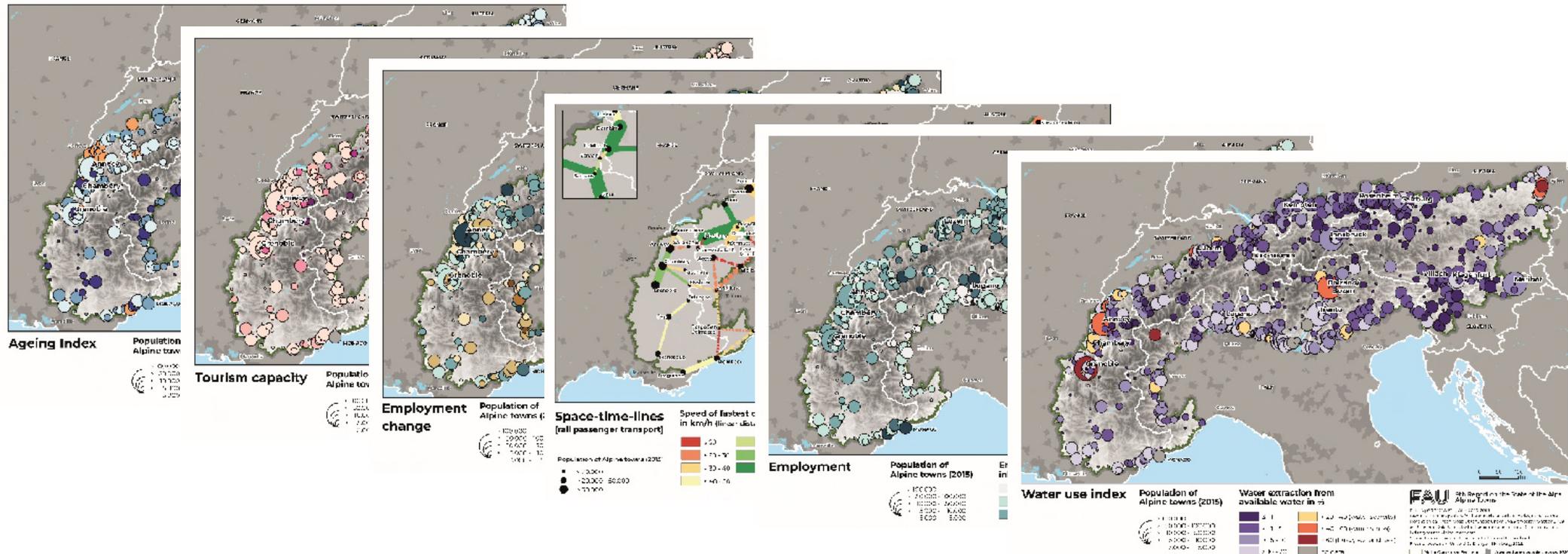
# Take aways

- Alpine towns have key roles beyond size
- Alpine towns connect urban and rural territories
- Alpine towns stay front-runners
- Alpine towns become networking hubs

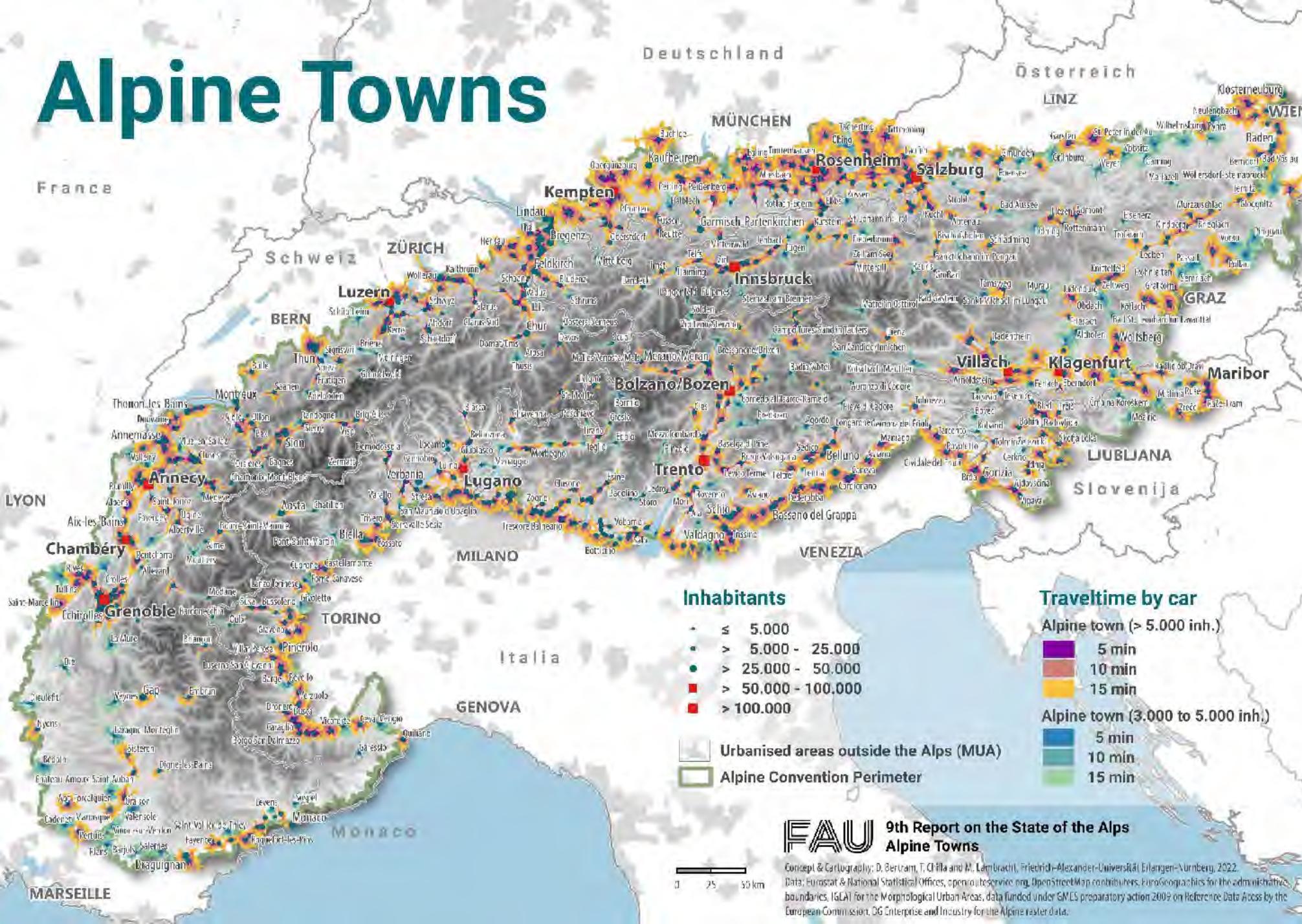


# Take aways

- **Alpine towns have key roles beyond size**
- Alpine towns connect urban and rural territories
- **Alpine towns stay front-runners**
- Alpine towns become networking hubs

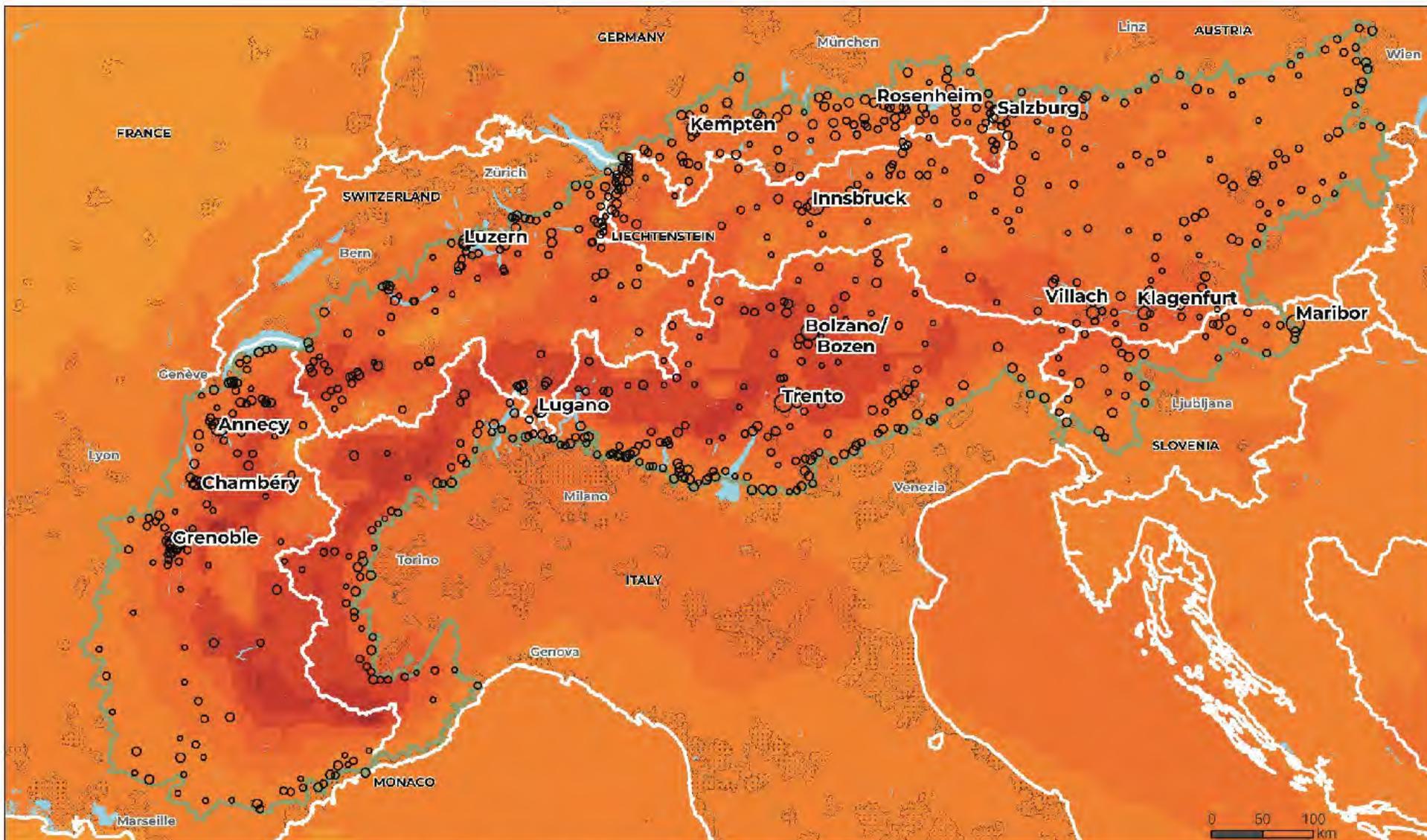


# Alpine Towns



## FAU 9th Report on the State of the Alps Alpine Towns

Concept & Cartography: D. Bertram, T. Di Tella and M. Lambrachi, Friedrich-Alexander-Universität Erlangen-Nürnberg, 2022.  
 Data: Eurostat & National Statistical Offices, openrouteservice.org, OpenStreetMap contributors, EuroGeographics for the administrative boundaries, IGLAI for the Morphological Urban Areas, data funded under GMES preparatory action 2009 on Reference Data Access by the European Commission, DG Enterprise and Industry for the Alpine raster data.



### Temperature change

### Population of Alpine towns (2015)

- 3,000 - 5,000
- > 5,000 - 10,000
- > 10,000 - 50,000
- > 50,000 - 100,000
- > 100,000

### Changes in surface temperature between 2021-2050 (in Celsius)

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>0.81 - 0.9</li> <li>0.91 - 1</li> <li>1.01 - 1.1</li> <li>1.11 - 1.2</li> <li>1.21 - 1.3</li> <li>1.31 - 1.4</li> </ul> | <ul style="list-style-type: none"> <li>1.41 - 1.5</li> <li>1.51 - 1.6</li> <li>1.61 - 1.7</li> <li>1.71 - 1.8</li> <li>1.81 - 1.9</li> <li>1.91 - 2</li> </ul> |
|--|--|



### 9th Report on the State of the Alps Alpine Towns

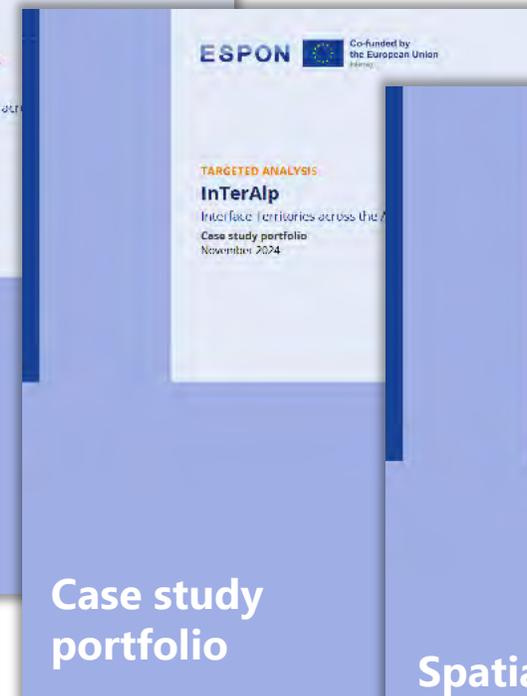
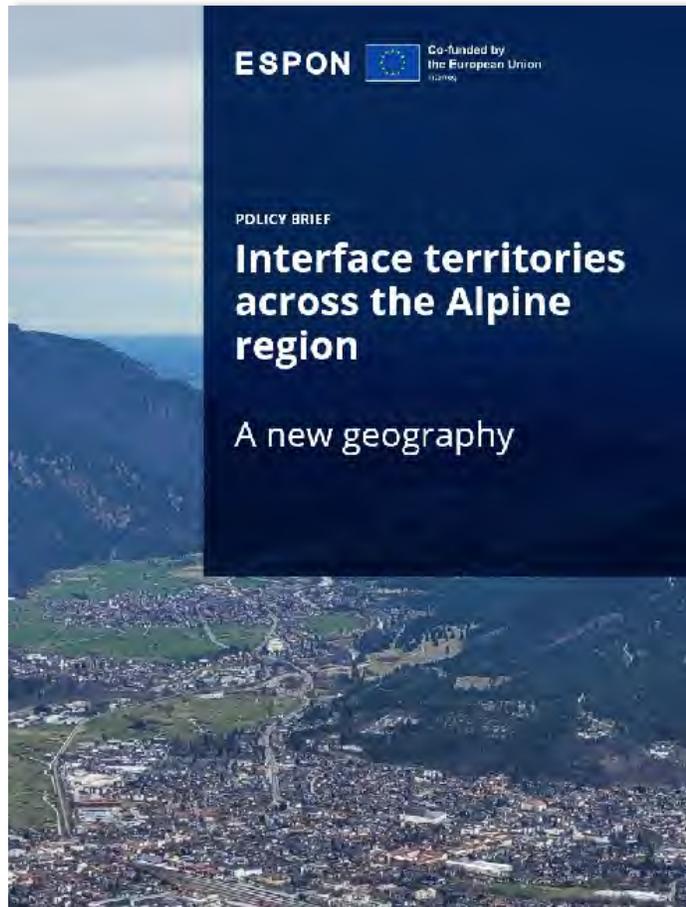
Data: Alpine Convention for projected changes in annual near surface temperature in Southern Europe 2021-2050 in Celsius (WWS).  
 Layout: © EuroGeographics for the administrative boundaries; GEAT for the Morphological Urban Areas.  
 Concept & Cartography: D. Bertram, T. Chilla and M. Lembrant, Friedrich-Alexander-Universität Erlangen-Nürnberg, 2022.

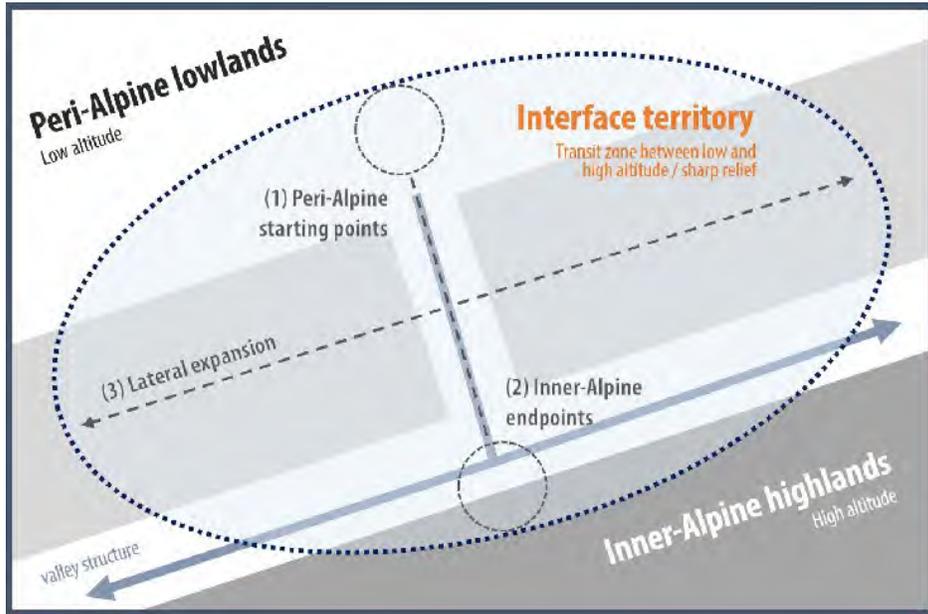
Alpine Convention Perimeter Urbanised areas outside the Alps (MUA)

# ESPON InTerAlp – Interface territories across the Alpine region



Policy Brief





FAU, 2024



Photo: Elias Günther, 2024



Photo: Andrea Mucelli, CC BY-NC-SA 2.0, <https://www.flickr.com/photos/bluestardrop/8296928890>



Photo: Agence d'urbanisme de la région grenobloise

# Take aways

1. It is essential to recognise interface areas as a specific geographic category
2. It is crucial to address the common challenges faced by interface areas.
3. The governance of Alpine interface areas requires a tailor-made approach.

ESPON

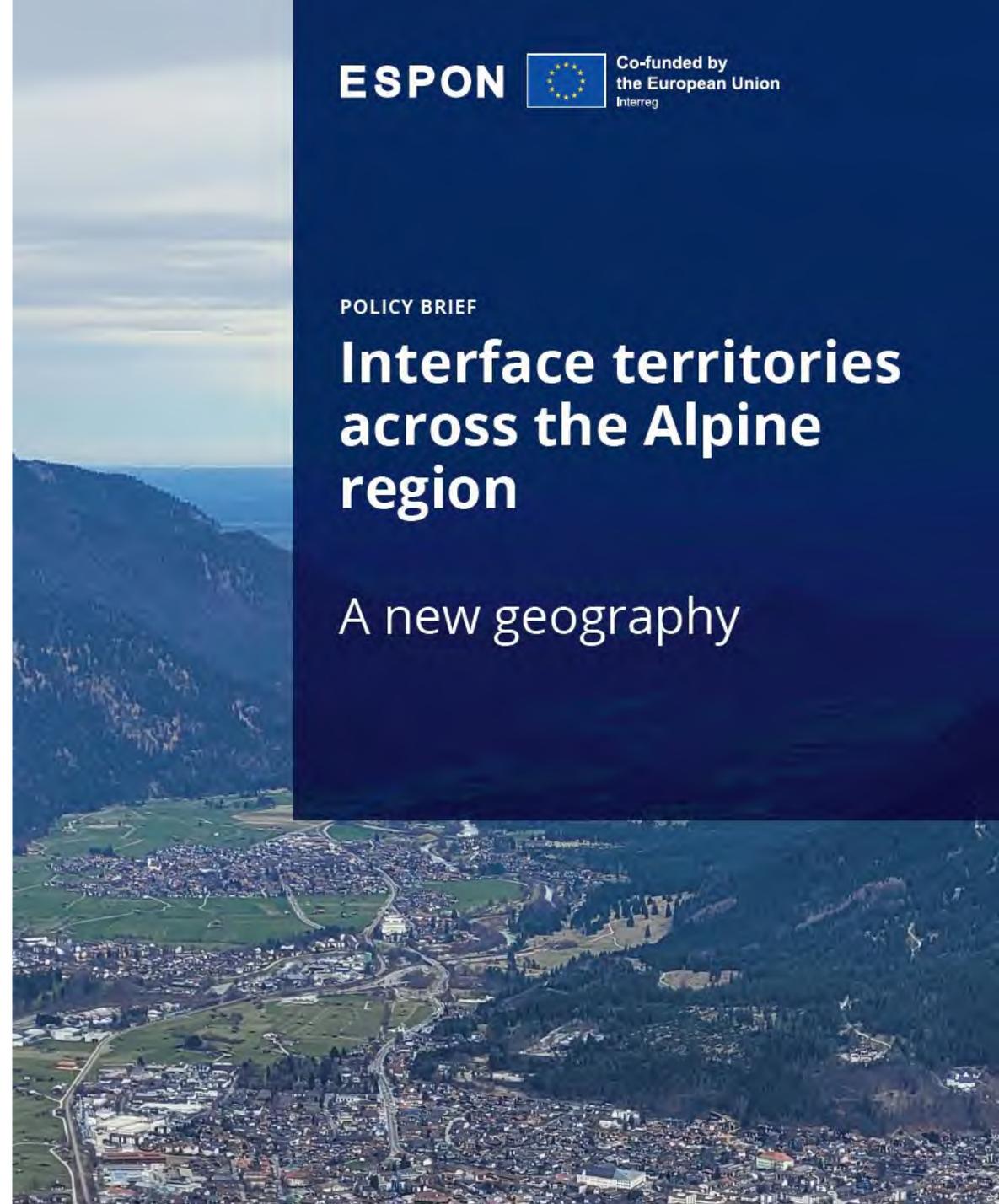


Co-funded by  
the European Union  
Interreg

POLICY BRIEF

## Interface territories across the Alpine region

A new geography



# Take aways

1. **It is essential to recognise interface areas as a specific geographic category**
2. It is crucial to address the common challenges faced by interface areas.
3. The governance of Alpine interface areas requires a tailor-made approach.

ESPON

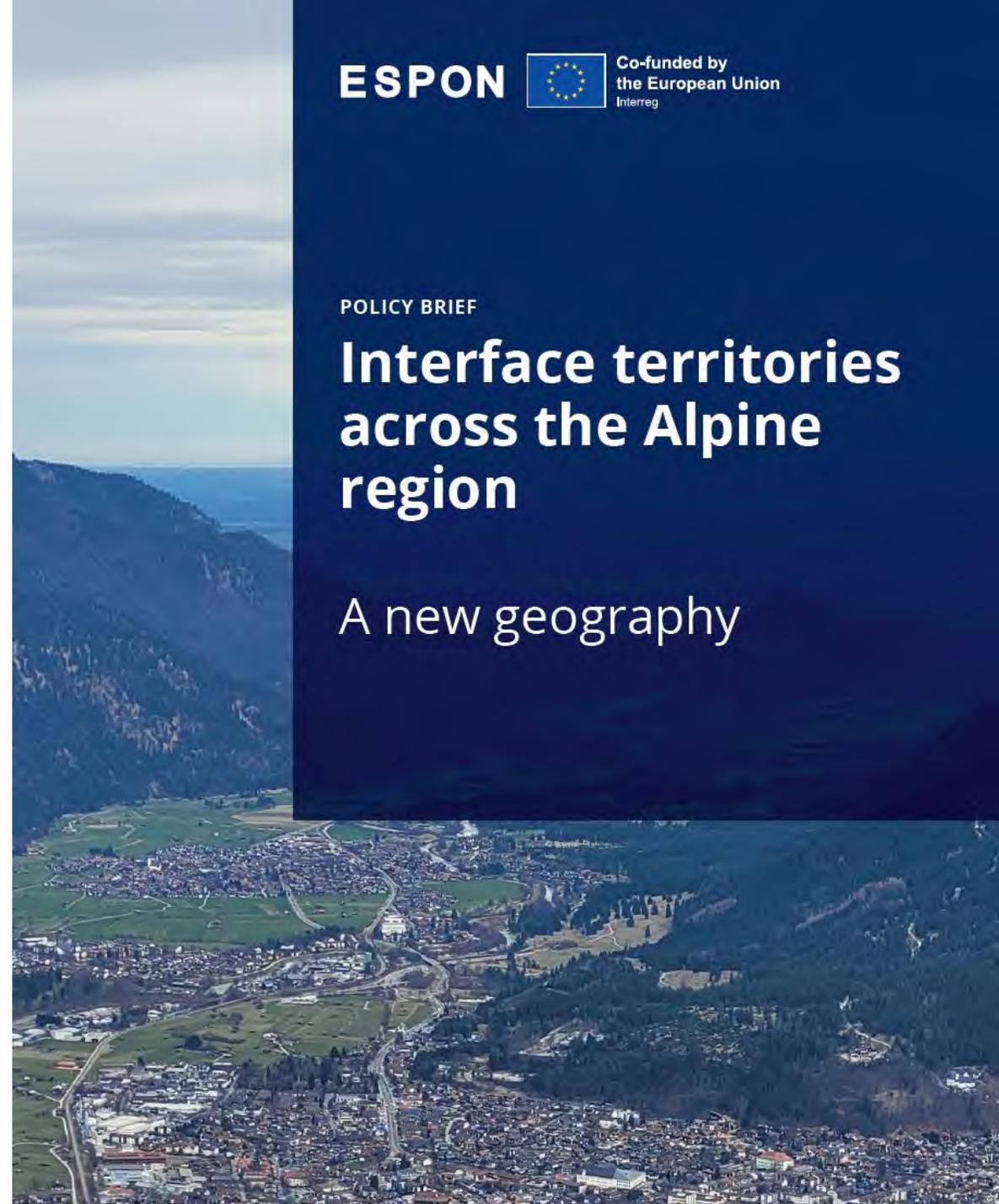


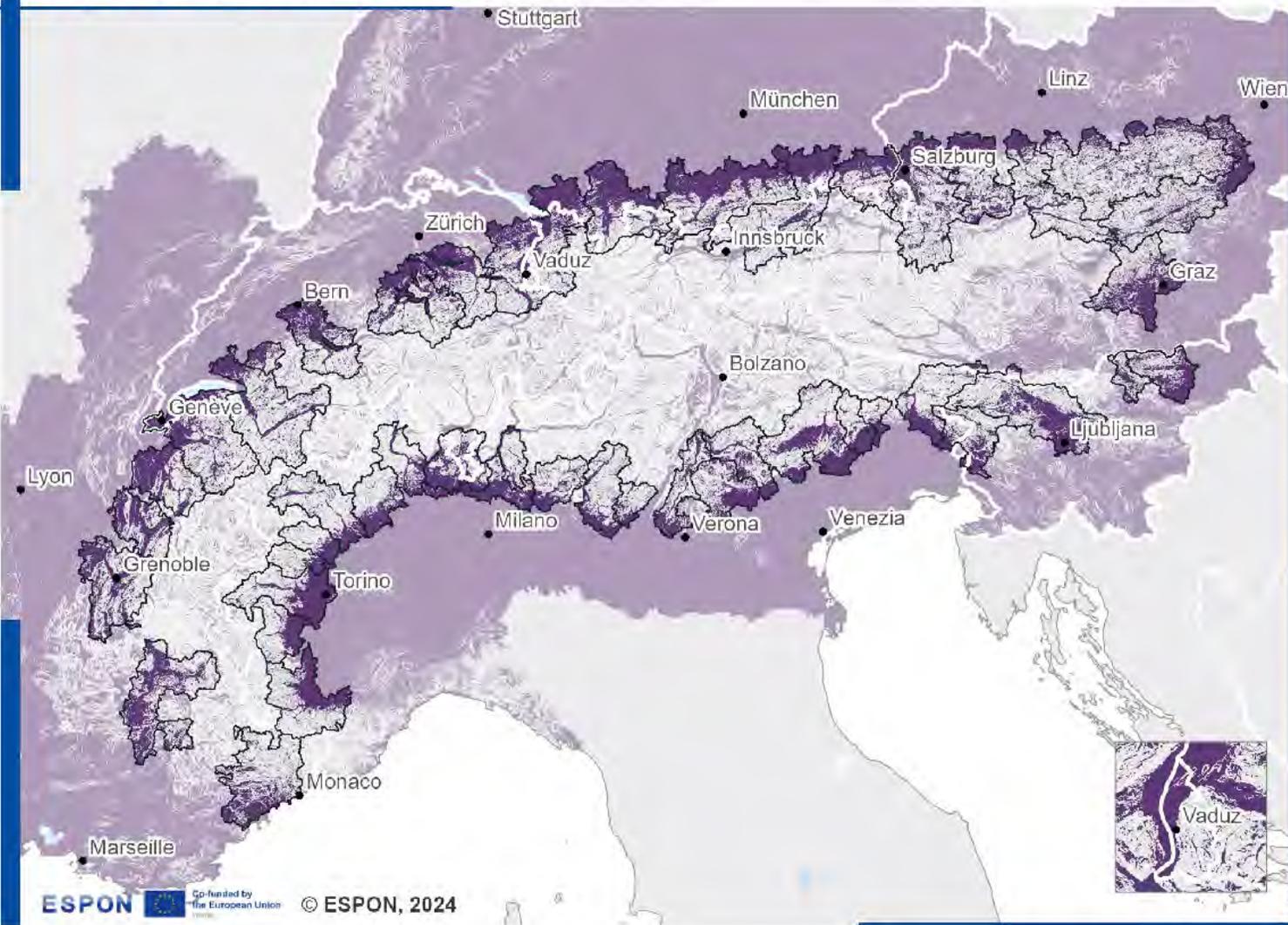
Co-funded by  
the European Union  
Interreg

POLICY BRIEF

## Interface territories across the Alpine region

A new geography





# Territories with sharp contrasts

The challenge of double-demand with half of space

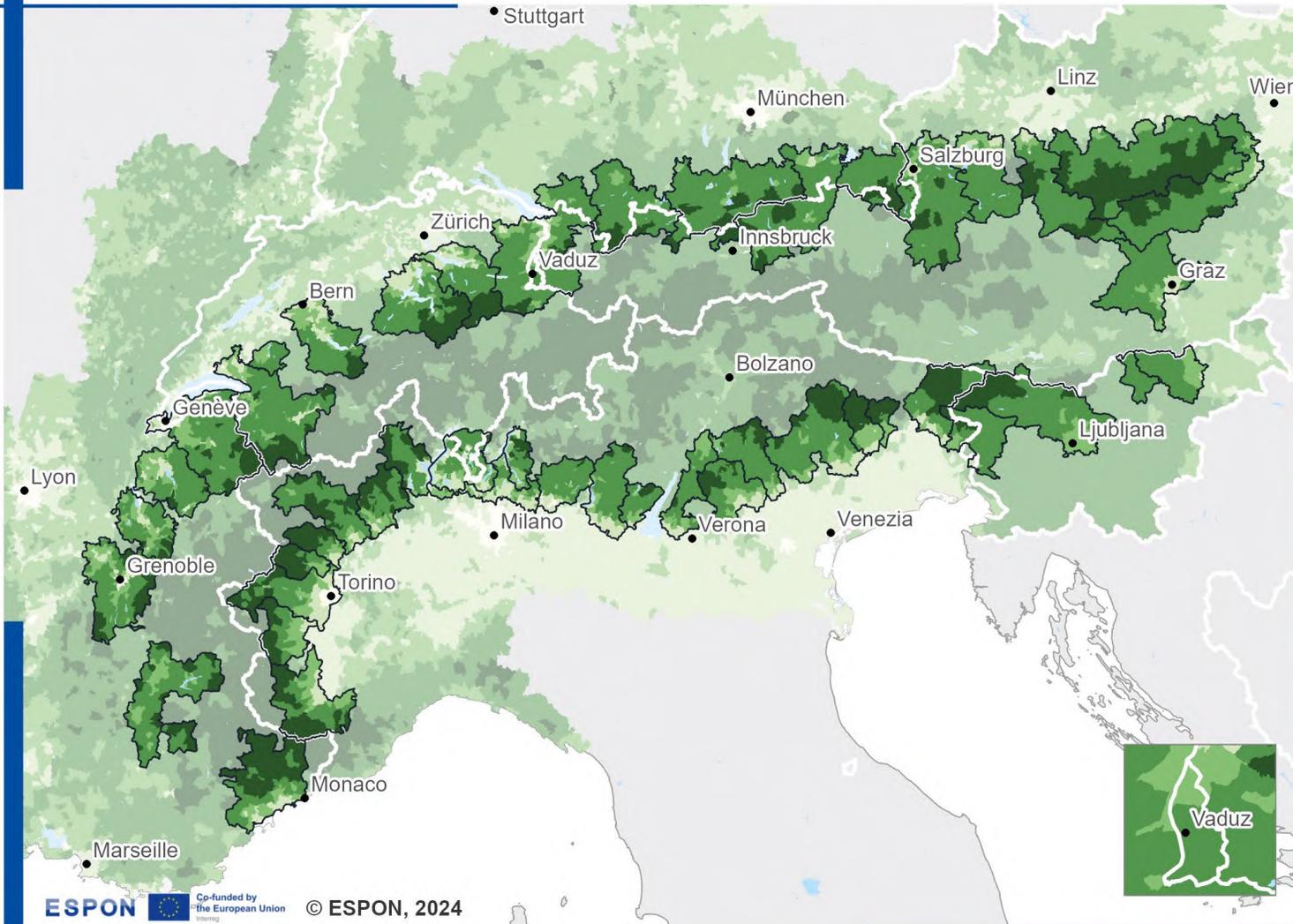
ESPON Co-funded by the European Union © ESPON, 2024

- Interface territories
- Areas with less than 30% slope (Topographic Potential Area)

Regional level: Raster data  
Source: FAU, ESPON InTerAlp, 2024  
Origin of data: EU-DEM, own calculations  
© EuroGeographics for administrative boundaries

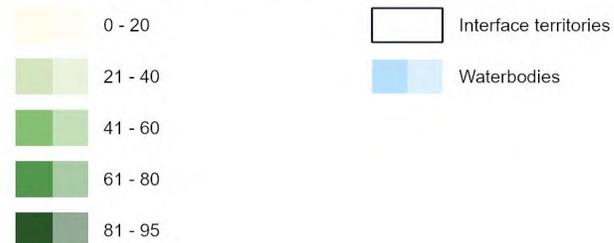
# Territories with sharp contrasts

Areas of environmental contrasts



ESPON Co-funded by the European Union Interreg © ESPON, 2024

### Degree of naturalness of land cover (index)



Regional level: LAU  
 Source: Uta Schirpke, ESPON InTerAlp, 2024  
 Origin of data: Corine Land Cover, 2018  
 © EuroGeographics for administrative boundaries

# Take aways

1. It is essential to recognise interface areas as a specific geographic category
2. **It is crucial to address the common challenges faced by interface areas.**
3. The governance of Alpine interface areas requires a tailor-made approach.

ESPON

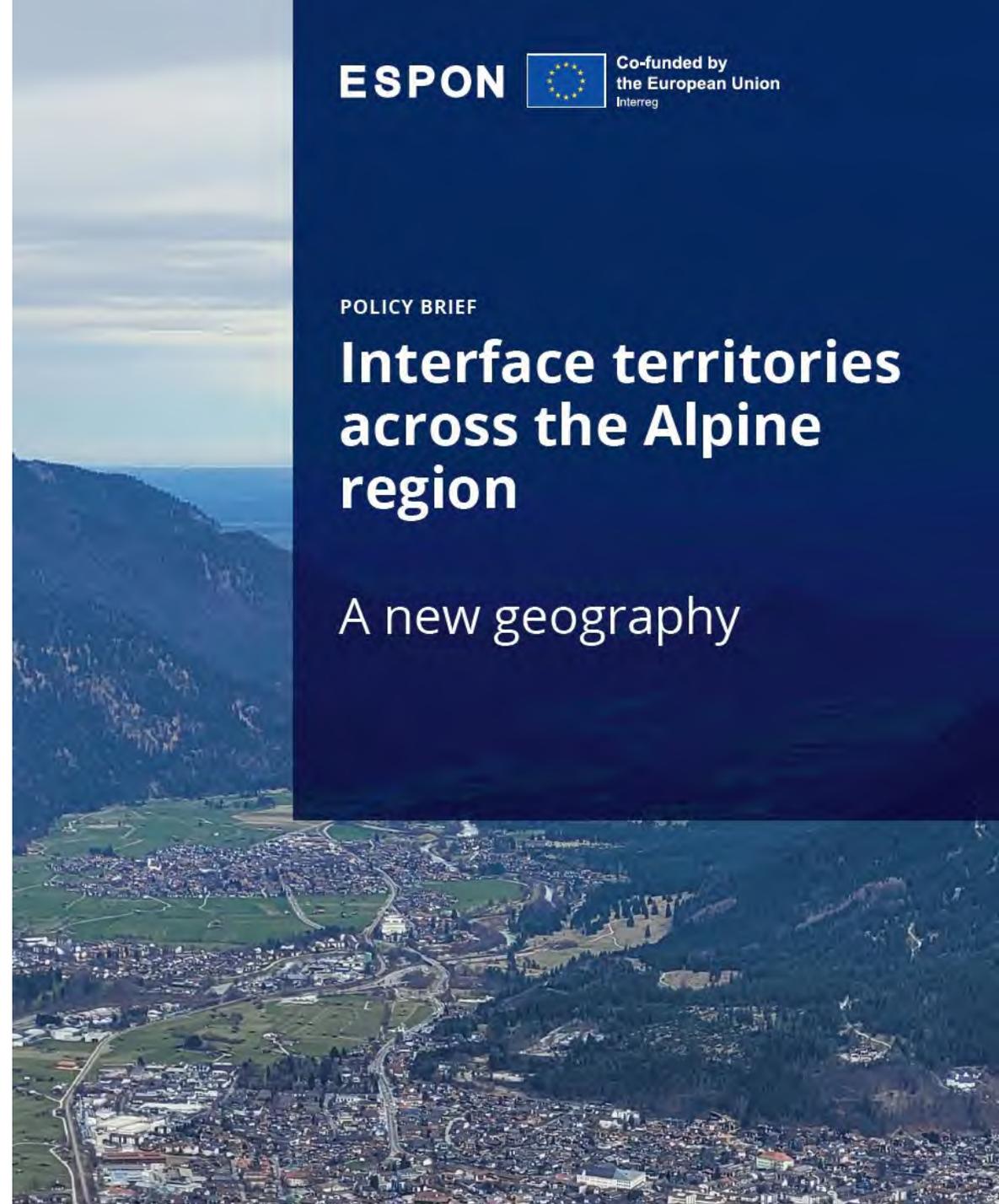


Co-funded by  
the European Union  
Interreg

POLICY BRIEF

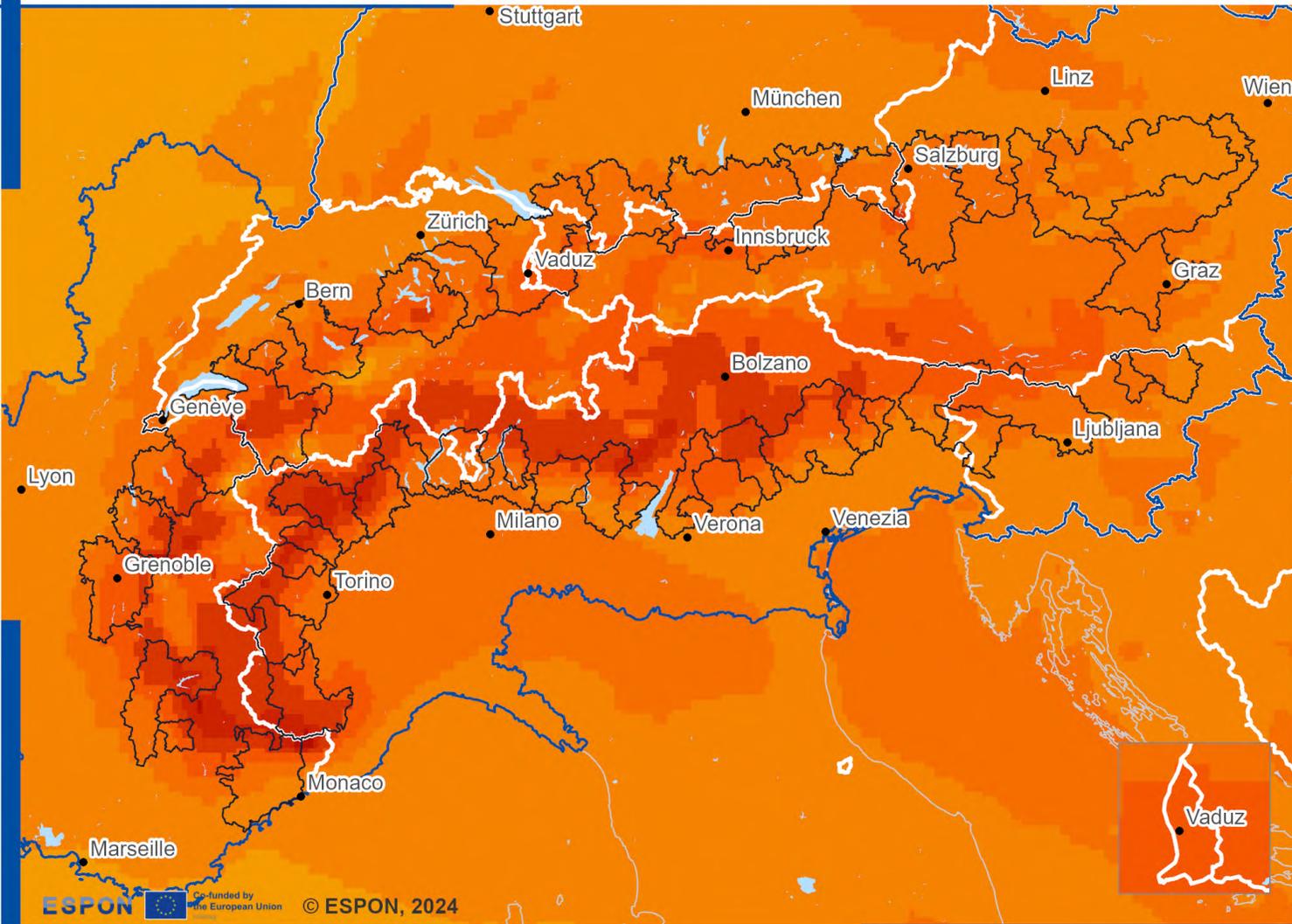
## Interface territories across the Alpine region

A new geography

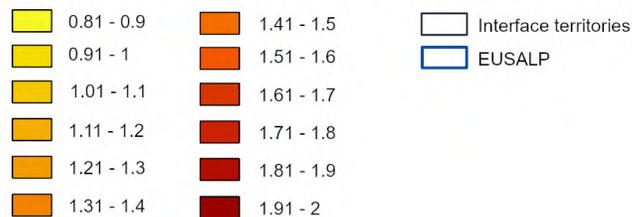


# Territories with common challenges and specific roles

Addressing cross-cutting issues of climate change



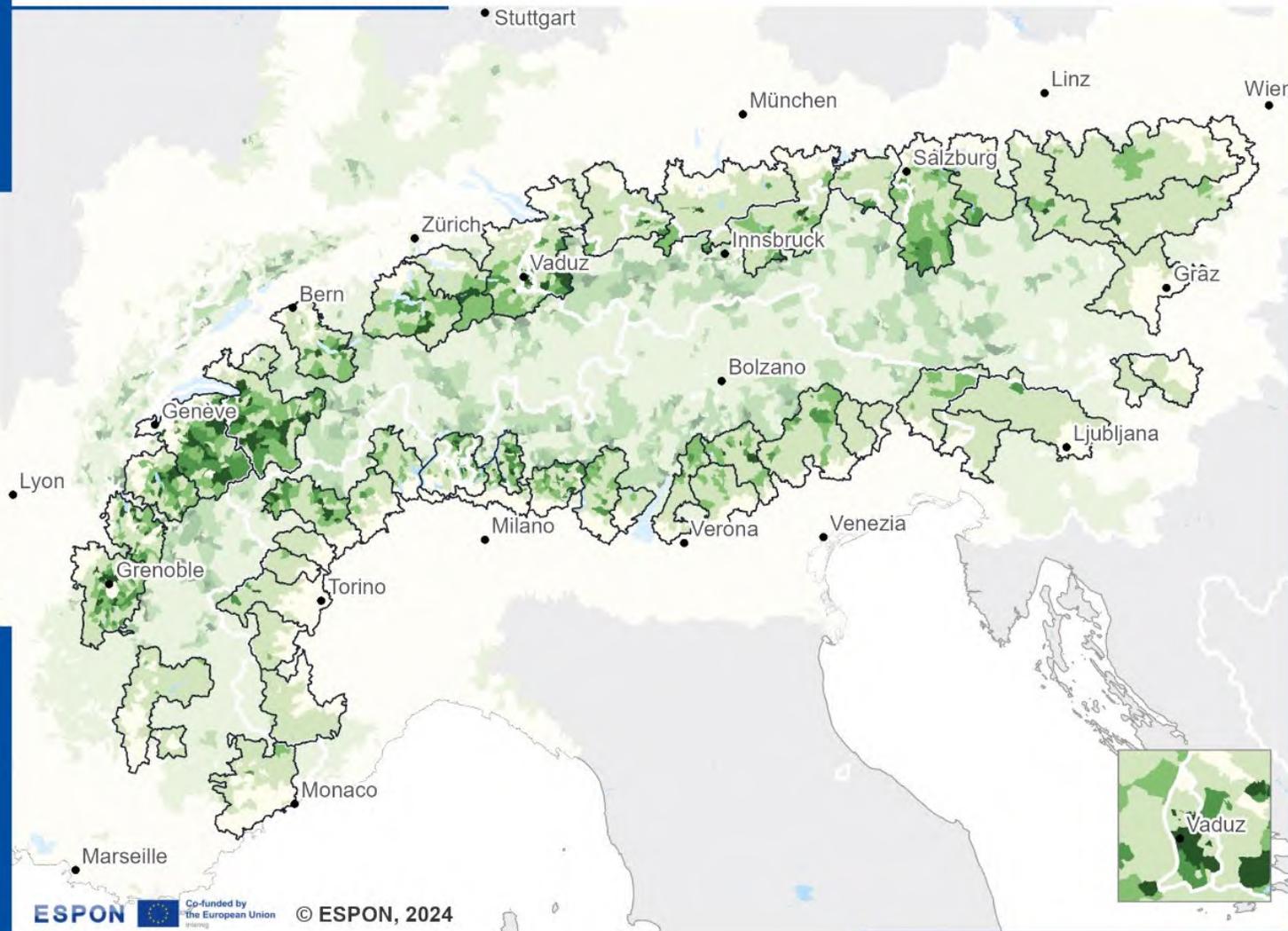
Changes in surface temperature between 2021-2050 (in Celsius)



Regional level: Raster data  
 Source: FAU, ESPON InTerAlp, 2024  
 Origin of data: Alpine Convention for projected changes in annual near surface temperature in Southern Europe 2021-2050 in Celsius (WMS), 2024  
 © EuroGeographics for administrative boundaries

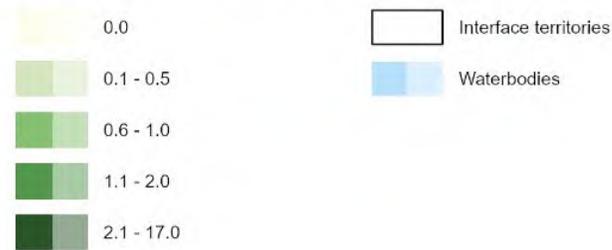
# Territories with common challenges and specific roles

Hazard prevention areas

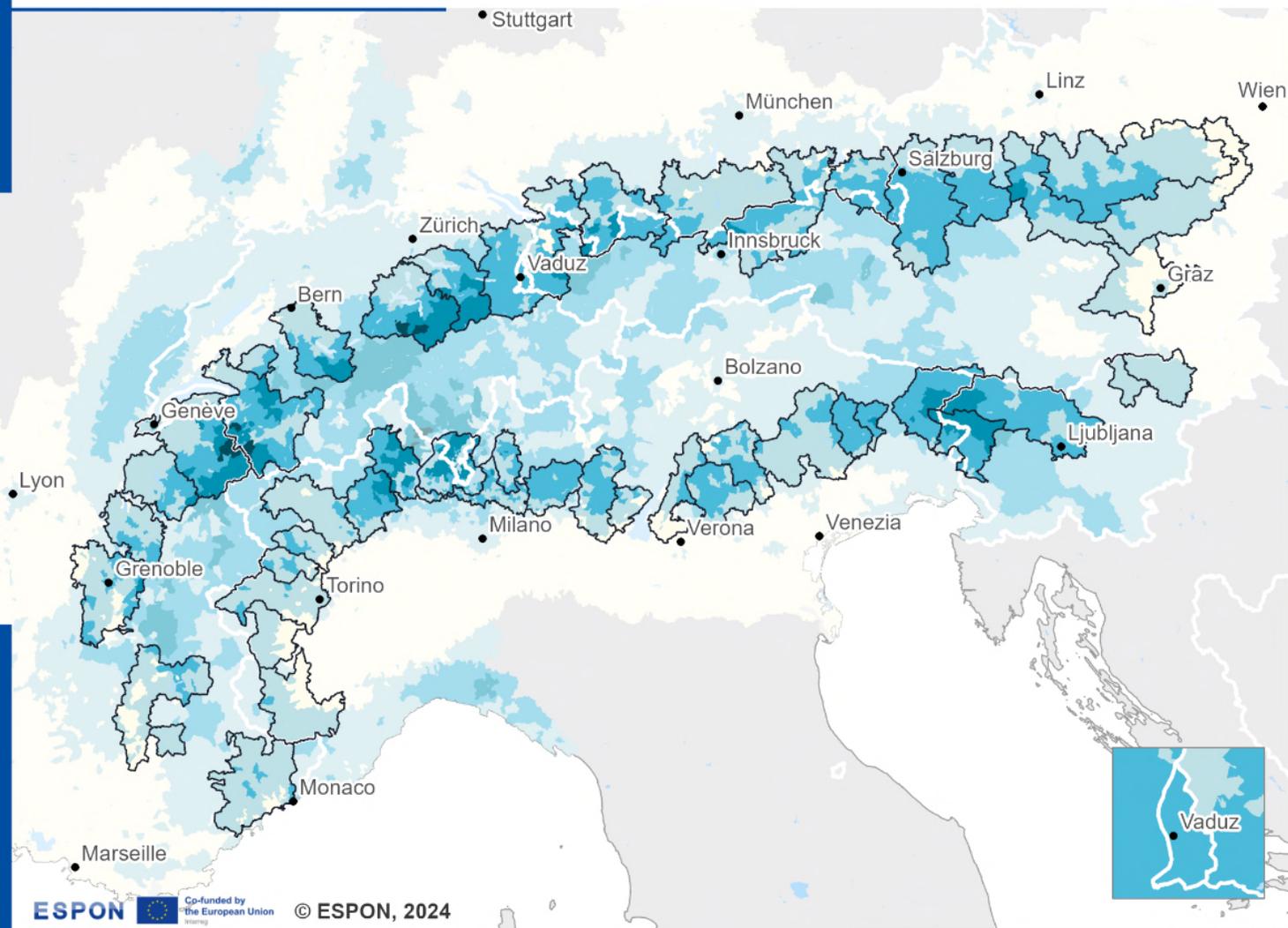


ESPON Co-funded by the European Union © ESPON, 2024

Share of infrastructure in hazard zones (%)

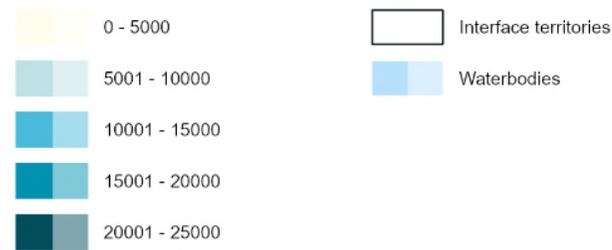


Regional level: LAU  
 Source: Uta Schirpke, ESPON InTerAlp, 2024  
 Origin of data: Project AlpES, 2018  
 © EuroGeographics for administrative boundaries



ESPON Co-funded by the European Union Interreg © ESPON, 2024

Potentially available water quantity ( $m^3 ha^{-1} y^{-1}$ )



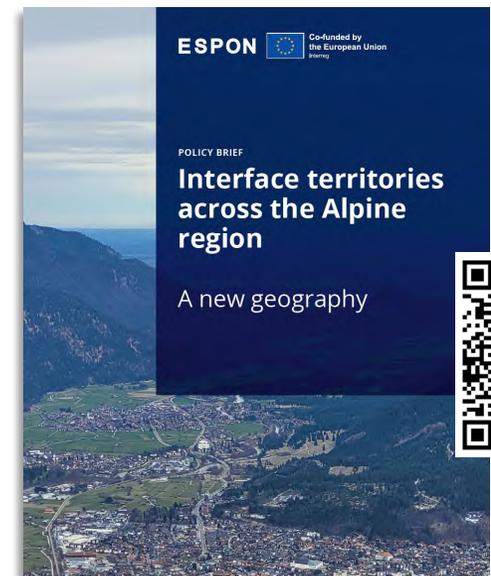
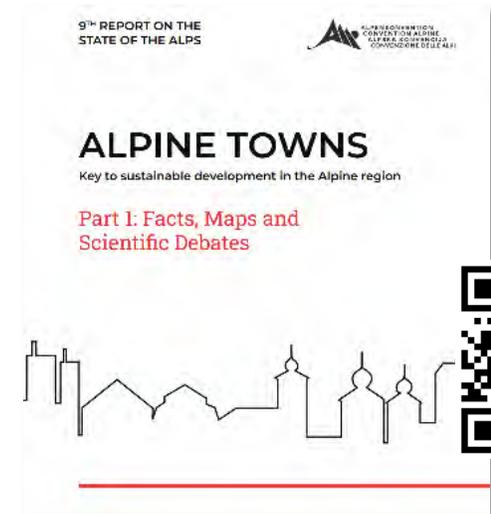
Regional level: LAU  
 Source: Uta Schirpke, ESPON InTerAlp, 2024  
 Origin of data: Project AlpES, 2018  
 © EuroGeographics for administrative boundaries

# Territories with common challenges and specific roles

Areas of water infrastructure

# Alpine towns and climate change

1. Alpine towns play a **pioneering role** in addressing the cross-cutting challenges of climate change (in particular in interface territories)
2. Alpine towns are **key to sustainable development** in the Alpine region
  - Key roles beyond size
  - Urban-rural connectors
  - Front-runners
  - Networking hubs



# Thank you!



## Dominik Bertram

**Friedrich-Alexander-Universität  
Erlangen-Nürnberg (FAU)**  
Institute of Geography

dominik.db.bertram@fau.de  
+49 9131 85-22462



[Link to homepage](#)