



CLIMATECOUNCIL.ORG.AU

# Challenges of the Alpine area

## AIM HIGH, GO FAST

**Interreg**  
Alpine Space



Co-funded by  
the European Union



prof. Lučka Kajfež Bogataj  
University of Ljubljana

**Let's change our altitude!**

# So many challenges so little time

- Transport
- Energy
- Tourism
- Natural hazards
- Water
- Spatial planning
- Soil
- Mountain agriculture
- Mountain forests
- Ecosystems and biodiversity



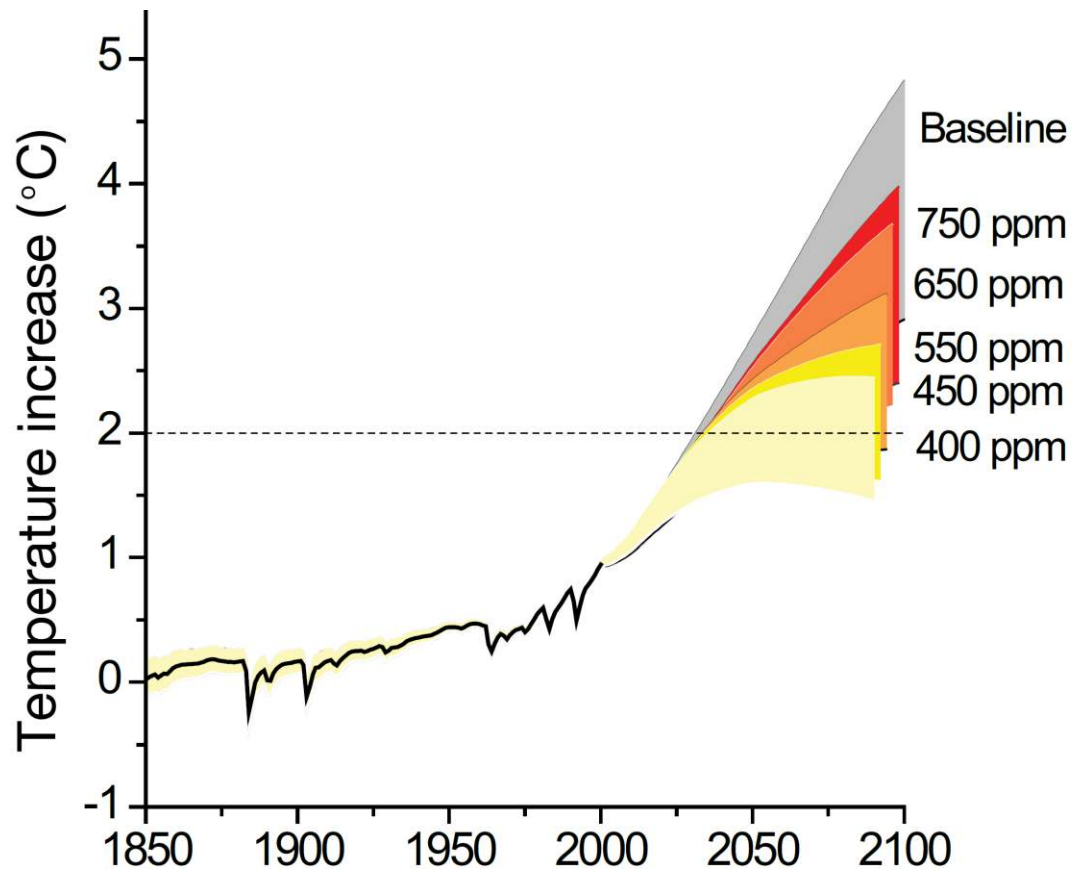
# COVID-19 and climate change

## what do they have in common

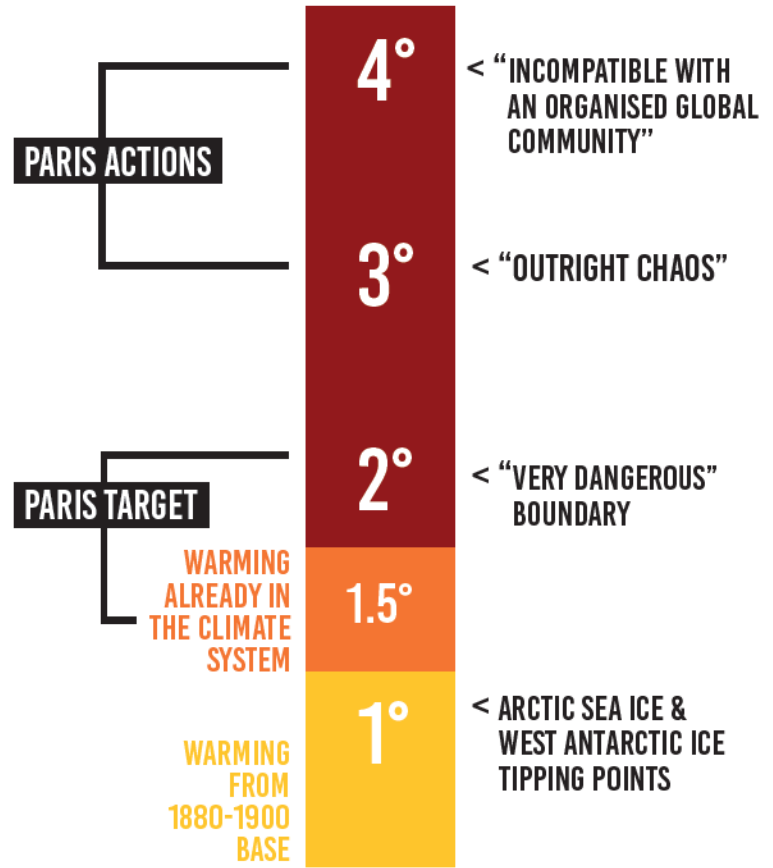
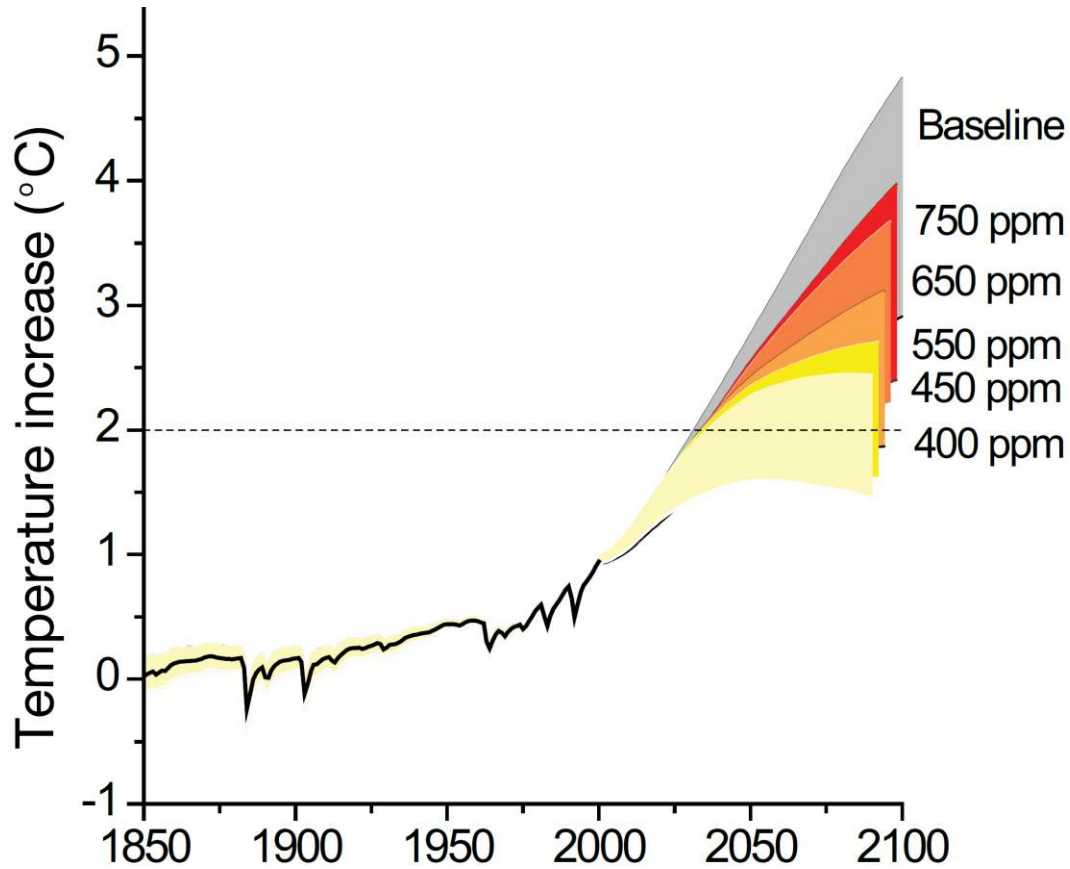


- Resilience undermined by deep inequality
- Some systems lacking resilience – energy, food and financial systems
- Traditional mechanisms of multilateral cooperation straining to be equal to the task
- Depth and breadth of COVID-19 inspired recession will test international solidarity even further
- The risks in plain sight we ignore





## PARIS EMISSIONS PATH & CLIMATE RISKS



# COP26: the leaders who hold the world's future in their hands



# Cop26

The goal of 1.5°C of climate heating is alive,  
but only just



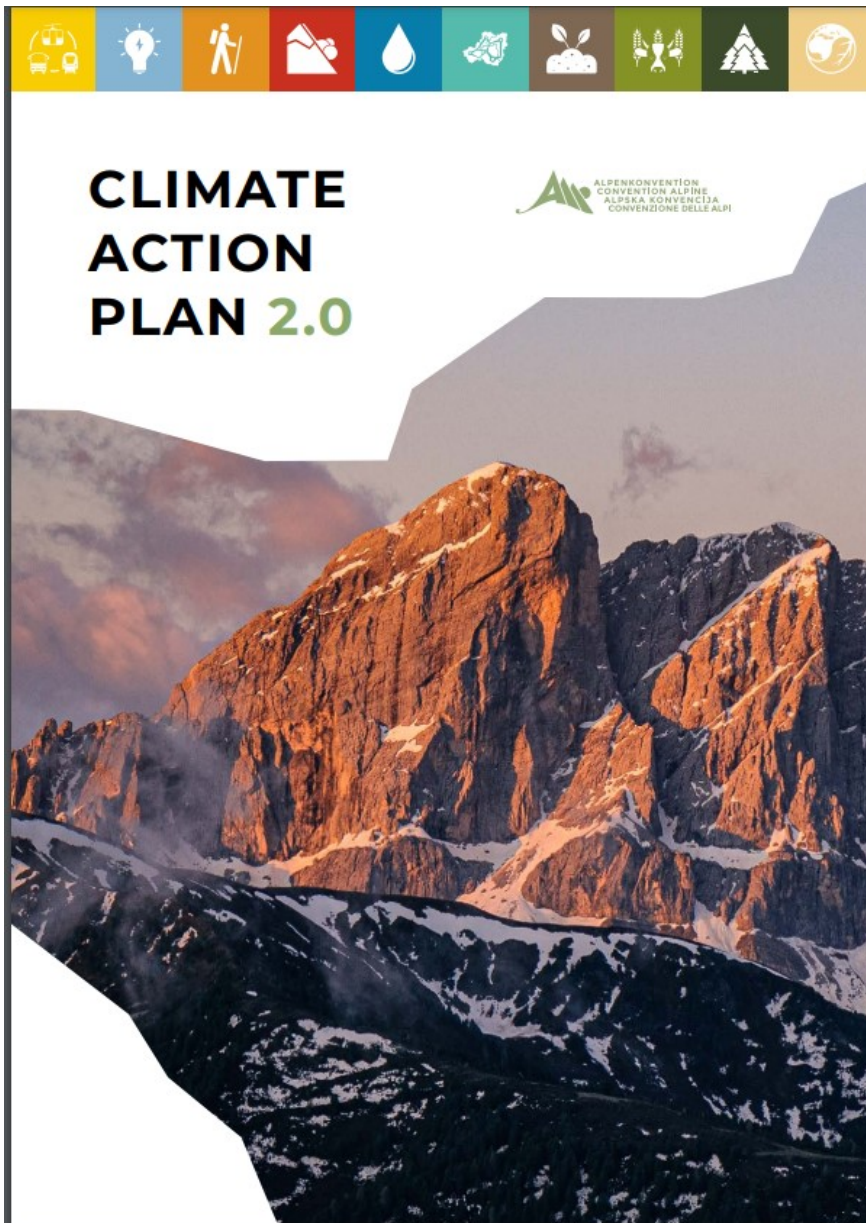
# Global temperatures are likely to rise more than 2°C , with even the most optimistic scenario





# Limiting warming to 1.5°C requires rapid and unprecedented transitions in energy, land use, urban, industry and infrastructure systems

- Deep emission cuts in all sectors – CO<sub>2</sub> emissions to decline **substantially before 2030**
- A range of technologies and behavioural changes
- Scale up in annual investment in low carbon energy and energy efficiency by factor of five by 2050
- Renewables supply 70-85% of electricity in 2030
- Coal declines steeply, ~zero in electricity by 2030

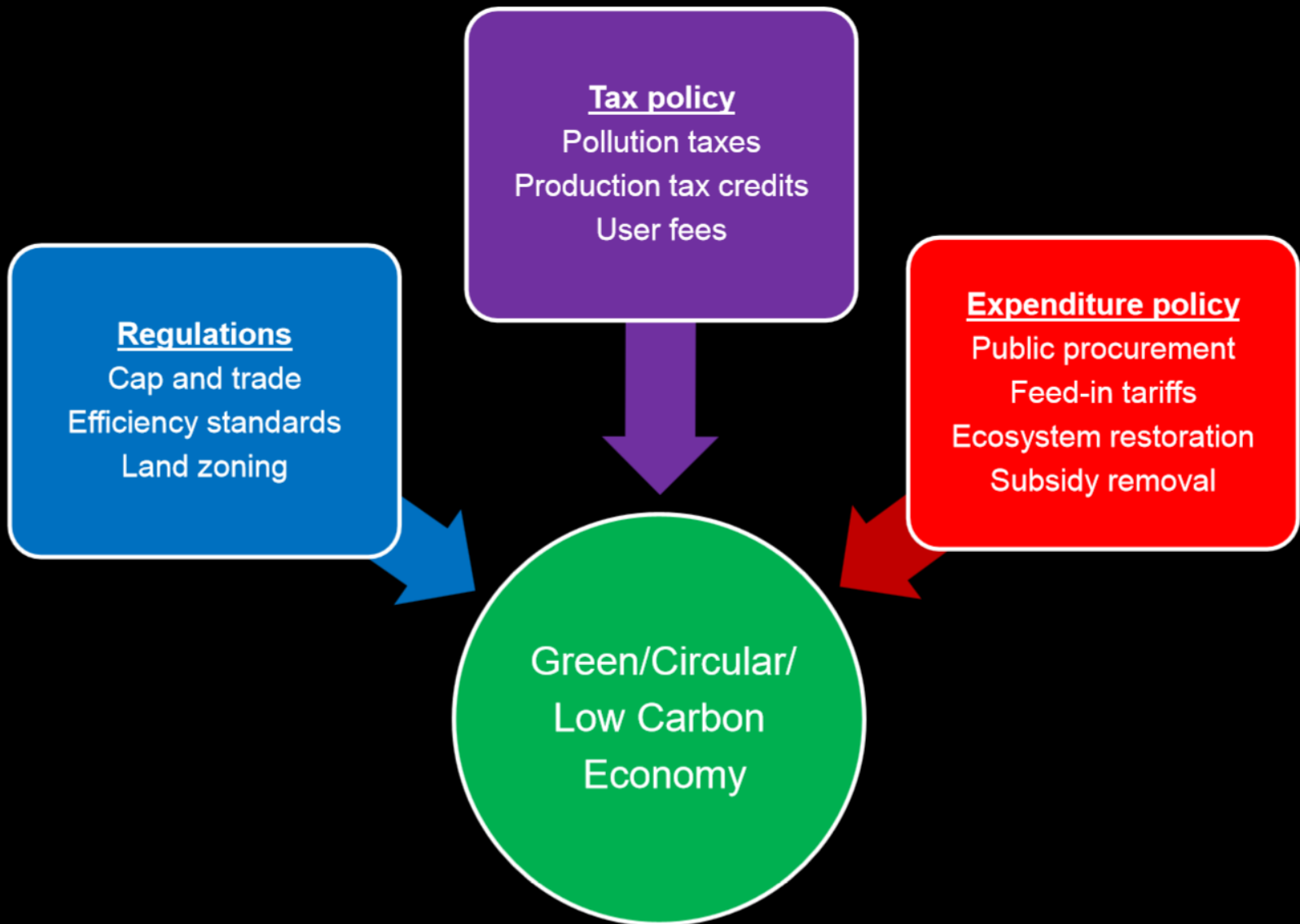


## 30 implementation pathways for 10 different sectors

Transport  
Energy  
Tourism  
Natural hazards  
Water  
Spatial planning  
Soil  
Mountain agriculture  
Mountain forests  
Ecosystems and biodiversity

Developed by the Alpine Climate Board of the Alpine Convention

# National government role is critical



# A European Green Deal

- Europe being the **first climate-neutral continent**.
- **Extension of the Emissions Trading System** (to cover the maritime sector, aviation, also traffic and construction).
- Introduction of **Carbon Border Tax** (to avoid carbon leakage).
- Revision of the **Energy Taxation Directive**.





**EUSALP** EU STRATEGY FOR THE ALPINE REGION

[www.alpine-region.eu](http://www.alpine-region.eu)



---

EUSALP Energy Survey 2017  
Report

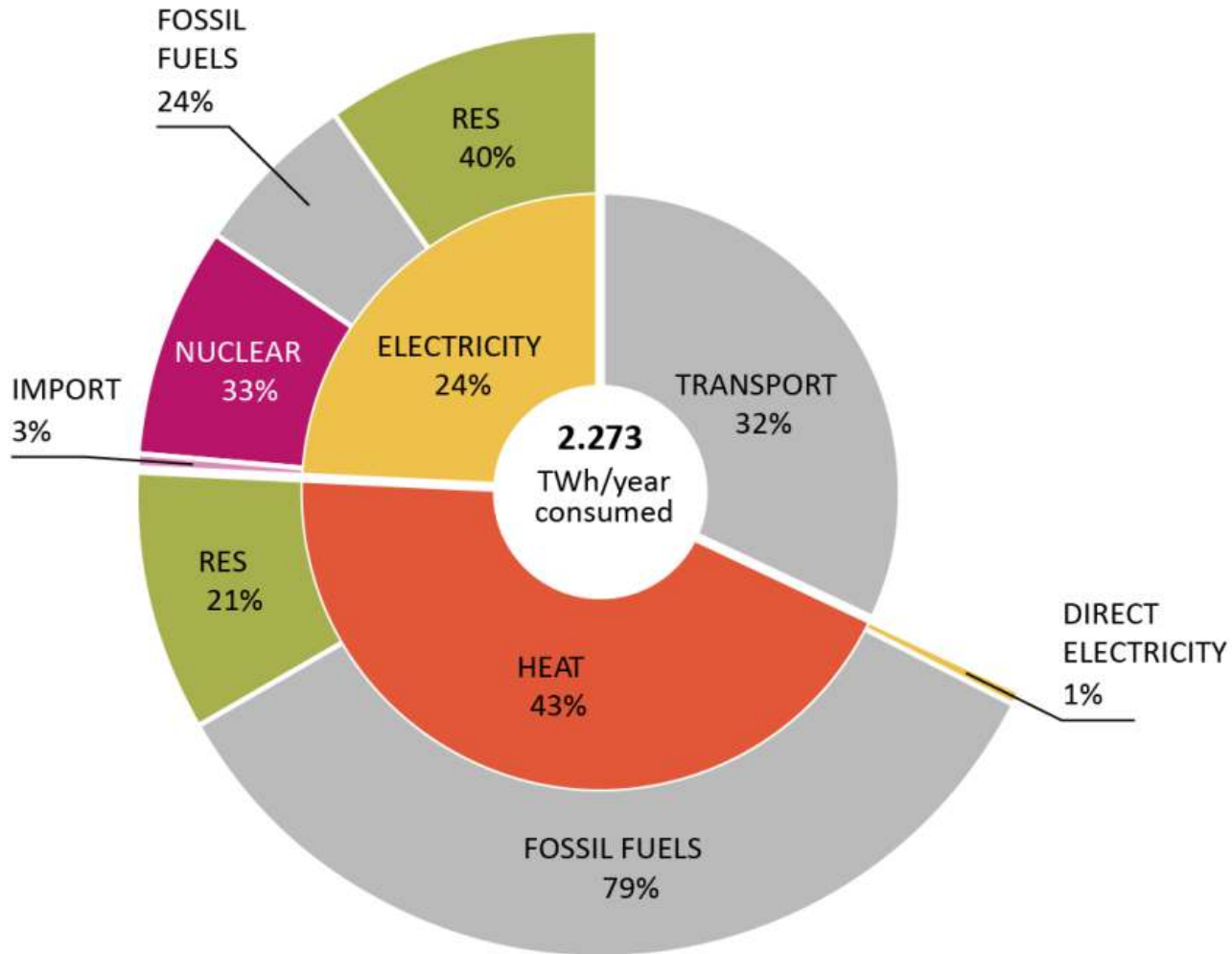
---

---

80 million people, 7 countries, 48 regions,  
mountains and plains addressing together  
common challenges and opportunities



# EUSALP energy consumption



Source: Eurac Research

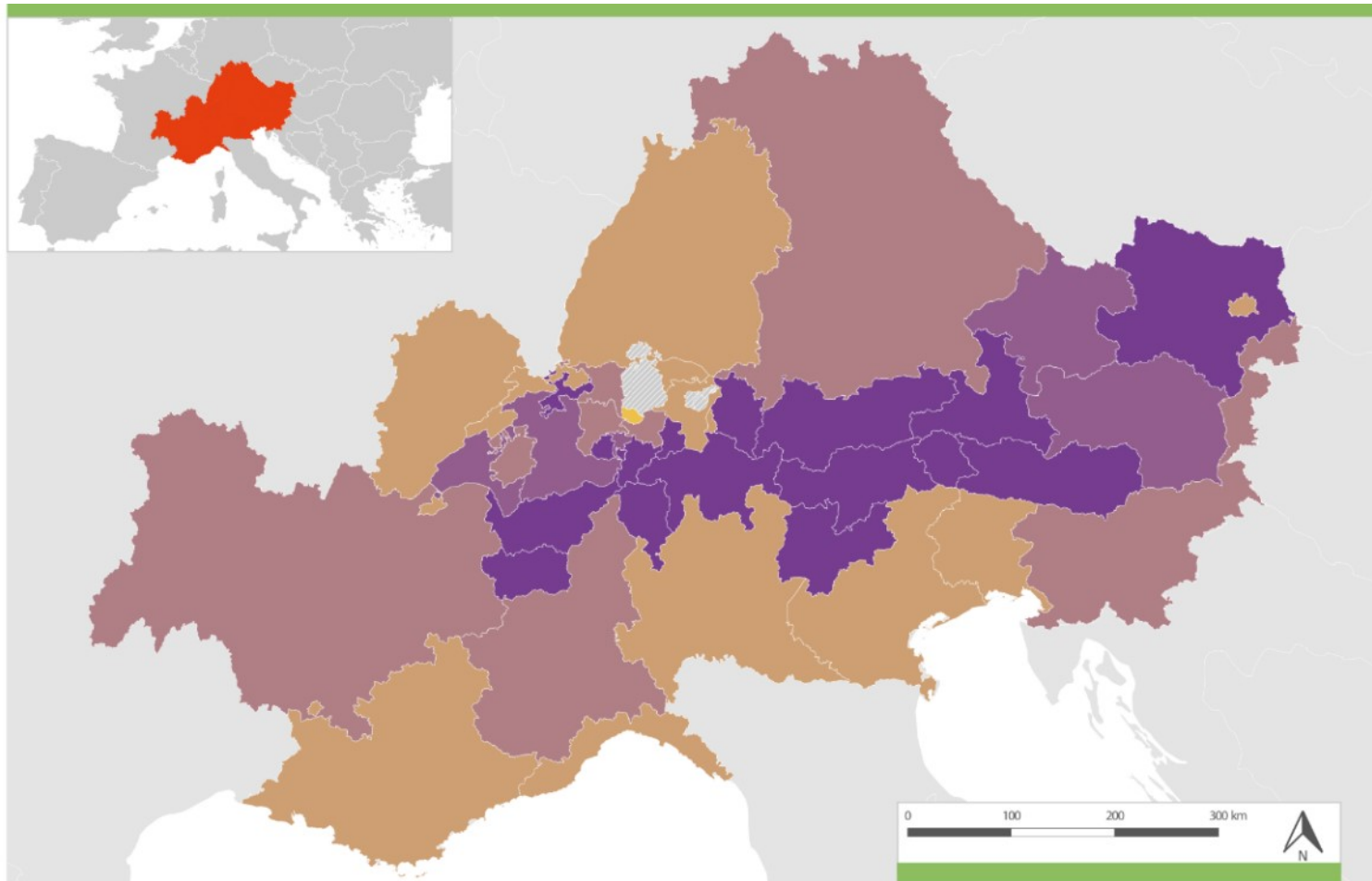
	<b>Min (Territory)</b>	<b>Max (Territory)</b>	<b>Mean</b>
<b>Final energy consumption (TWh/year)</b>	1.04 (Nidwalden)	386.2 (Bayern)	48.3
<b>Final energy consumption pro capita (MWh/year/inh)</b>	18.7 (Liguria)	45.8 (Graubünden)	30.2
<b>Electricity consumption (TWh/year)</b>	0.23 (Obwalden)	77.6 (Bayern)	11.8
<b>Heating consumption (TWh/year)</b>	0.39 (Nidwalden)	187.4 (Bayern)	21.1
<b>Transport sector consumption (TWh/year)</b>	0.39 (Glarus)	123.6 (Bayern)	14.5
<b>Share of RES in electricity consumption</b>	5% (Zug,Liguria)	100% (Alpine NUTS)	48%
<b>Share of RES in heating consumption</b>	1% (Lombardia)	61% (Kärnten)	21%

# Share of electricity from renewable sources

## Legend

### Share of electricity from RES [%]

- no data
- 0 - 5
- 5 - 26
- 26 - 49
- 49 - 87
- 87 - 100

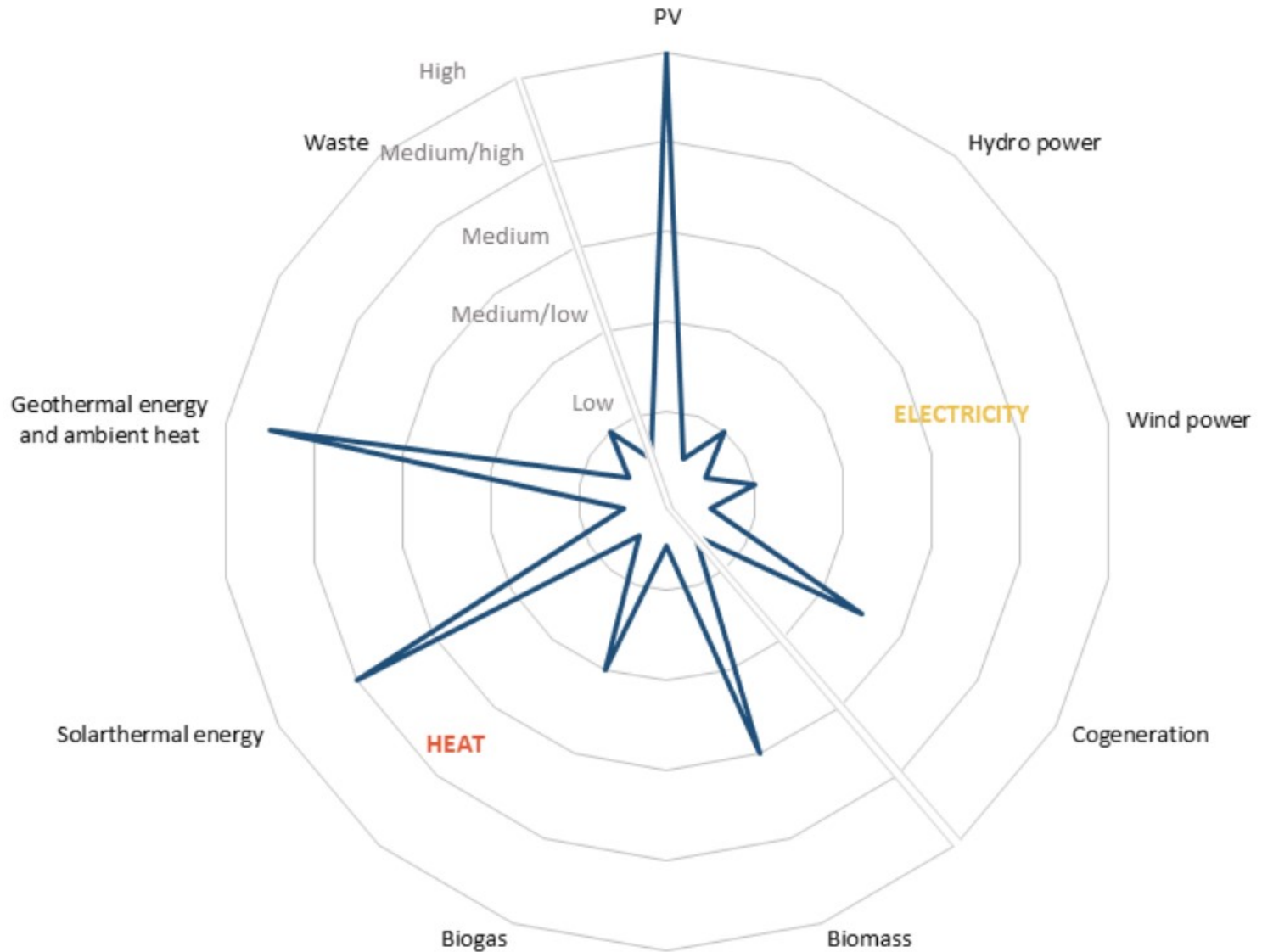


Source: Eurac Research

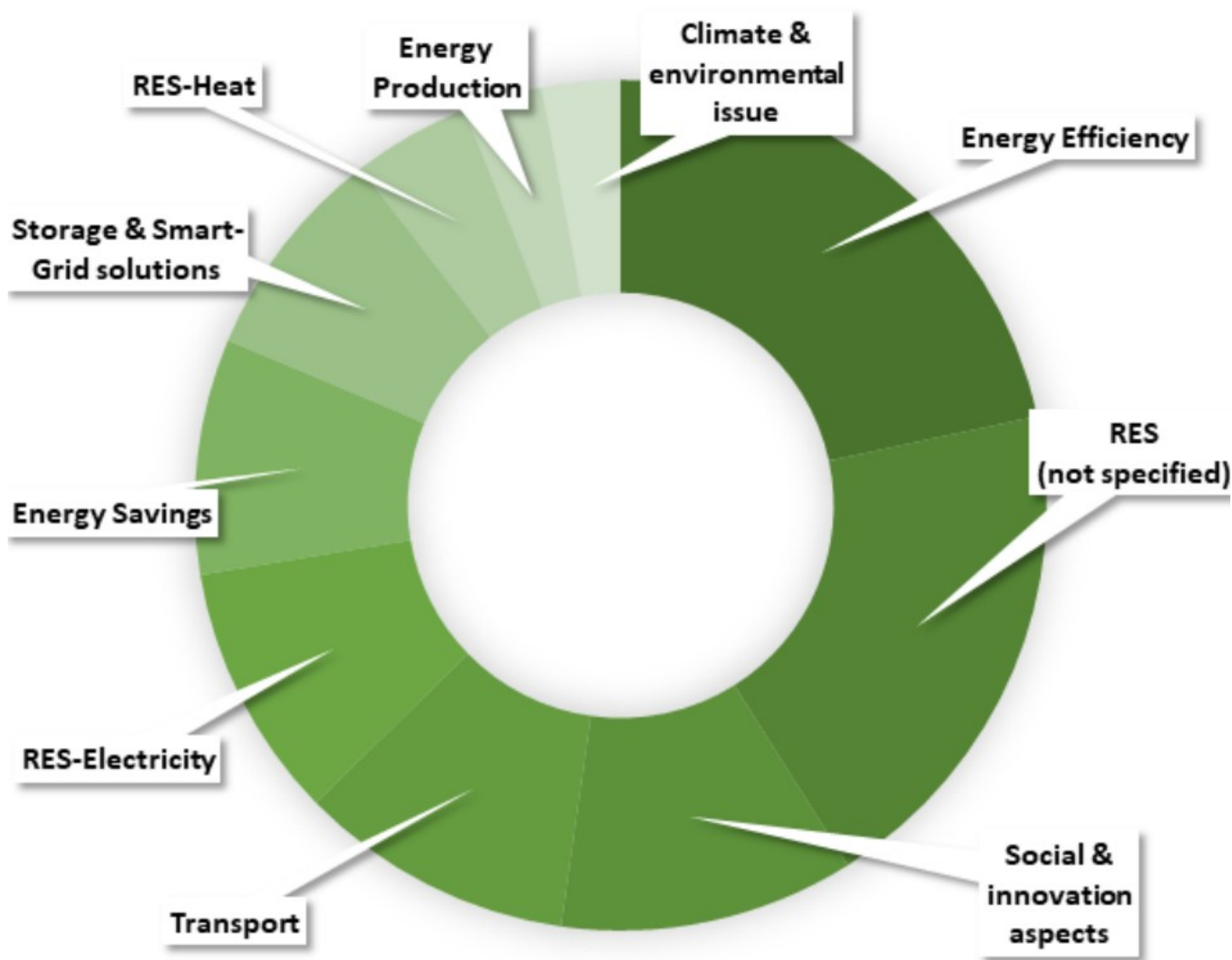
Among RES, **hydropower** plants production is outstanding (80%), a long way down lies **PV** (10%). Power from **wind and cogeneration** is even lower (around 4% each one), and **waste contribution** only slightly above 1%.



# Remaining potentials of RES (expert judgements)



# Focus areas of energy strategies in the EUSALP area



“a global recovery from the pandemic must be rooted in green growth”



VS



Promoting  
Economic Growth

Fighting Climate  
Change

But there is no such thing as green growth.  
Growth is wiping the green from the Earth.

# Business has a crucial role to play

## Need to switch from

- accumulation to distribution,
- an economy of extraction to regeneration,
- from competition to co-operation

If we are serious about “saving the planet”, then this requires a fundamental rethinking in economy model

- Reduction of resource consumption
- Management that emphasize optimization, not maximization
- Behavioural changes

# Conclusions

- We can no longer postpone tackling difficult issues.
- We need to change the way we produce, consume and trade. The way out of climate crisis requires an Alpine area that works together.
- Carbon emissions must have a price. Every person and every sector will have to contribute.
- Need to invest in innovation and research, redesign economy and update industrial policy.

**We need enlightened policies and governance, and an engaged citizenry if we are to achieve long-term sustainability.**

SO ...

**AIM HIGH, GO FAST**

