

CLIMATE RESILIENT PATHWAYS IN CITIES

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Niki-Artemis Spyridaki (University of Piraeus),

Peter Eckersley (Nottingham Trent University, Leibniz Institute for Research on Society and Space),

Sofia G. Simoes (The National Energy Laboratory of Portugal),

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Paris Fokaides (Frederick University).

The EURO-LCP Initiative

Assessing the State of Local Climate Planning in European Cities:

Updates of Local Climate Plans conducted by a scholarly team of around 40 researchers across 28 European countries on as much as 885 European cities

40

Researchers

28

European countries

885

European cities

How are we preparing for climate change in European cities?

The EURO-LCP Initiative collects local climate plans and policies in European cities and assesses their content with respect to important plan quality criteria, ambition levels, sectoral scope and depth, integration and mainstreaming. We summarize this information across European cities, countries, and regions with regard to the alignment with the 1.5°/2° Celsius goals and adaptation targets based on impact/ risk levels.



Reference publication

npj | urban sustainability

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Quality of urban climate adaptation plans over time

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INTRODUCTION

- Adaptation is happening;
- But gaps exist between current levels of adaptation and levels needed to respond to impacts (IPCC, 2022) → **the adaptation gap**
- **Why do we see such a gap in adaptation** even in cities most at risk?
- **How can we reduce that gap?**

Addressing the question through rigorous adaptation planning or “**Adaptation plan quality**”

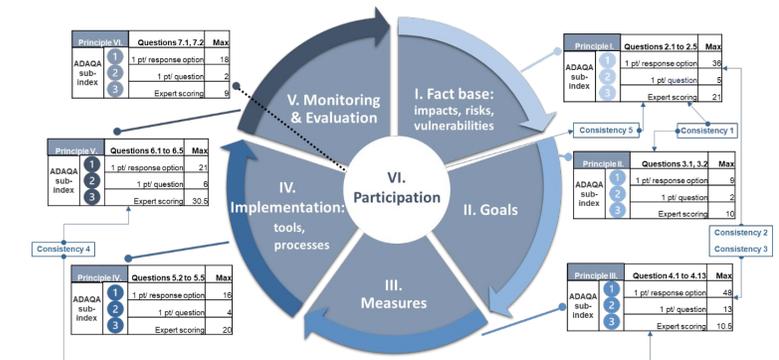
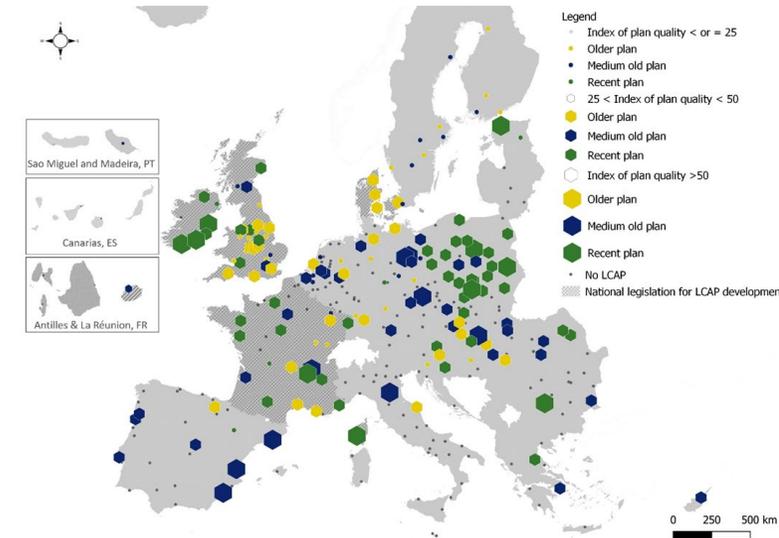
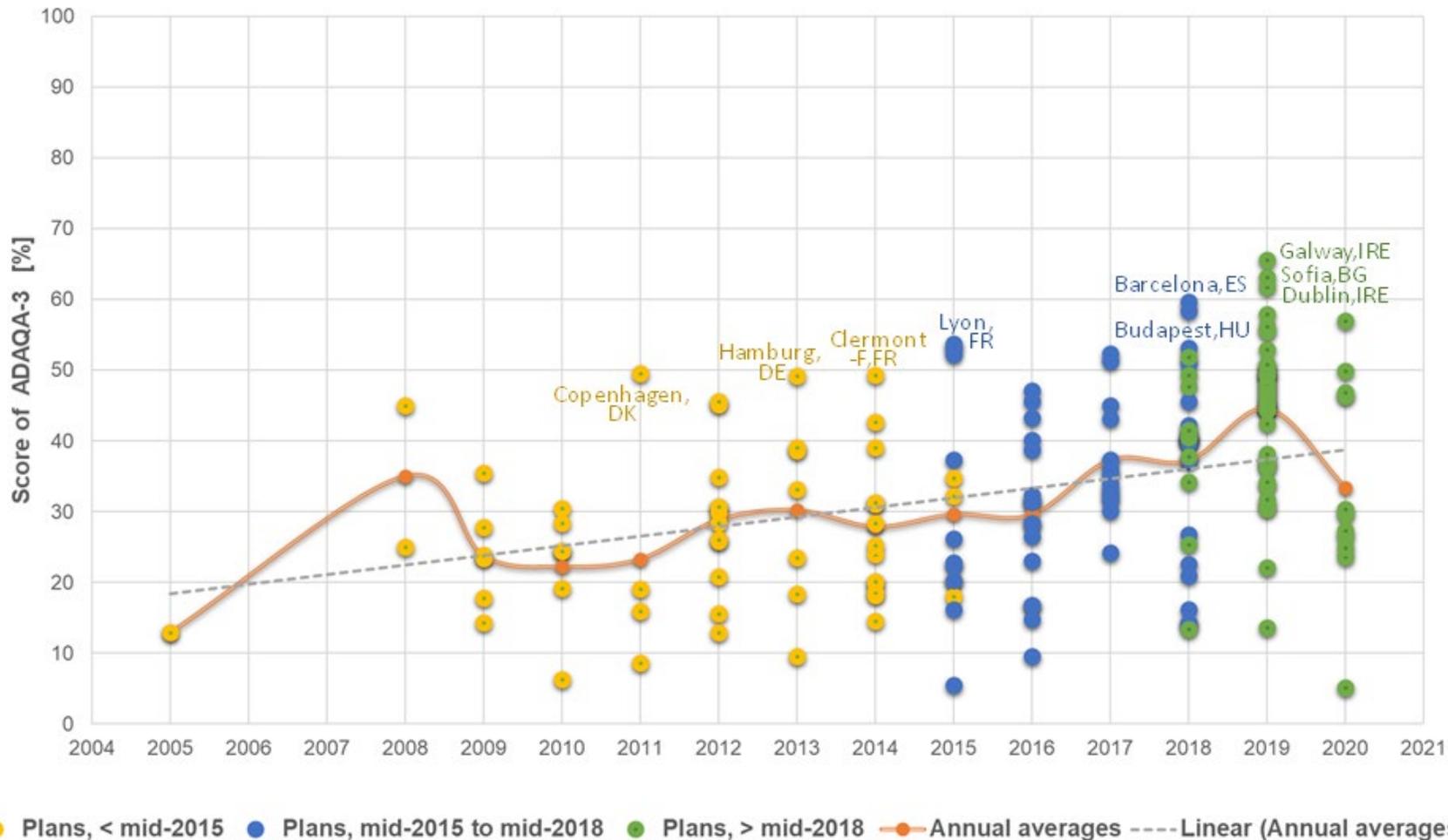
- → Hypothesis 1: Too little focus on **equity/ justice**;
- → Hypothesis 2: **Inconsistent urban planning** points to an adaptation gap



Wadi in Amsterdam Schoolyard. Photo credit: Ir. Renet Korthals Altes

ADAPTATION PLAN QUALITY

Finding#1: Plan Quality in European cities is increasing from 2005 to 2020, by about 1.3 percentage points/ year.

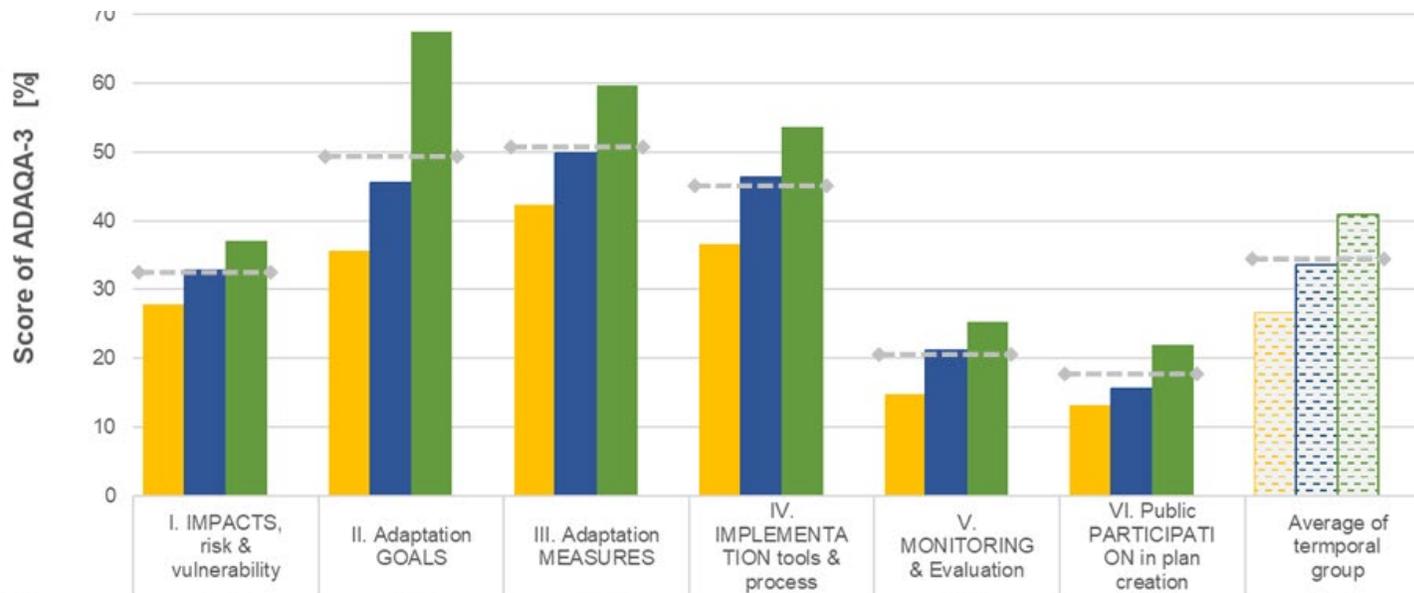
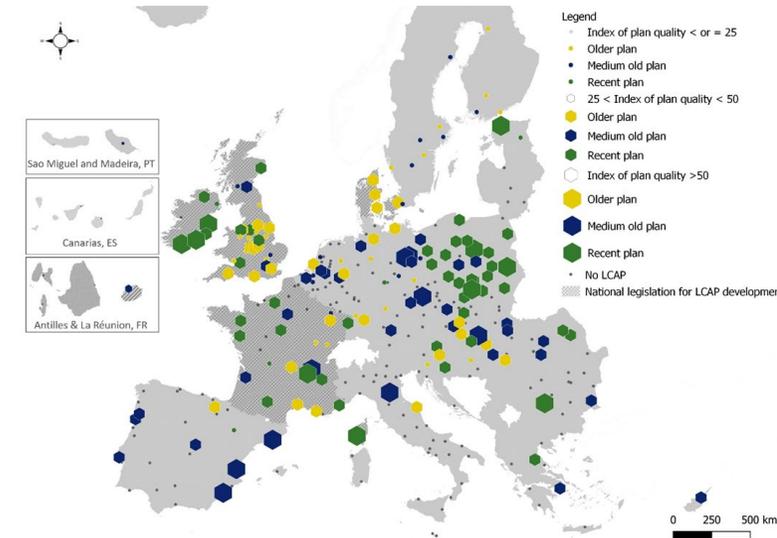


ADAPTATION PLAN QUALITY

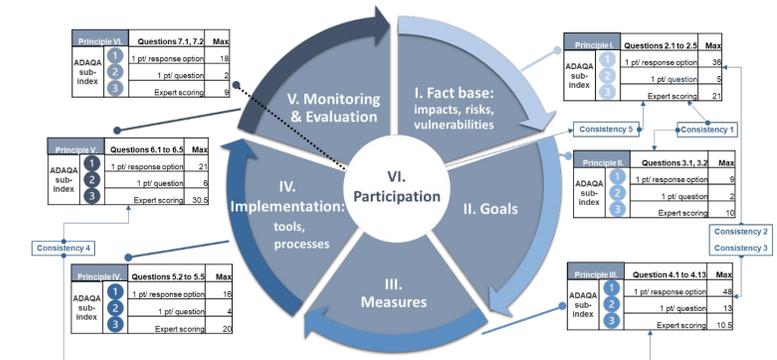
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Finding#2: Newer plans are found in cities in Ireland, France, and Eastern Europe, following a “national model”.

Finding#3: Specifying adaptation goals improved most. Specifying M&E, and participation is generally low.



Legend	I. IMPACTS, risk & vulnerability	II. Adaptation GOALS	III. Adaptation MEASURES	IV. IMPLEMENTATION tools & process	V. MONITORING & Evaluation	VI. Public PARTICIPATION in plan creation	Average of temporal group
Plans, < mid-2015	27,82	35,72	42,40	36,60	14,79	13,17	26,67
Plans, mid-2015 to mid-2018	32,80	45,60	49,87	46,32	21,11	15,51	33,52
Plans, > mid-2018	37,10	67,48	59,78	53,73	25,23	22,00	40,91
Average	32,58	49,60	50,68	45,55	20,38	16,89	33,70



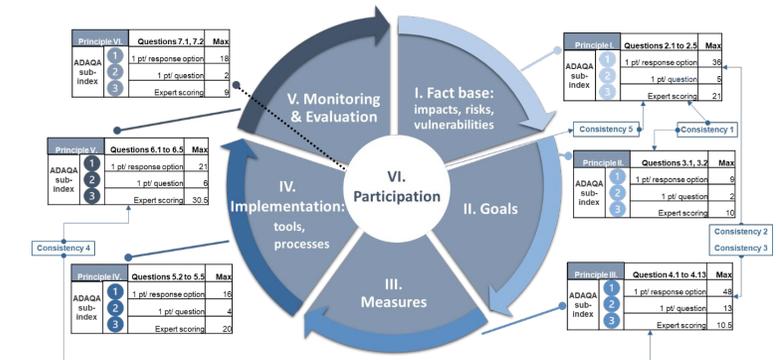
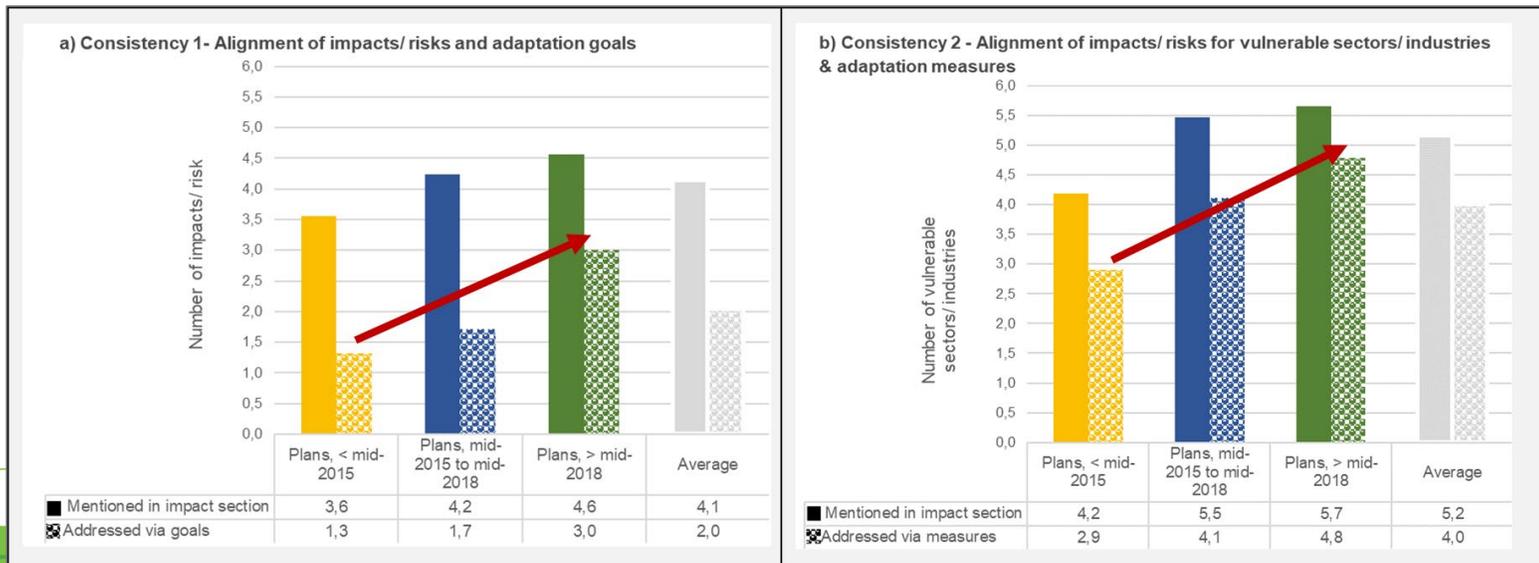
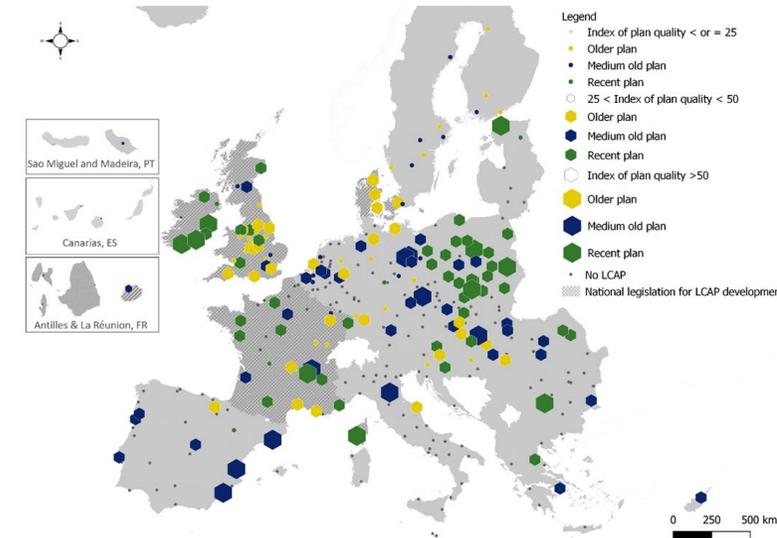
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Finding#4: Adaptation plans are consistent to a degree between risks/ hazards and adaptation goals, and risks to industries and measures.



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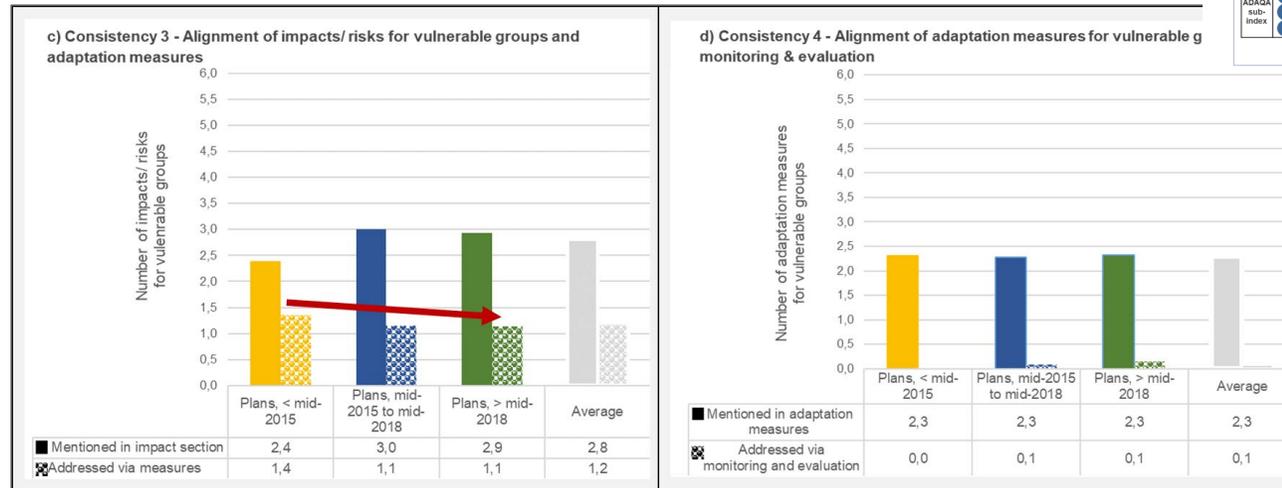
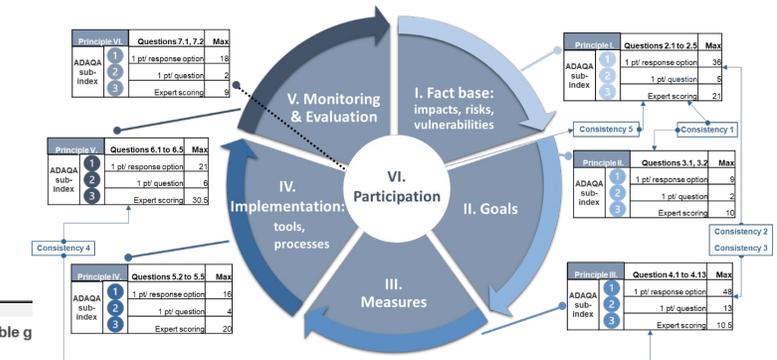
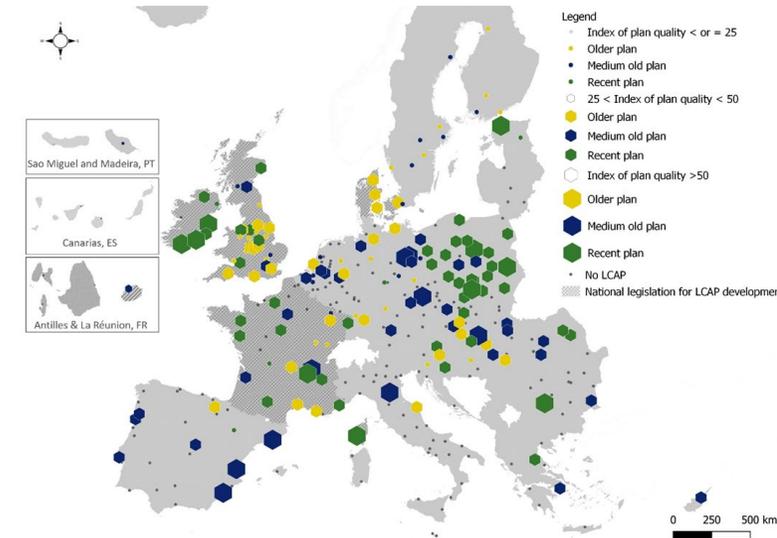
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Findings#5: We are missing out on focusing on people most in need.

Consistency decreased over time when looking at risks for vulnerable groups and measures; measures for vulnerable groups and M&E & risks for vulnerable groups and participation is nearly non-existent.



ADAPTATION PLAN QUALITY

CONSISTENCY

- On average, 8% of plans do “something” (grey checker)
- Only 11% of plans are consistent (colored/ checker part)
- On average, 16% of plans identify risks that are not followed up with action (rosé checker)

→ Huge impact on adaptation gap



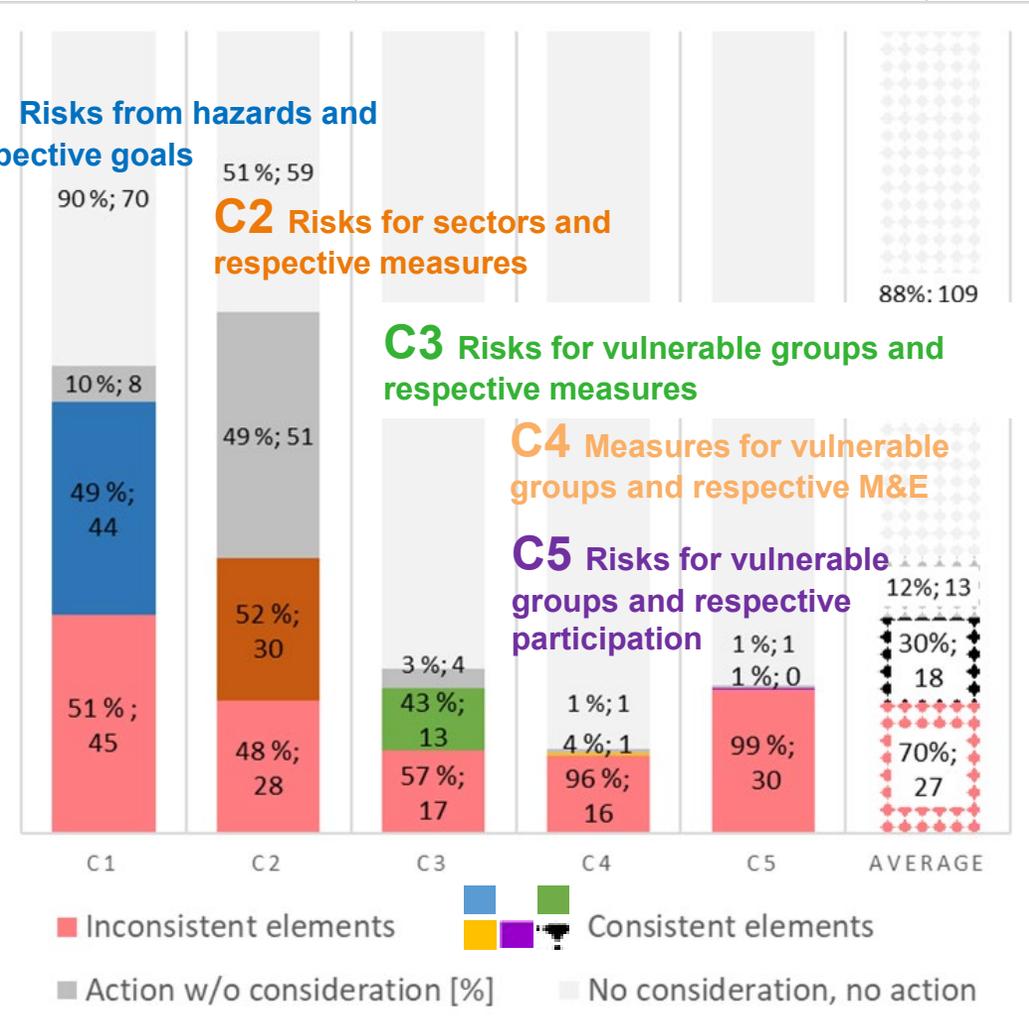
C1 Risks from hazards and respective goals

C2 Risks for sectors and respective measures

C3 Risks for vulnerable groups and respective measures

C4 Measures for vulnerable groups and respective M&E

C5 Risks for vulnerable groups and respective participation



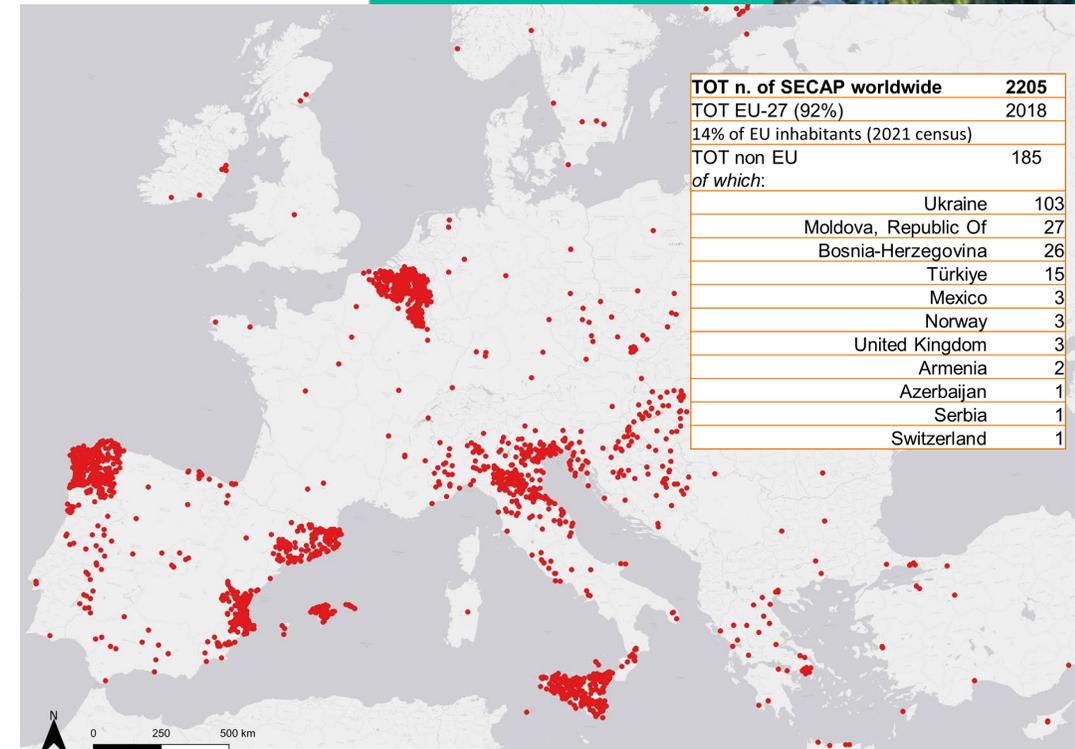
ADAPTATION PLAN QUALITY

Related follow-up projects:

→ with Global Green Growth Institute: Adapt assessment to National Adaptation Plans (50 NAPs) **“NAP-GGGP”**



→ with EU Joint Research Centre: Apply this assessment of plans to the Global Covenant of Mayors Database, called **“ADAQA4GCoM”**
 → As a quality check



SUMMARY

How current academic research can be useful for local decision-making?

1) Adaptation planning lacks focus **on justice**

→ A lot of sectoral actions without risk assessment (grey)

→ **Plan more for those in need**

To what extent research on adaptation done on one city can be translated to another city?

2) Adaptation lacks **internal consistency in planning**

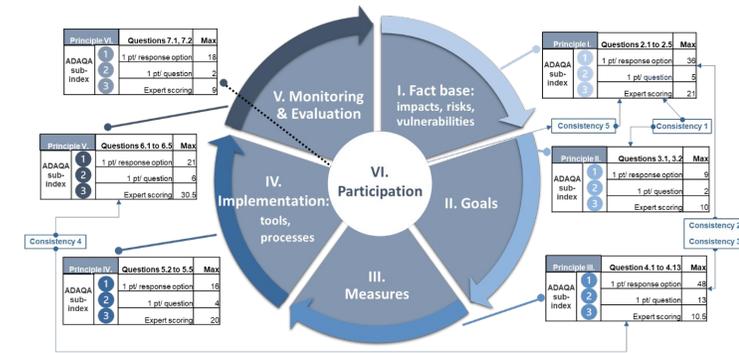
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→ Only 11% of plans are consistent (colored/ checker part)

→ On average, 16% of plans identify risks that are not followed up with action (rosé checker)

→ I assume this is because cities are copying from each other without reflecting on their needs/ vulnerability aspects

→ “Blind” copying & quick fixes should be prevented



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References to our work

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