IMPETUS 4CHANGE



Barcelona **Supercomputing** Center Centro Nacional de Supercomputación



Where cities guide the development of novel climate sciences

Objectives

- Provide seamless climate information across timescales ranging from sub(seasonal) to a few decades at local and regional spatial scales
- Enhance accessibility and usability of climate information to strengthen alignment with user adaptation planning needs
- Refine assessments of risk, risk elements and uncertainties due to extremes and associated impacts
- Integrate these advances into a transdisciplinary co-production framework
- improve understanding of the creation and flow of climate information through knowledge networks, and the potential for scaling out the findings



Co-production framework

- 1. Engagement. Co-exploration through stakeholder mapping and discussions between scientists and stakeholders to understand how and what climate services may best fit the local context and raise awareness of climate service potential.
- 2. Involvement. Co-design of mock-ups of climate services with potential users using existing data. Adaptalabs is the platform where scientists and practitioners exchange knowledge in profound discussions related to the structure, data post-processing and delivery formats.
- 3. Empowerment. Co-development of the final climate services will empower the users to integrate new climate information produced in Impetus 4 Change into their decision making.
- +.Co-evaluation runs alongside these steps, focusing on the coproduction process itself as well as the value of the end products.

Demonstrators

The coproduction of highly localised nearterm climate knowledge to explore adaptation solutions with stakeholders takes place in four **Demonstrator Cities**



Mitigating the urban heat island effect to yield health benefits

Barcelona

Urban redevelopment and climate shelters to combat extreme heat

More from Impetus 4 Change at ECCA2023 :

POSTER 238 - Upscaling, downscaling and rescaling: how to fit climate services into the real world? Weds 21st 12.15: Interactive workshop (Platforms and Services) Selecting stakeholders and users



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Introduction

Impetus4Change (Improving Near-Term Climate Predictions for Social Transformation) is a research project where urban practitioners, social scientists and climate modellers work together to improve the quality and accessibility of near-term climate information in cities and regions.

Risk and vulnerability

Prague

assessments to inform urban

Green infrastructure to

edia org/wiki/File-Blank Template for Greater Europe PN(

tackle heatwaves and

flood adaptation planning



Above: The coproduction framework for climate services

Results, Outputs & Legacy

Alongside climate services implementation and adaptation support guidance packs for each demonstrator, we will synthesise an overall roadmap of best practices for coproduction of urban climate services.



poor air quality

