

Co-developing climate services

Lessons from the I4C Demonstrator Cities

Cities across Europe face growing pressure to scale up adaptation to heatwaves and wildfires, flash flooding, urban heat islands and other risks associated with climate change.

How are European cities turning climate knowledge into practical decision-making?

Four climate services

BARCELONA SPAIN

Sub-seasonal temperature forecasts

What is it?

Four-week weekly temperature forecasts in the form of online bulletins and website updates, helping anticipate periods of extreme heat.

Who is it for?

The bulletins are used by the climate Adaptation office of the Barcelona Metropolitan Area and the Province of Barcelona and distributed to their municipality networks.

How is it used?

Supports planning for social activities such as summer camps, but also cooling shelters and other heat emergency response measures.

BERGEN NORWAY

Supporting strategic planning at city level

What is it?

A process for effective collaboration between researchers and city departments, contributing climate information and hydrological impacts to risk assessment and urban planning.

Who is it for?

Municipal departments working on water management, urban planning and risk assessment.

How is it used?

Provides climate expertise that informs long-term planning while strengthening collaboration between researchers and decision-makers.

PARIS FRANCE

Heat exposure and health risk maps

What is it?

Maps combining climate, health and socio-economic information to identify neighbourhoods most vulnerable to extreme heat.

Who is it for?

Regional urban planners and public health authorities.

How is it used?

Helps prioritise adaptation measures and supports planning for healthier, more resilient cities.

PRAGUE CZECHIA

Urban heat island assessments

What is it?

Future climate scenarios based on high-resolution data to inform urban planning and adaptation strategy of the city of Prague.

Who is it for?

City planners and municipal authorities involved in public health.

How is it used?

A technical process for analysing high-resolution regional simulations for long-term adaptation planning.

What is the takeaway for other cities?

The Impetus4Change (I4C) project has been co-developing climate services with local stakeholders in I4C Demonstrator Cities (Barcelona, Paris, Bergen and Prague) and testbed cities (Hamburg and Newcastle).

Their insights offer valuable lessons for any city seeking to strengthen their climate adaptation policies.



LISTEN TO THE USERS FIRST

The climate research work is driven by user needs, and consequently services respond to and support actual decision-making context.



COLLABORATION BUILDS LASTING CAPACITY

Strong relationships between researchers, municipalities and practitioners continue creating value beyond the project itself. Lasting co-evaluation with multiple check-ins (online and in person) is recommended.



EVERY CITY HAS DIFFERENT PRIORITIES

Each city has its own planning rules and policy priorities. Successful climate services must remain flexible and adapt to local climate risks, governance structures and stakeholder needs.



CLIMATE RISKS REQUIRE INTEGRATED THINKING

A systemic risk assessment addressing heat, health, air quality, demographics and urban planning together leads to more effective adaptation.



COMMUNICATION MATTERS AS MUCH AS THE SCIENCE

Developing a shared language and making climate information understandable is essential for turning knowledge into action. Creating bulletins, glossaries or one-page explainers can help familiarise societal audiences with complex concepts and data visualisations.



METHODS CAN BE TRANSFERRED – NOT COPIED

The co-development process can be replicated elsewhere, while each city adapts the approach to its own context.

Local solutions, European relevance: the I4C Roadmap

The experiences of the I4C Demonstrator Cities will inform the I4C Roadmap, a practical guide for designing climate services through co-development that will be available at the end of the project.

ABOUT THE IMPETUS4CHANGE PROJECT

By combining a shared co-creation methodology with flexibility for local contexts, I4C is committed to supporting other cities in developing climate services that are scientifically robust, user-centred and ready to inform climate adaptation across Europe.

Learn more at:

impetus4change.eu/