



Last-mile delivery of climate services in cities: matching needs to solutions



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Learn more here:



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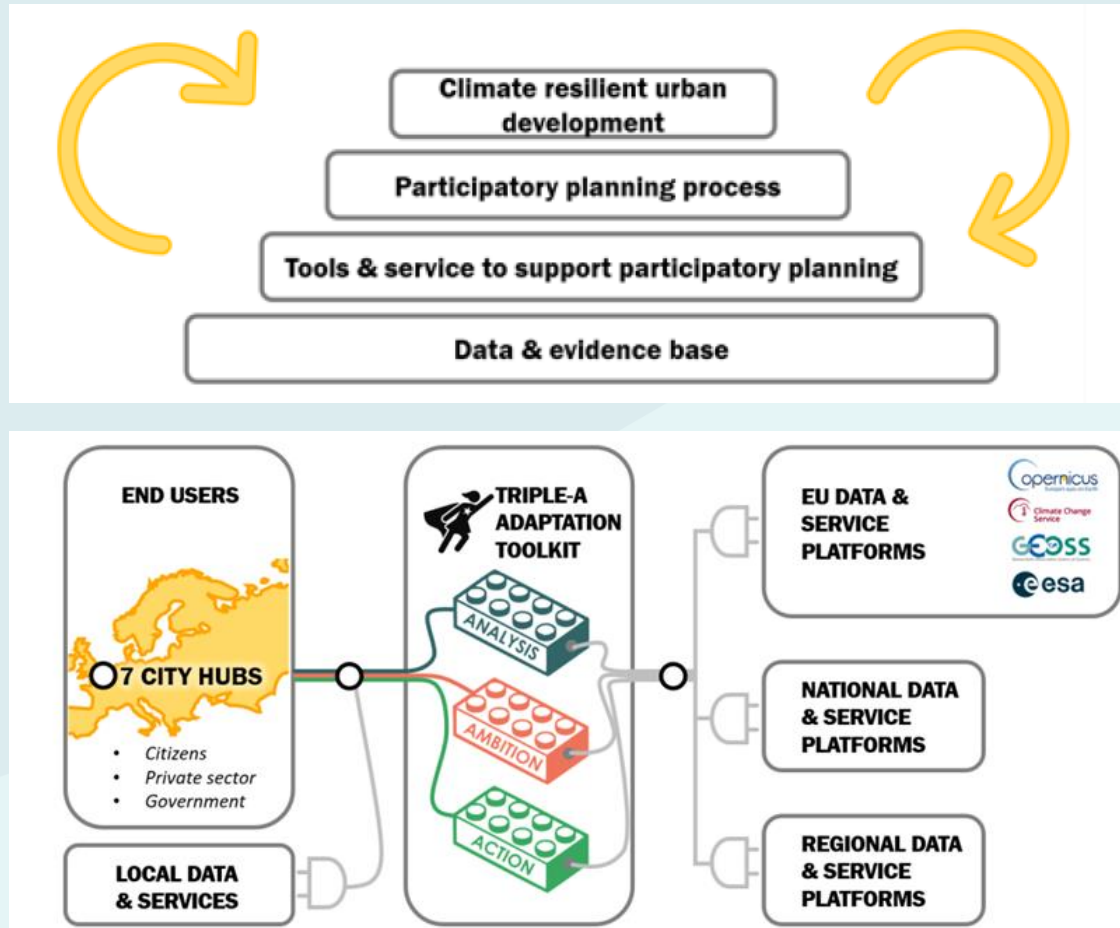


The Challenge



Produced by project partner Climate Adaptation Services (2022)

The Ambition



- 1) **engage** citizens and business in adaptation decision making in 7 city hubs
- 2) **tailor** services to local policy contexts
- 3) **innovate** the Triple-A toolkit building upon ~20 existing, successful open-source tools
- 4) **upscale** the use of the services to the wider city hub network
- 5) build a **robust evidence base** providing successful examples of implementations
- 6) **extend** and make it sustainable

City hubs participating



Logrono



Amsterdam



Athens



Cork



Gdynia



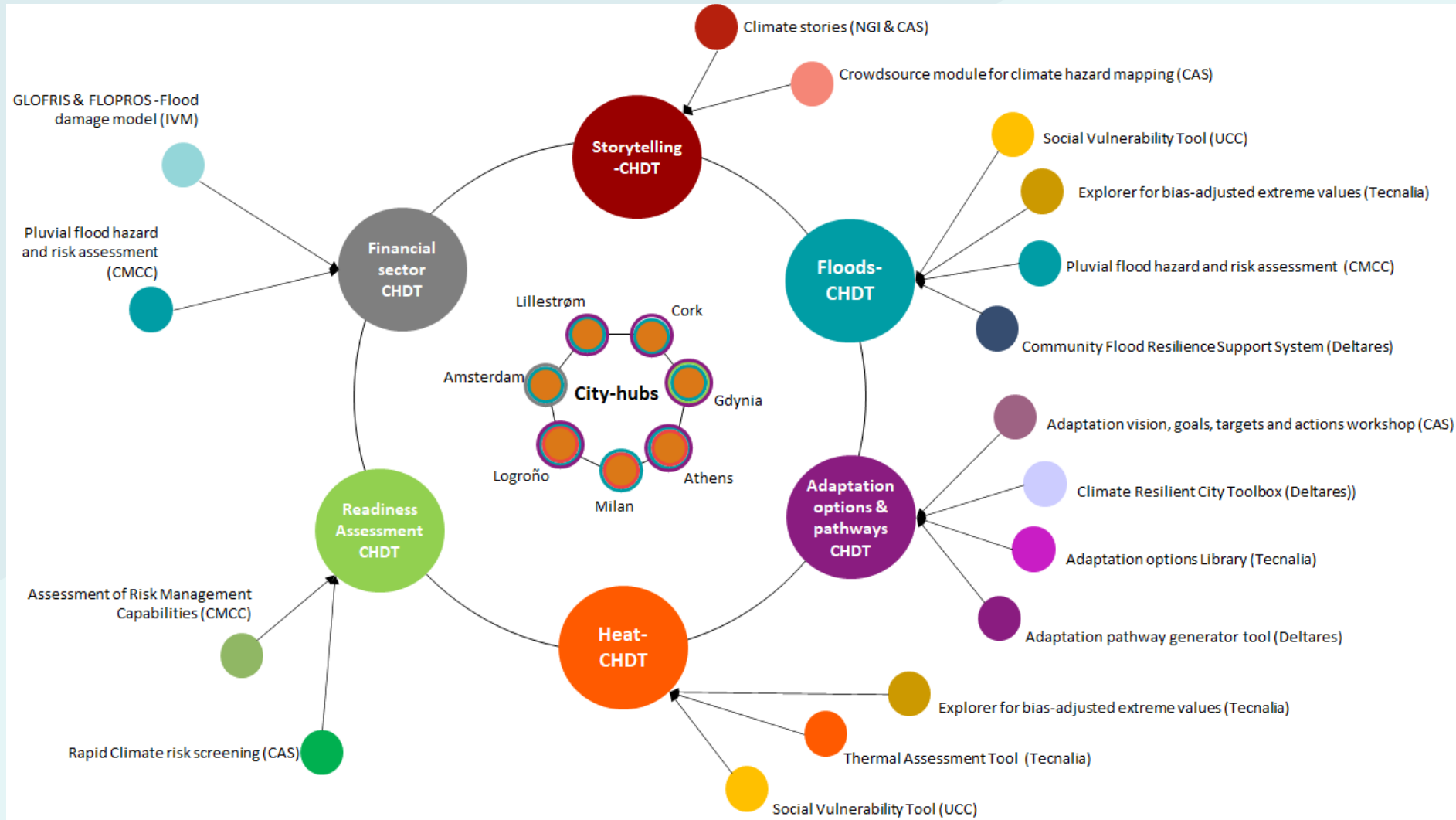
Lillestrom



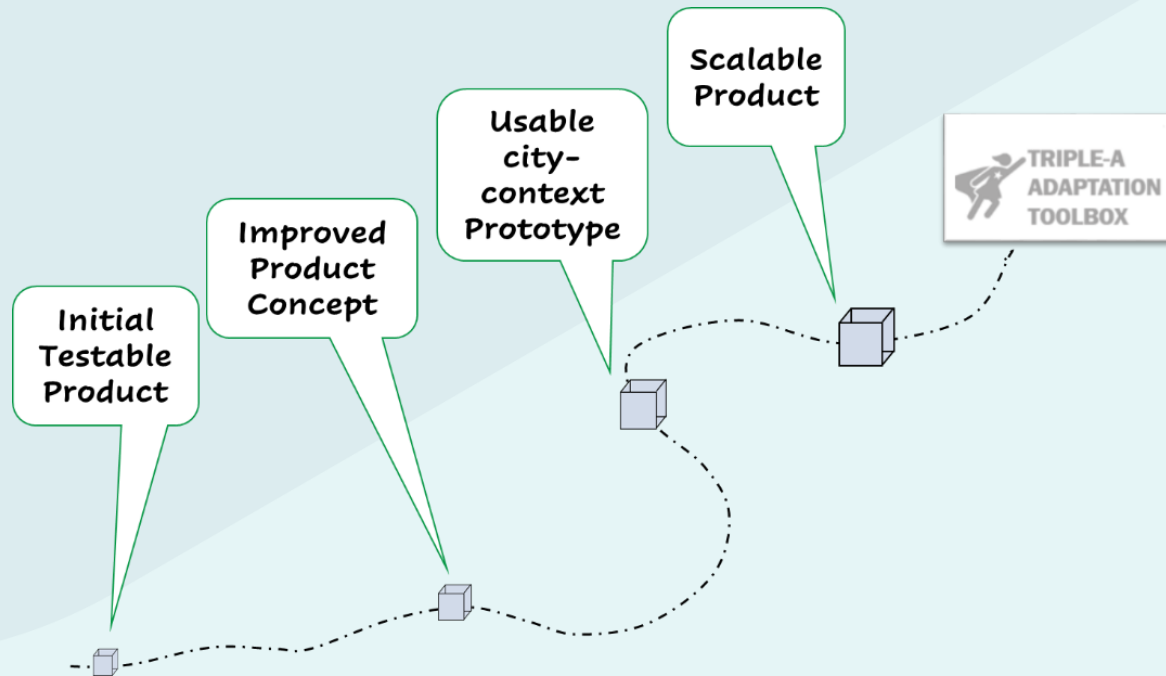
Milan



The Tools: an overview



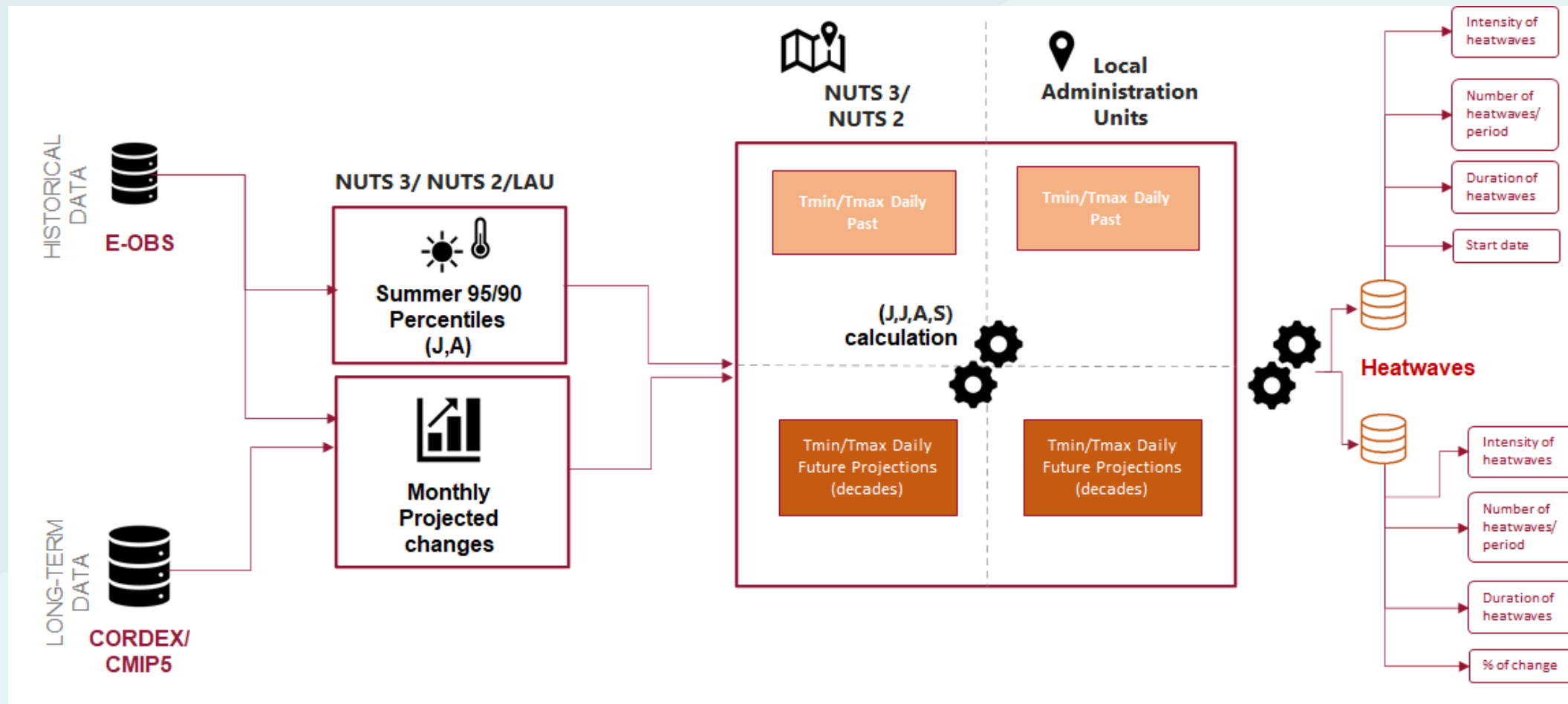
Roadmaps for Tools and Toolbox



Lessons so far... or tips:

- *Move our focus away from own tools to empathize with stakeholder's broader challenge.*
- *Consider possible tool combinations and additional data sources that respond to these challenges*
- *Engage with stakeholders to provide highly relevant services*

Tools (1): Thermal Assessment Tool



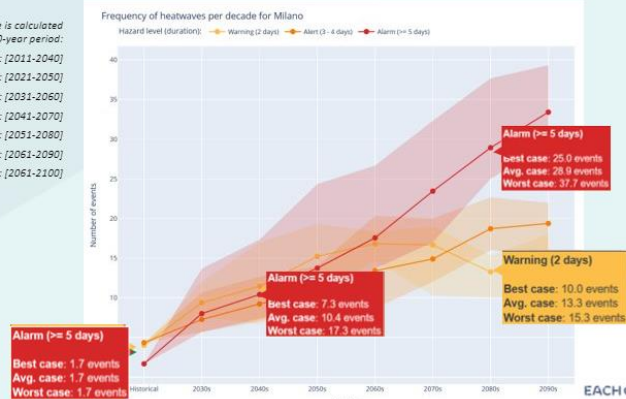
Tools (1): Thermal Assessment Tool



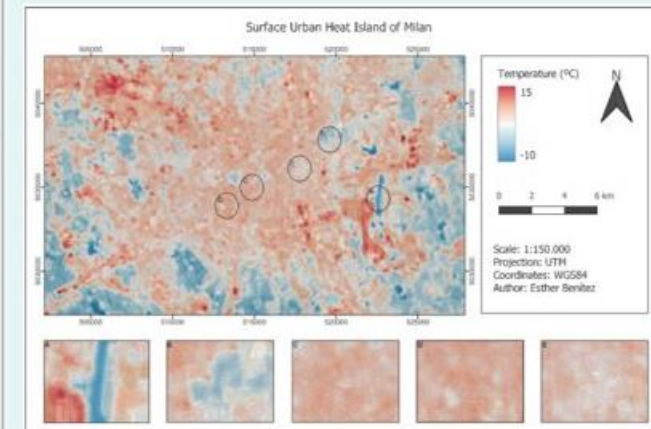
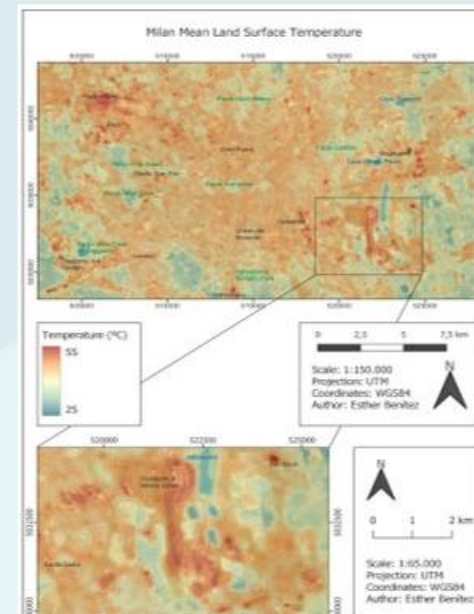
Heatwave outcomes (II)

Frequency of heatwaves per decade
[2011-2100]

- Each decade is calculated considering a 30-year period:
- 2030s: [2011-2040]
 - 2040s: [2021-2050]
 - 2050s: [2031-2060]
 - 2060s: [2041-2070]
 - 2070s: [2051-2080]
 - 2080s: [2061-2090]
 - 2090s: [2061-2100]

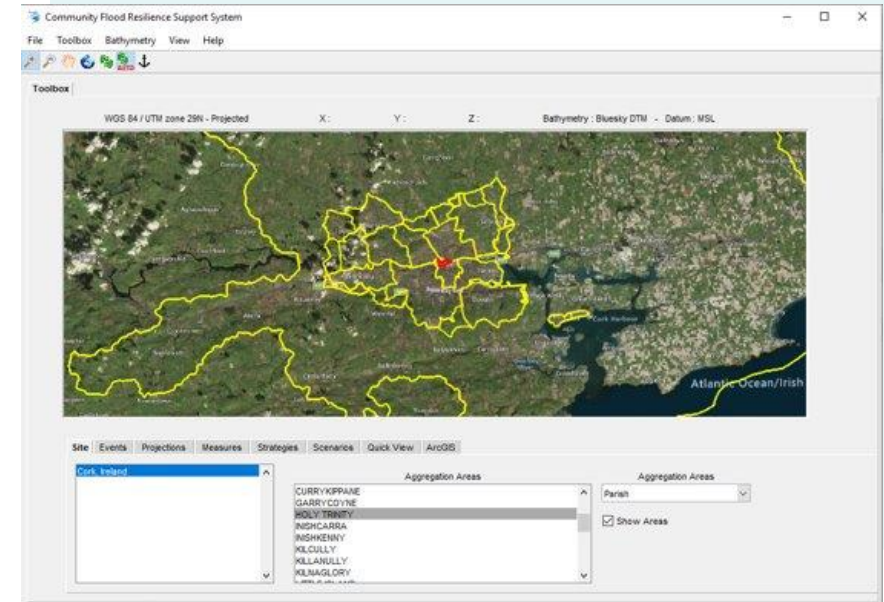
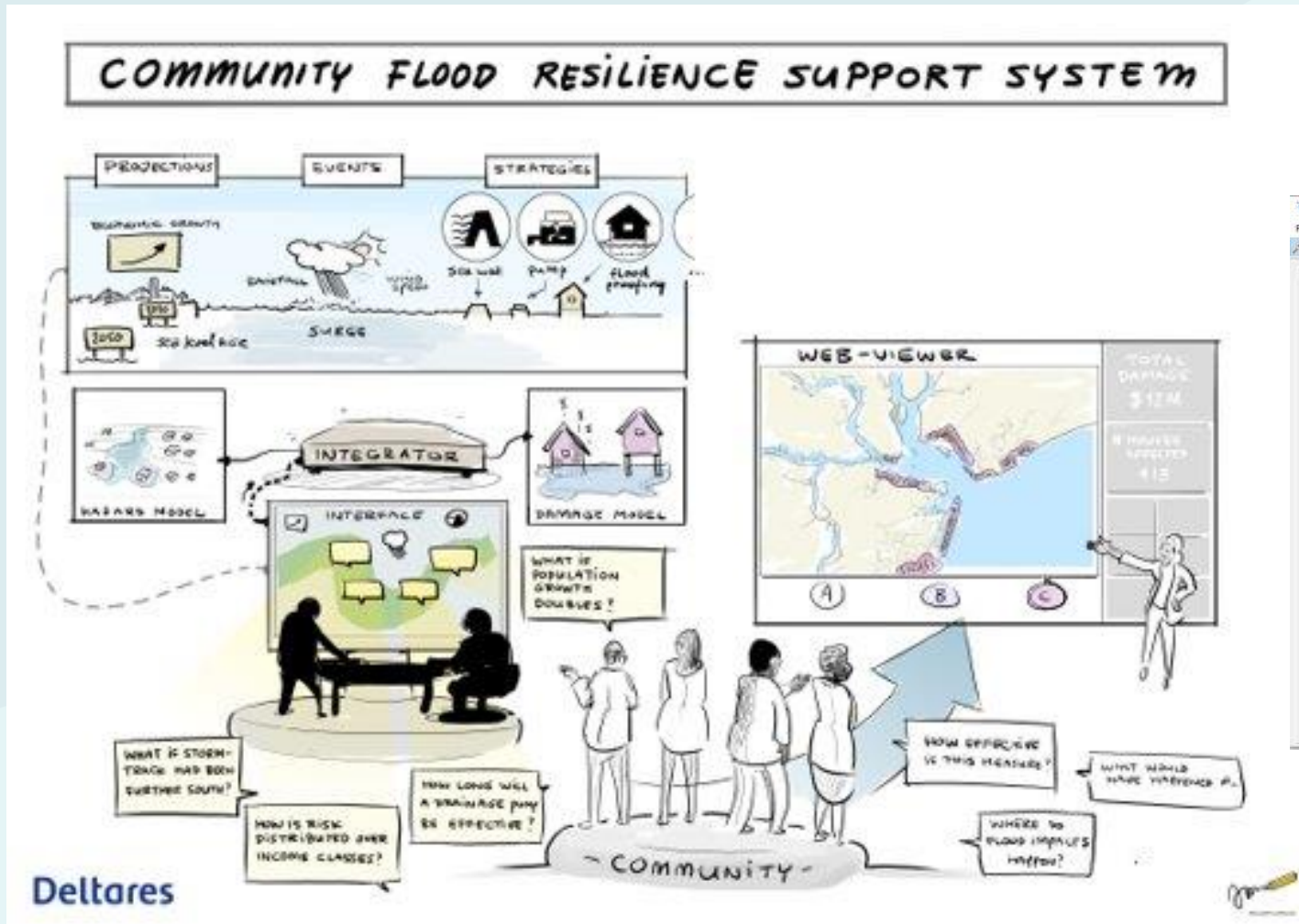


Heatmaps outcomes for Milano

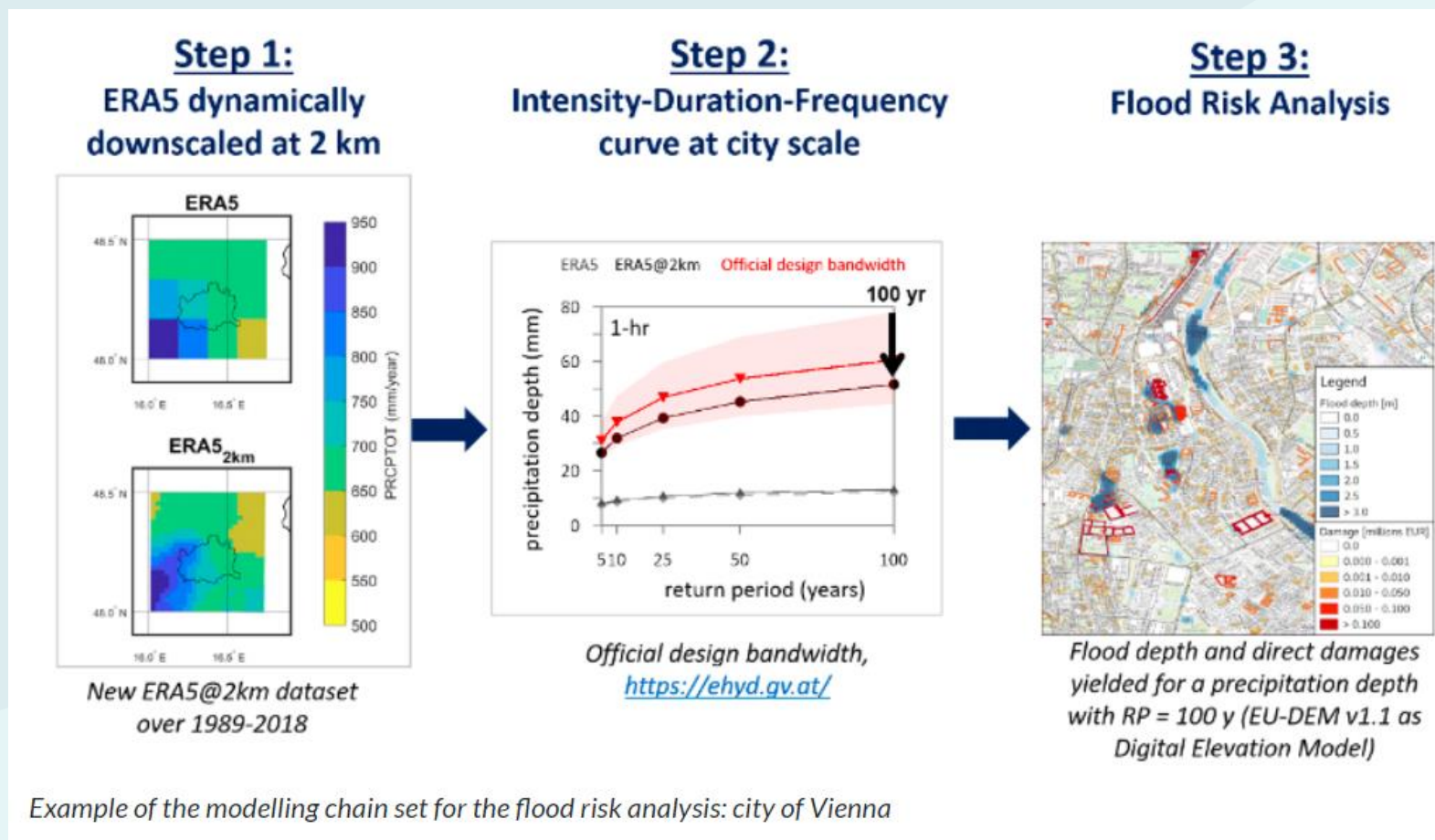


REACH OUT

Tools (2): Community flood resilience support system



Tools (3): Pluvial Flooding Analysis

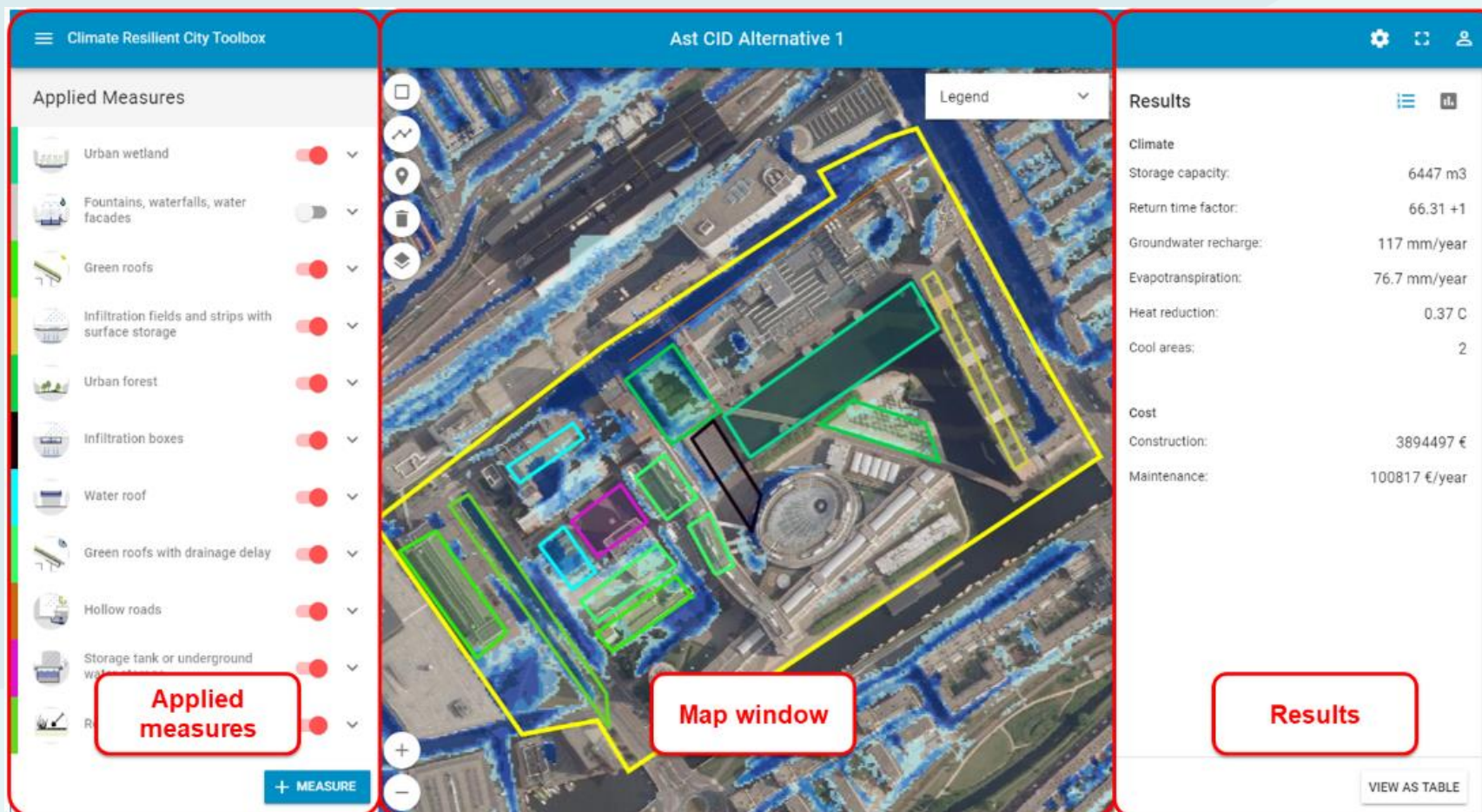


Cities feedback:

It is not just about
flooding... it about
blue-green
potential =>

CMCC connecting
this to a NBS
opportunity
identification Tool

Tools (4): Climate Resilient Cities Tool

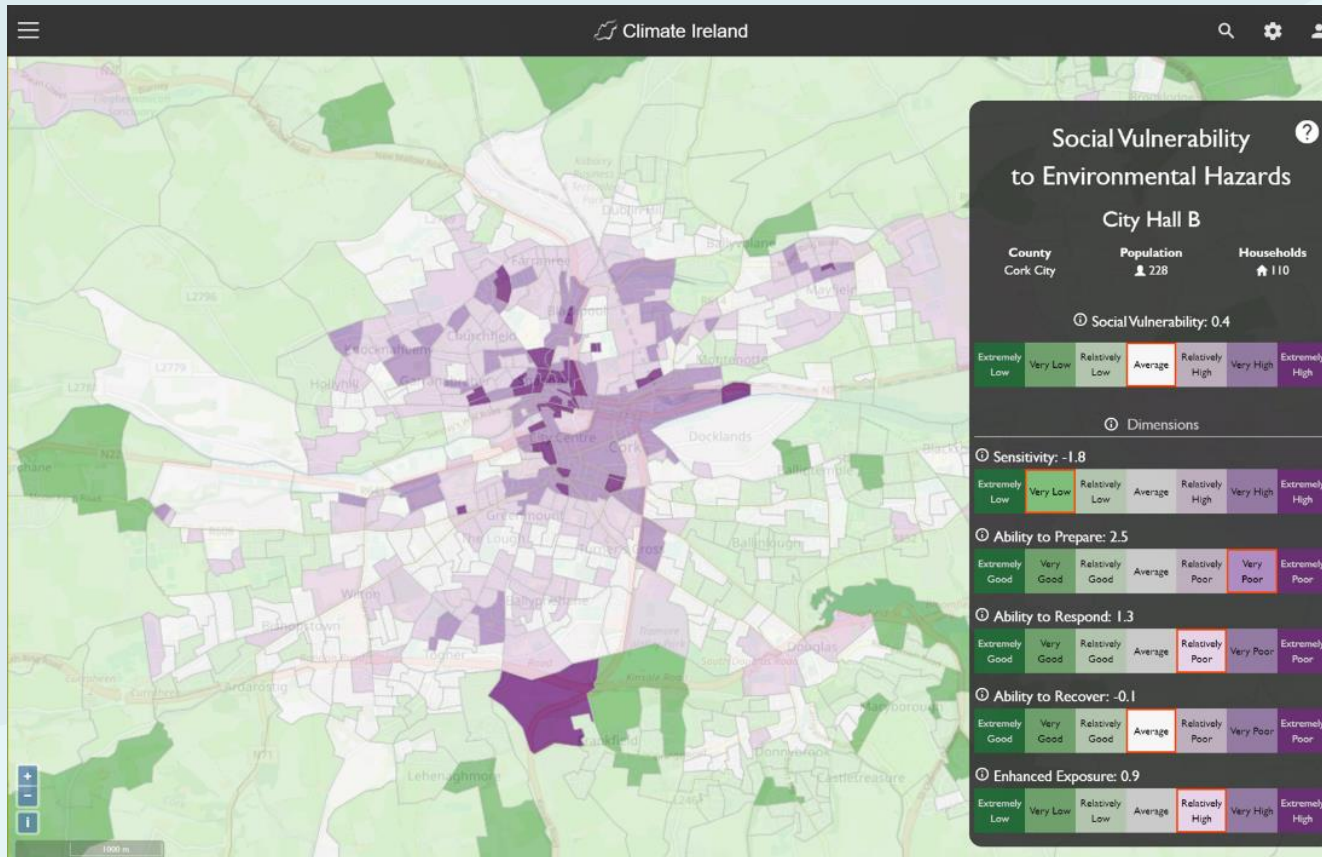


Planning oriented,
multi-stakeholder
engagement focused

Input:

- Pan-European datasets (soil, weather)
- Google Maps
- Connect to hydrological model

Tools (5): Social Vulnerability Indexing



University College Cork

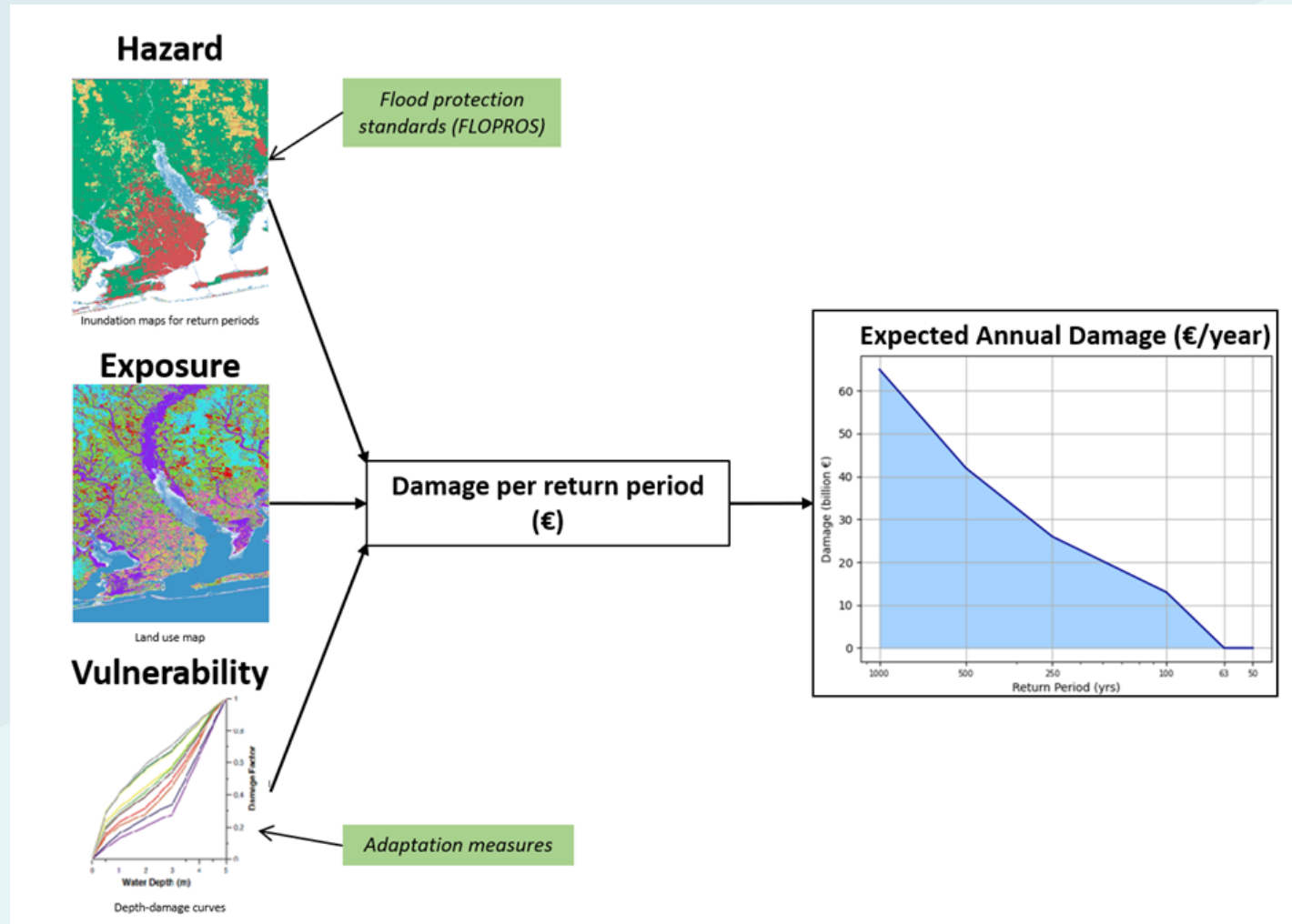
Analyses the ability to:

- Prepare
- Respond
- Recover

Input:

- Demographic data
- Socio-economic data
- Hazard, modeling data
- Diverse other (Mobility, Road density, Proximity to emergency/key services, Flood Warnings, Flood insurance, Floors in households, Green/Blue area)

Tools (6): GLOFRIS & FLOPROS



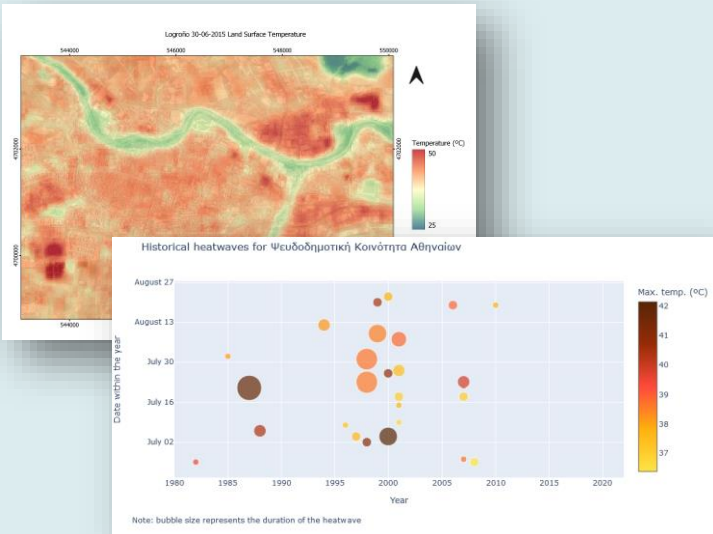
From tools to services:

- Understand economic damage
- Assess insurability/premiums
- Assess portfolio exposure

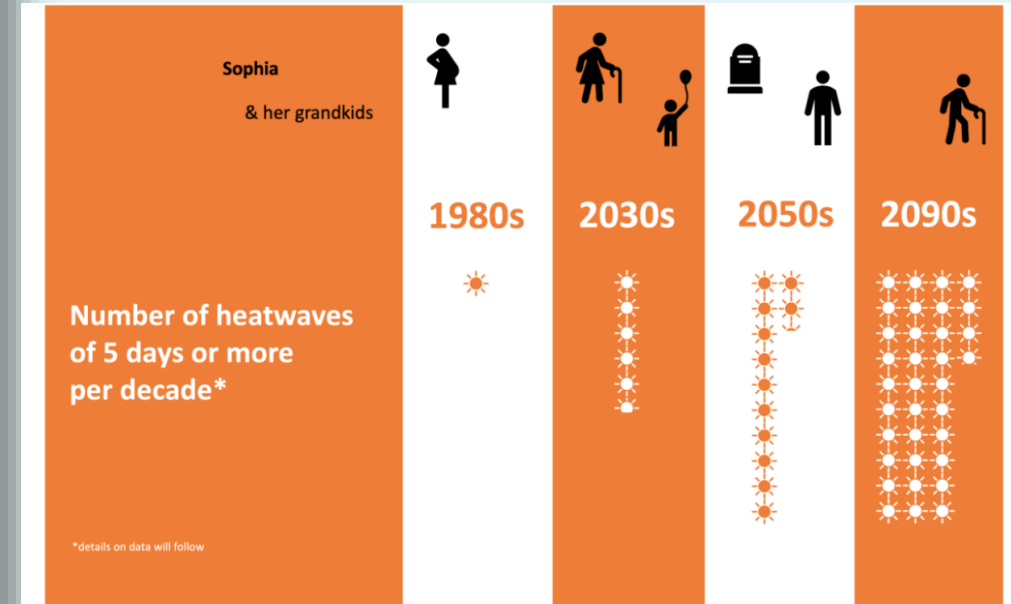
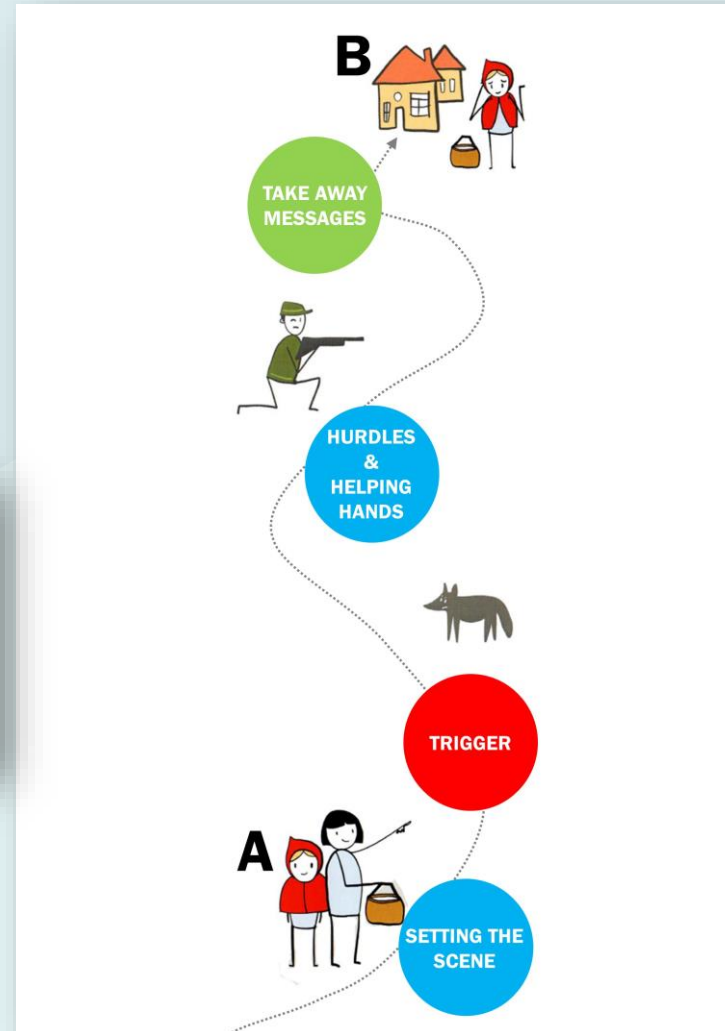
Input data:

- Hazard: inundation maps
- Exposure: building type/land use value and location

Tools (7): Storytelling



Not
Communicable
...



Communicable!

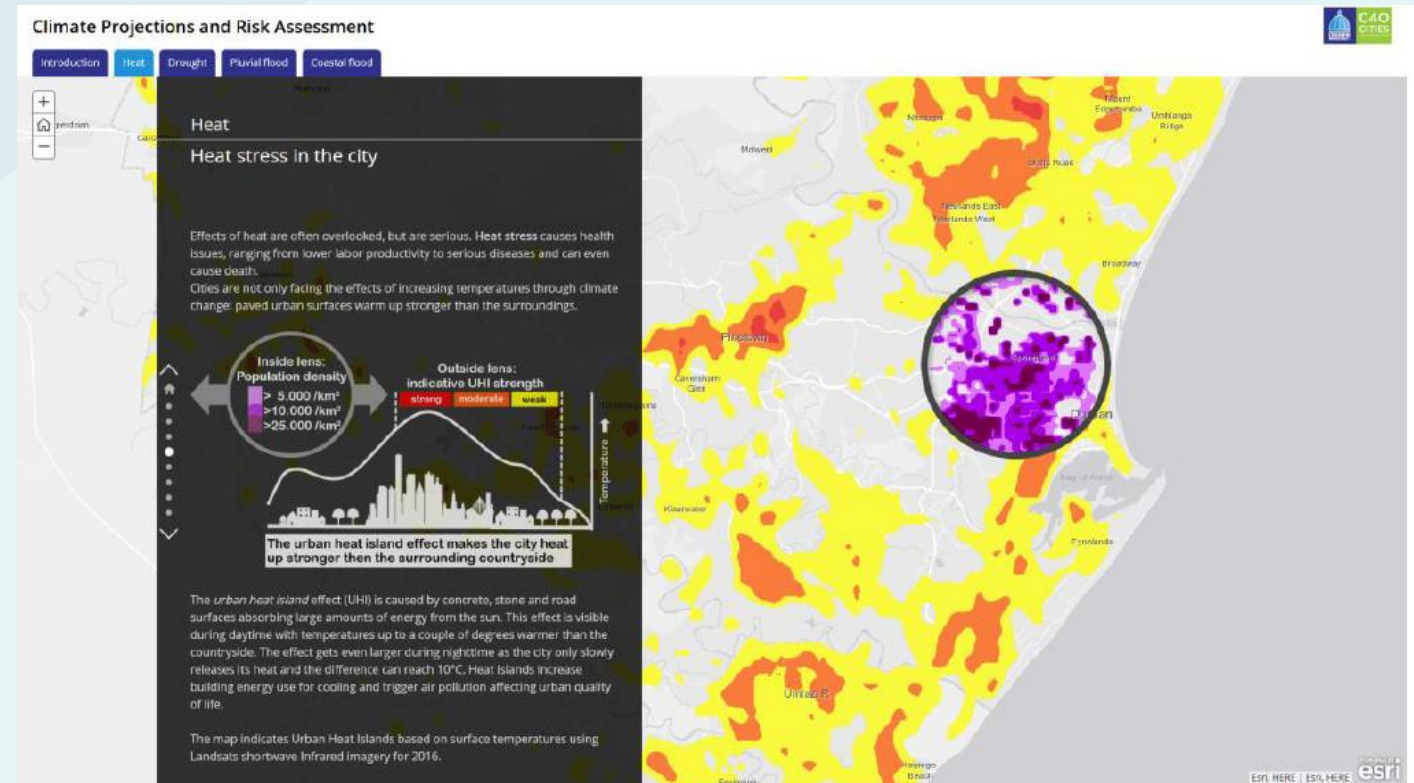
Tools (7): Storytelling

Tools:

ArcGIS Climate Stories & Crowdsource module climate hazard mapping

Input:

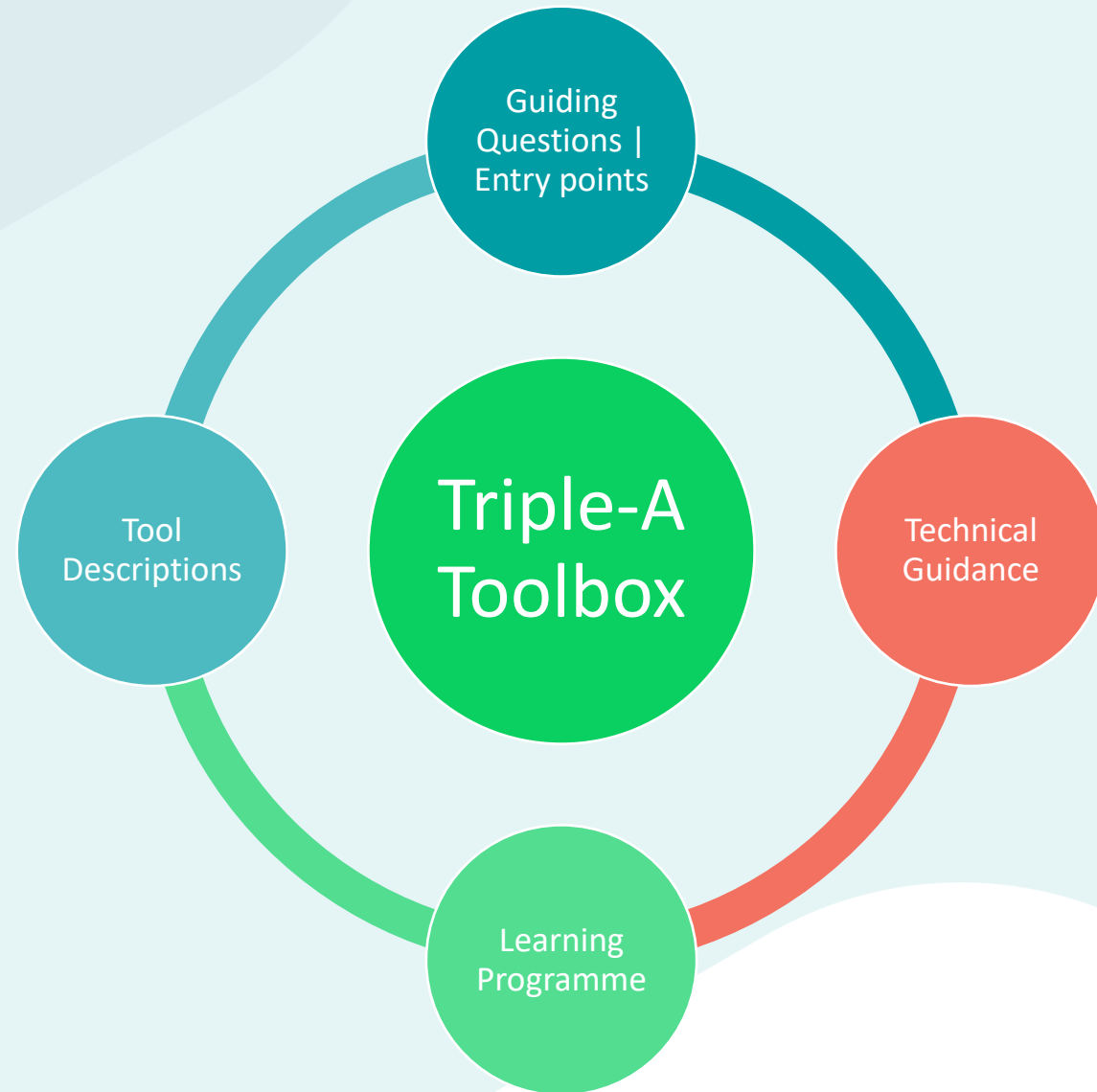
- Some sort of geo-files (e.g., geopackage /shapefiles),
- Some forms of graphics (images, video, background maps etc.) and
- Text (city narrative etc.).
- Input from other climate service outputs



Climate Adaptation Services

Take-away messages

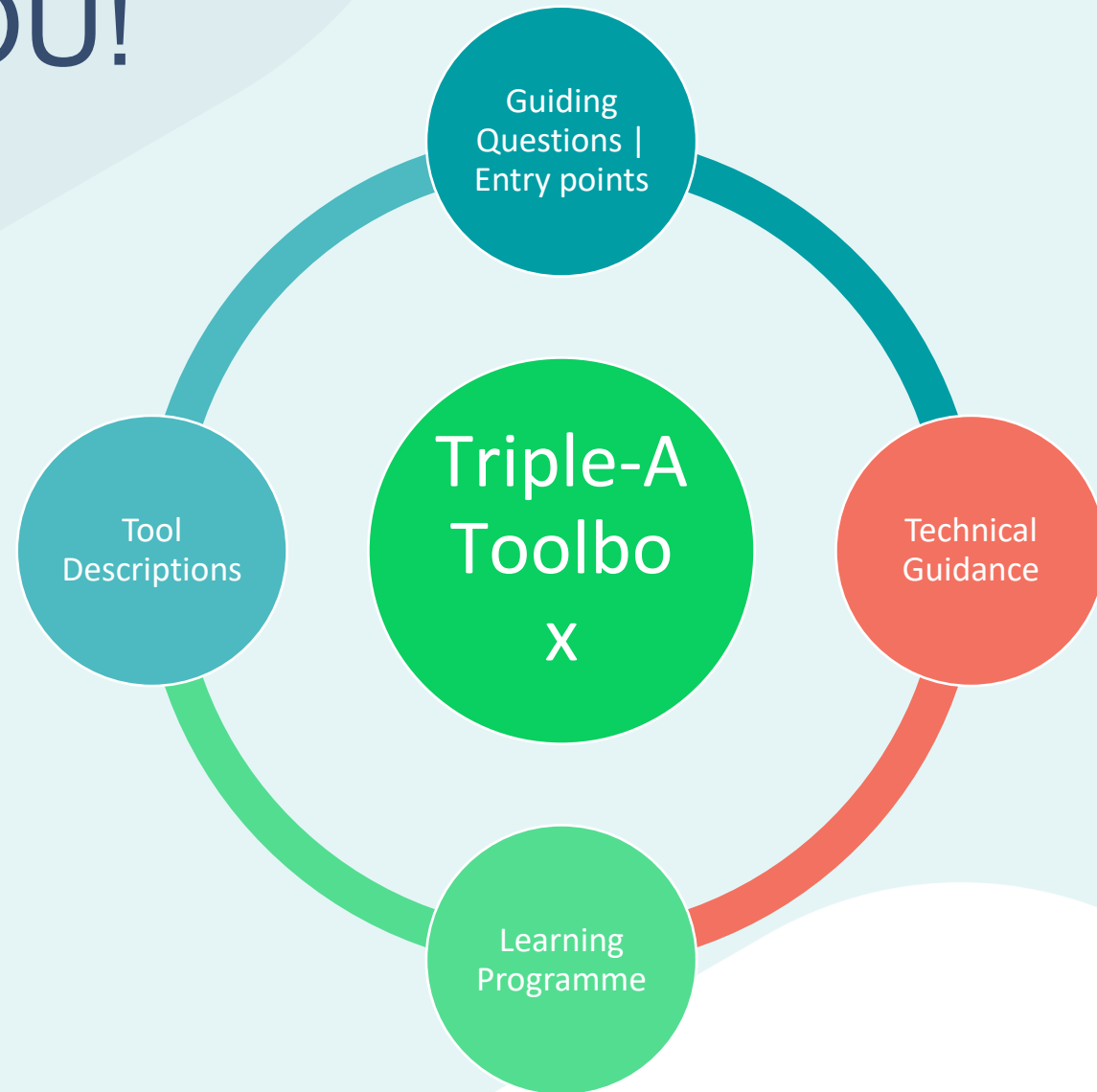
1. Use of tools each on its own will probably have limited relevance for cities
2. **Facilitate cities** to integrate across tools
3. Use toolbox to **build capacities** in cities
4. Support **understanding of data availability**, particularly those publicly available
5. Use services to think strategically and **move from narrowly defined DRR to Resilience Building**



REACHING OUT to YOU!

1. What climate services have you developed?
2. What data do you use?
3. Do you wish to contribute to the Triple-A toolkit?

Get in touch!



Project partners

Deltares



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lkapetas@r-cities.org



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