

Regional Climate Risk Assessment Framework

TRANSCEND WP4

*T4.4 SCENARIOS: Climate and socioeconomic
scenarios*

*Jaroslav Mysiak and Jeremy Pal (CMCC) and
the CMCC-RAAS*

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T4.4 in a nutshell

Main goals

- develop bias corrected and downscaled climate, land use, socioeconomic and **policy change** scenarios for each lab.

Scope

- inform the development of transformative adaptation policies in Pilots, in particular task T2.2 (Co-design) and working closely with task T4.3 (e.g., land use changes),
- includes alternative strategies and pathways for monitoring, enforcement, and compliance control.

Key results

Deliverables

- Del D4.5 Scenarios database and sourcebook, **dataset M36**)

Milestones

- 13 Intermediate scenarios database (M25)

Scenarios

1. Climate data & risk drivers

- consistent records of past climate variables from (a) local observations, and/or regional data collections (e.g. e-obs), and/or reanalysis (e.g. ERA5),
- ensemble of climate prediction & projections
 - global or regional downscaled and bias-corrected climate products where available,
 - (sub)seasonal and decadal climate forecasts where skills are demonstrated – priority use of novel climate simulations developed in ASPECT or other ongoing projects,

2. Non-climate data & vulnerability drivers

- demographic projections and derivatives (e.g., age cohorts, households' composition, and age- and lifestyle sensitive water demand),
- advancement in water saving technologies in sectors relevant for the pilots, as well as new sources
- policy changes impacting how water is used, allocated or transferred).

[optional] plausible scenarios of potential water availability/supply disruptions.

Scenarios (cont.)

Framework

- *Lays down what is important for analysed policies in the pilots – based on an initial survey and revision in month M18,*
- *Collection of available and useful datasets covering the relevant domains,*
- *Collections of tools to identify or transfer known macro- and micro-trends (e.g., horizon scanning and strategic foresight, ...)*
- *Desk review and observatory of available studies, projects and initiatives.*

Applications in pilots

- *Applies the available & transferable data on water demand & supply drivers and complements them with locally driven (and owned) assessments chosen from the Framework,*
- *Requires several interactive sessions organised as a part of local workshops; as well as dedicated training of the local teams & participates (can be time and resource consuming),*
- *has potential to be part of the exploitable results and legacy of the project.*



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