

CLIMAAX

*CLIMAt*e risk and vulnerability *Assessment framework and toolbox*

11 October 2024



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Housekeeping



This session is recorded



Raise your hand to ask a question during
dedicated Q&A moment or write in the
chat



Framing the Climate Risk Assessment Process

An introduction to the CLIMAAX Climate Risk Assessment Framework

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Anna Pirani, CMCC

Vienna, 11th of October 2024

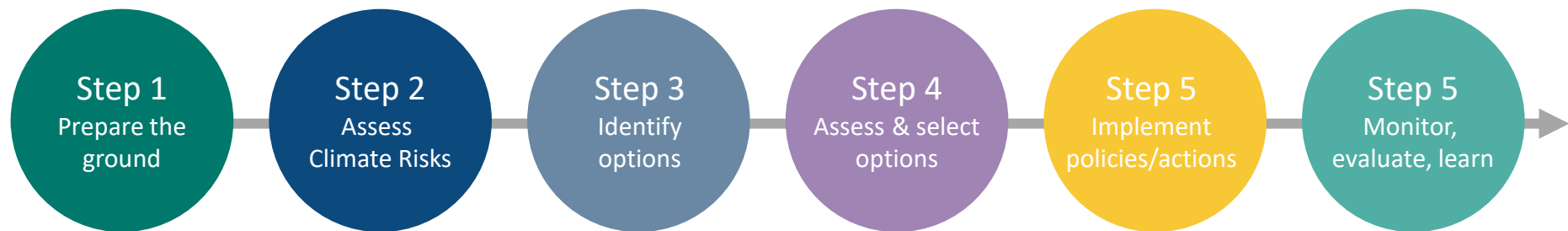


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Towards Climate Resilience



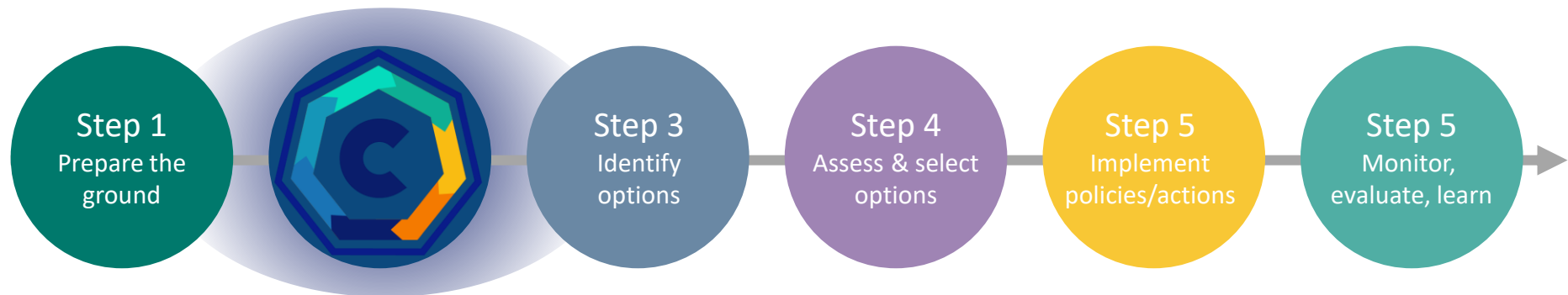
Source: Regional Adaptation Support Tool (EEA)



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Towards Climate Resilience



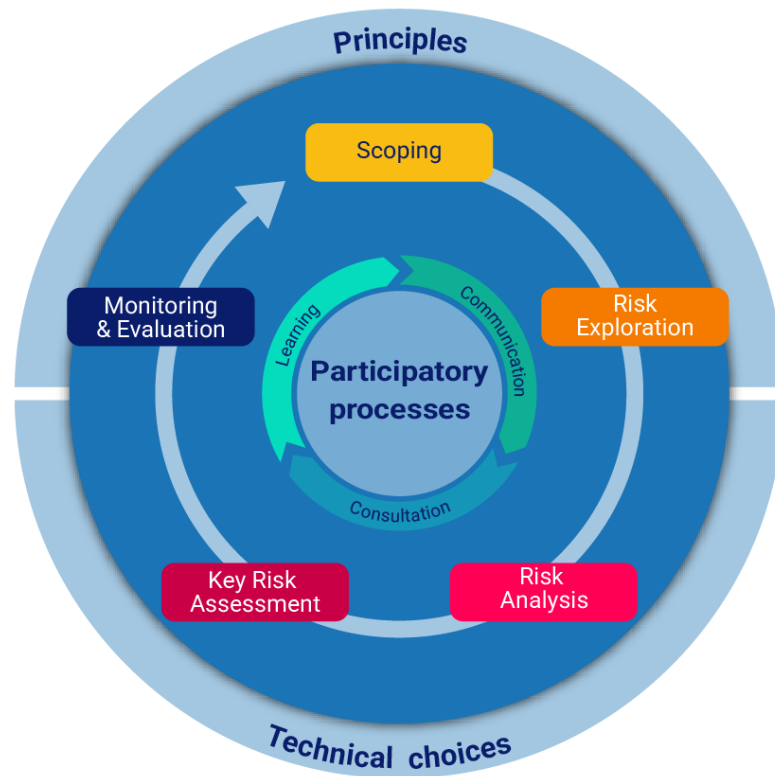
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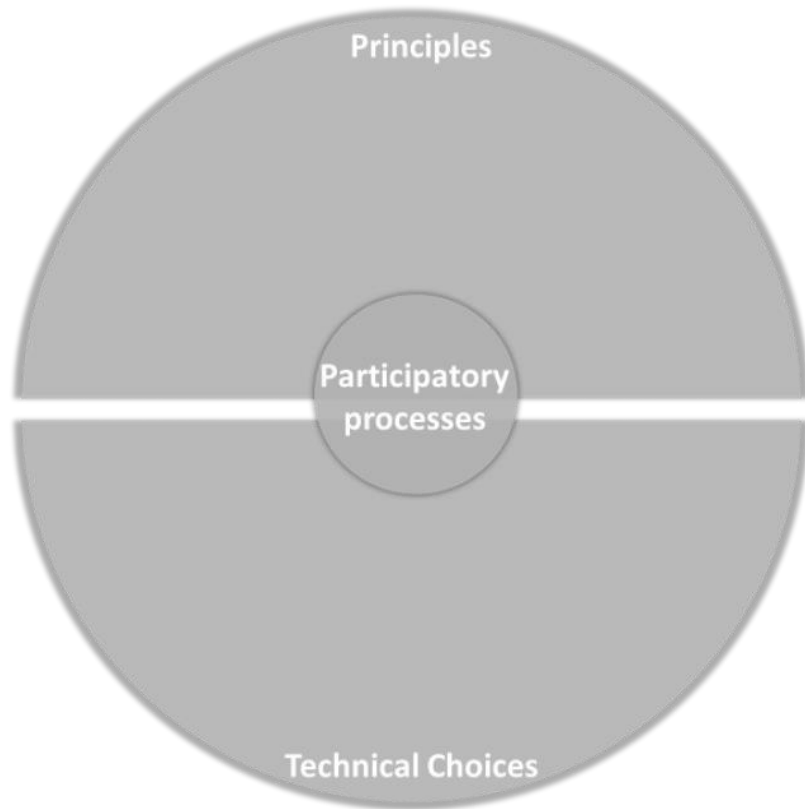
The Climate Risk Assessment Framework



The Climate Risk Assessment Framework

Conceptual background

1. Principles
2. Technical Choices
3. Participatory processes



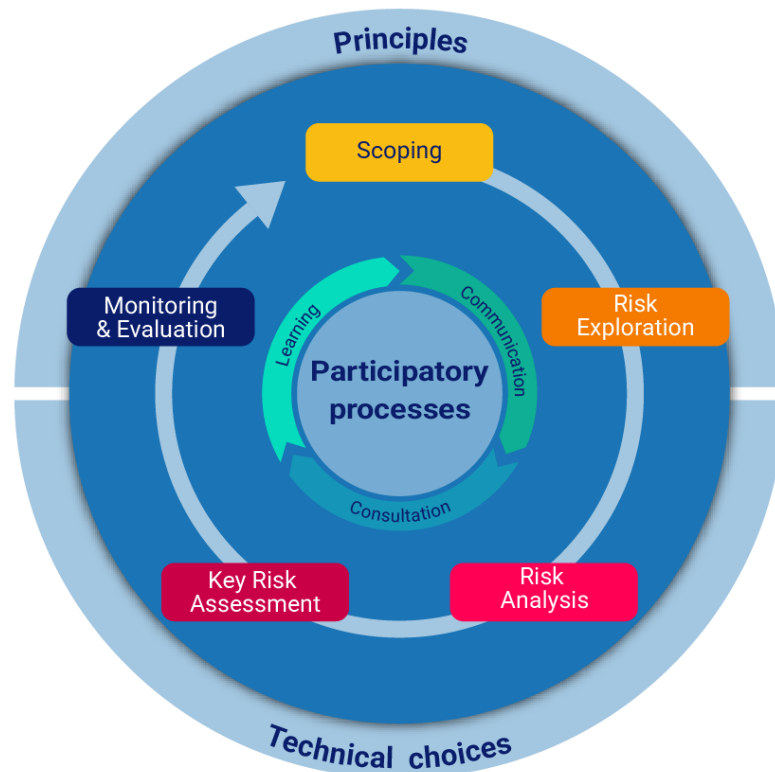
The Climate Risk Assessment Framework

Conceptual background

1

Principles

- Social justice, equity, inclusivity (**Just Resilience**)
- Quality, rigour, and transparency
- Precautionary approach



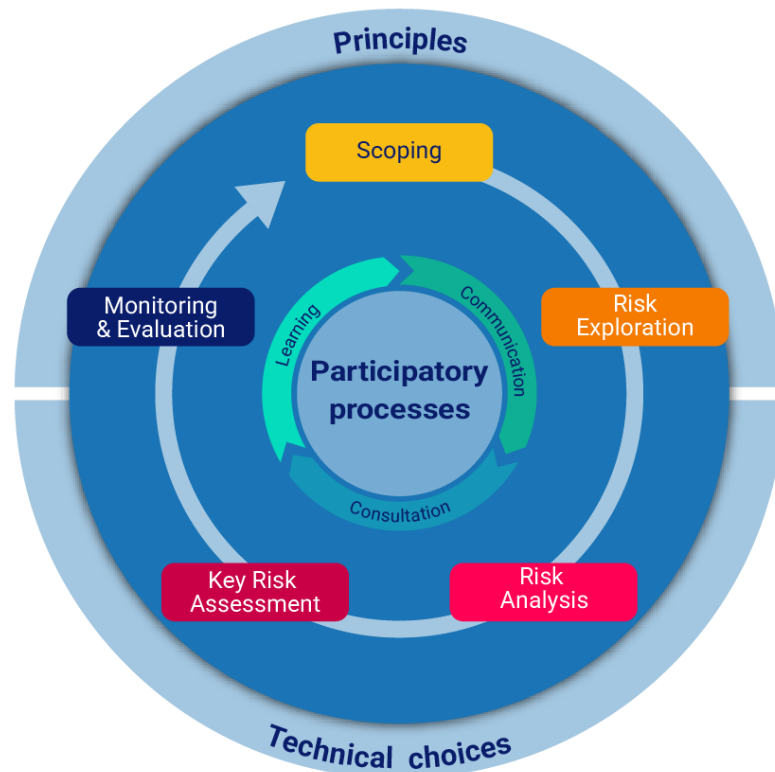
The Climate Risk Assessment Framework

Conceptual background

2

Technical Choices

- Climate change scenarios
- Climate models
- Choice of time horizon
- Integration of local data



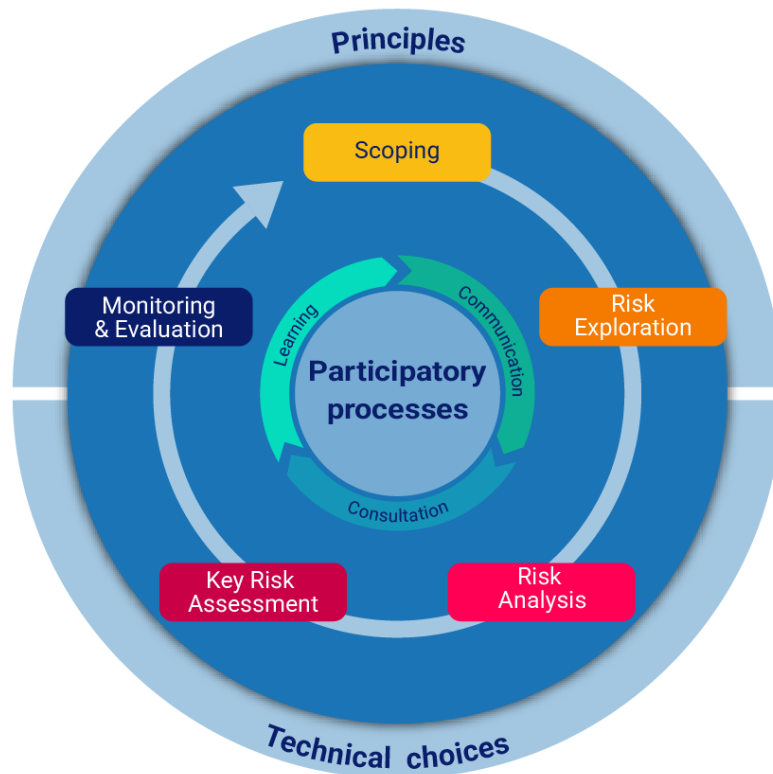
The Climate Risk Assessment Framework

Conceptual background

3

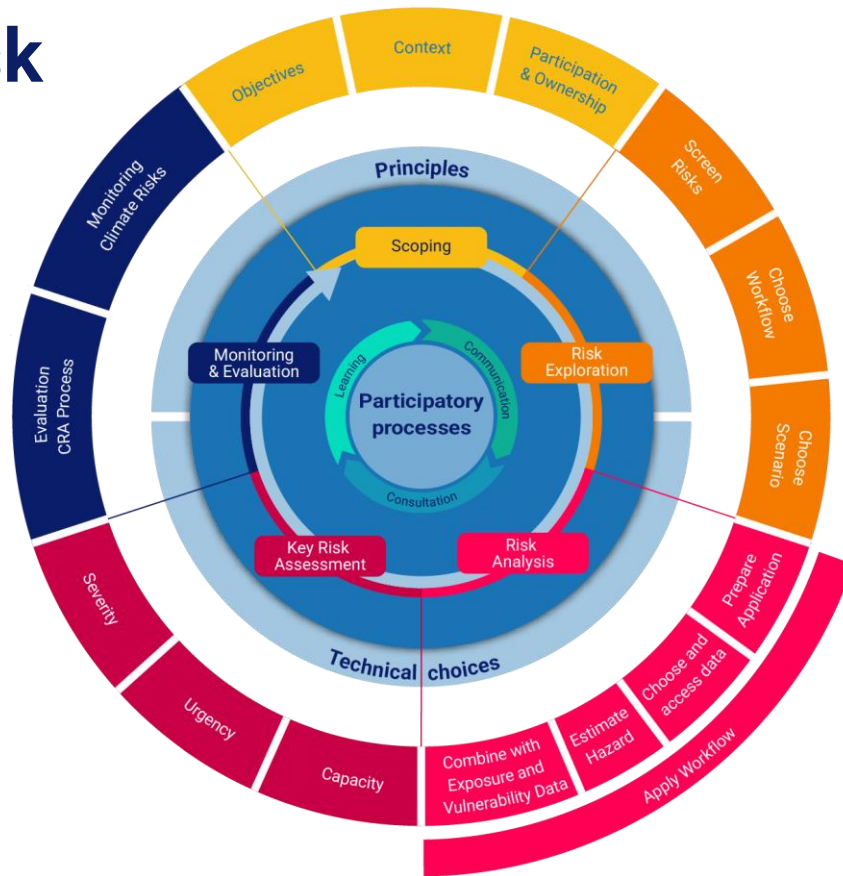
Participatory Processes

- Stakeholders, experts, priority groups
- Learning, communication, consultation



The Climate Risk Assessment Framework

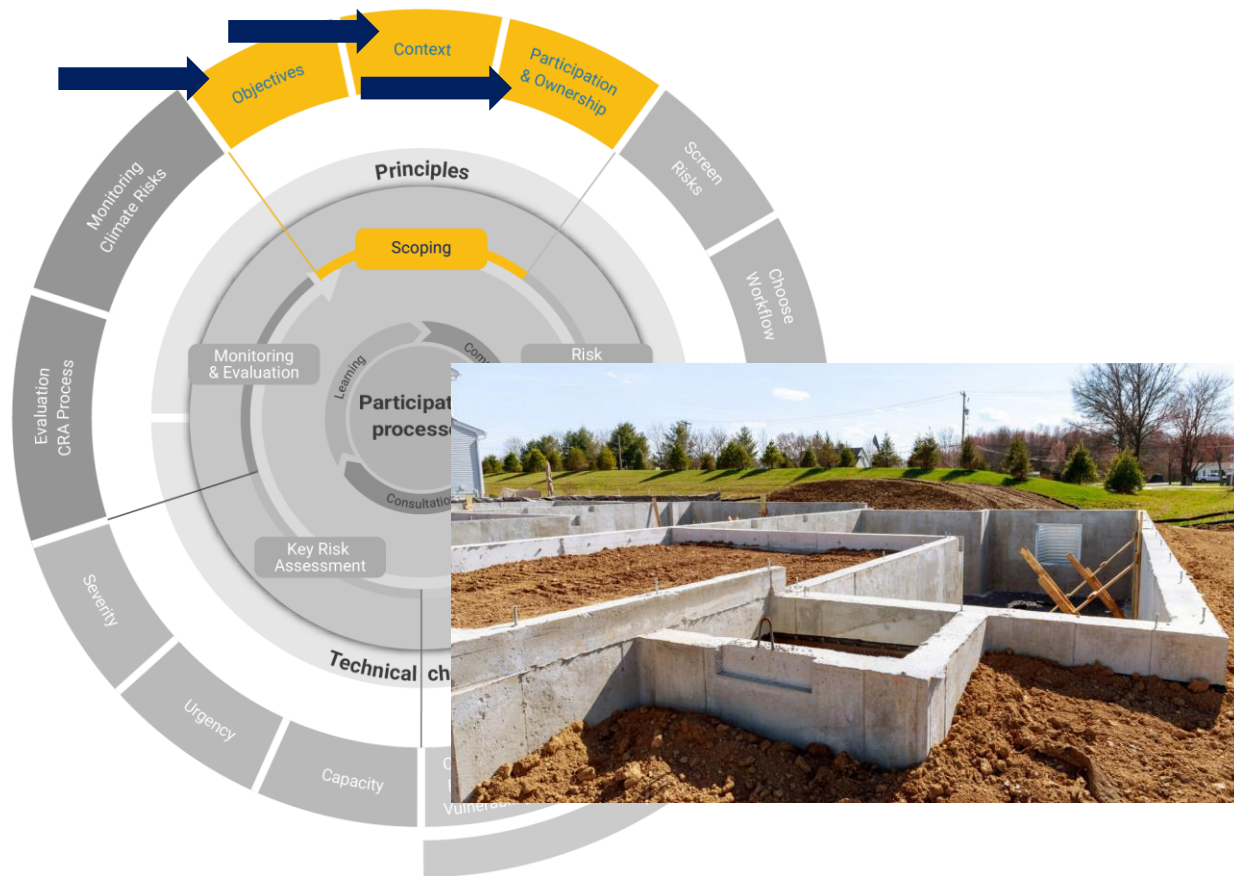
Operational steps



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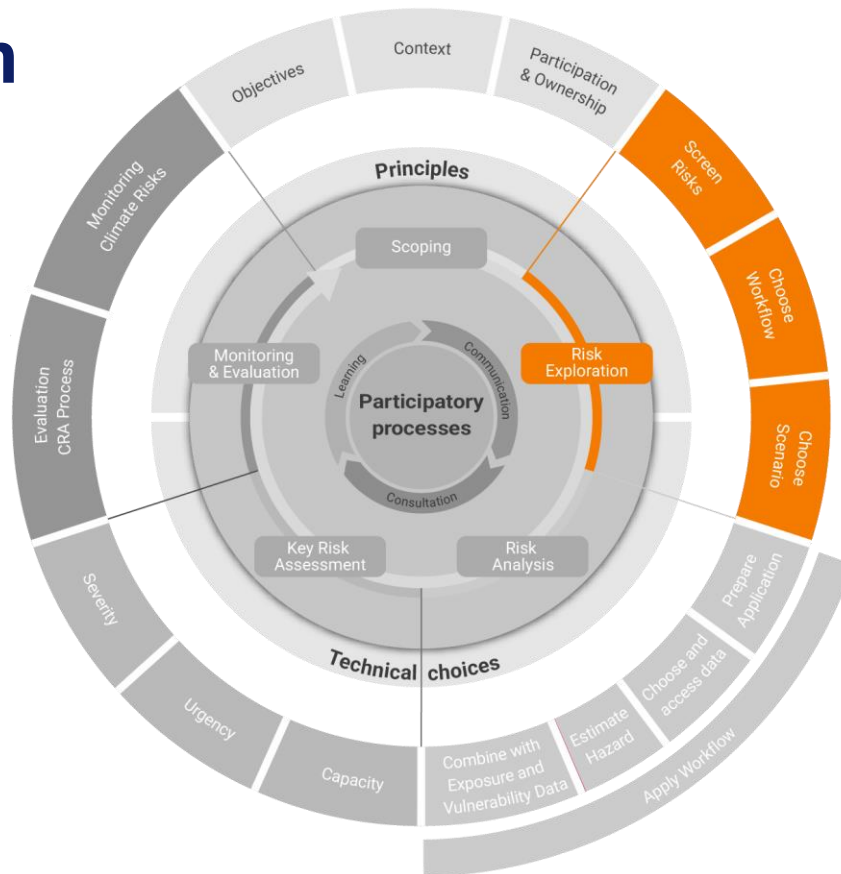
Scoping



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Risk Exploration



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Risk Analysis

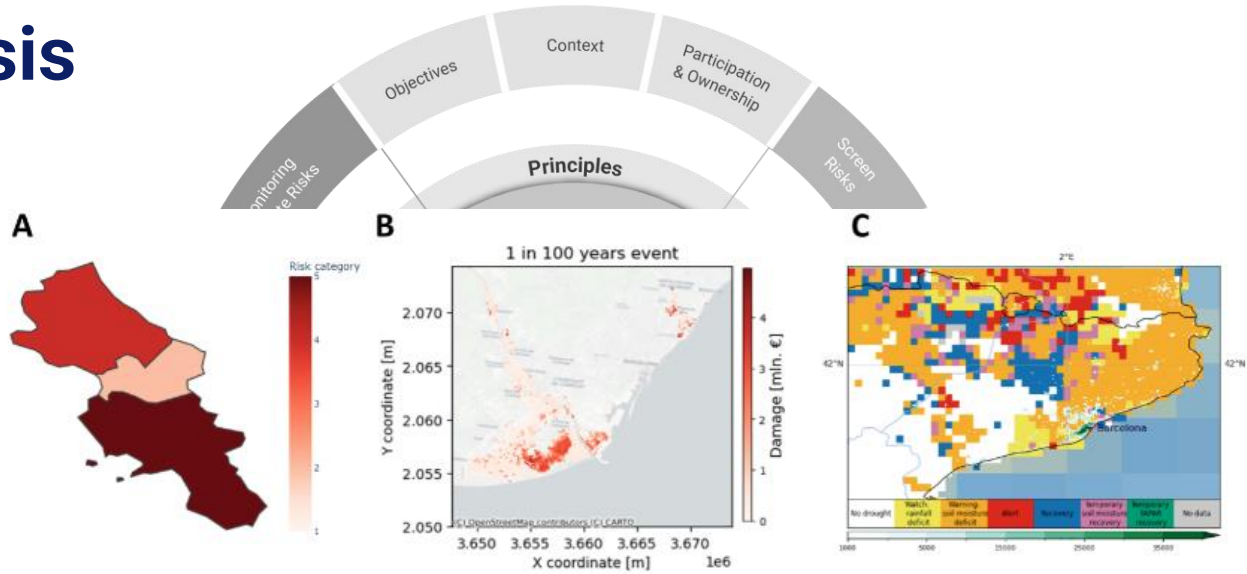


Fig. 7 Examples of the different outputs from the three risk assessment approaches with A drought risk indexing, B coastal flood damage, and C drought exposed population. Credit:

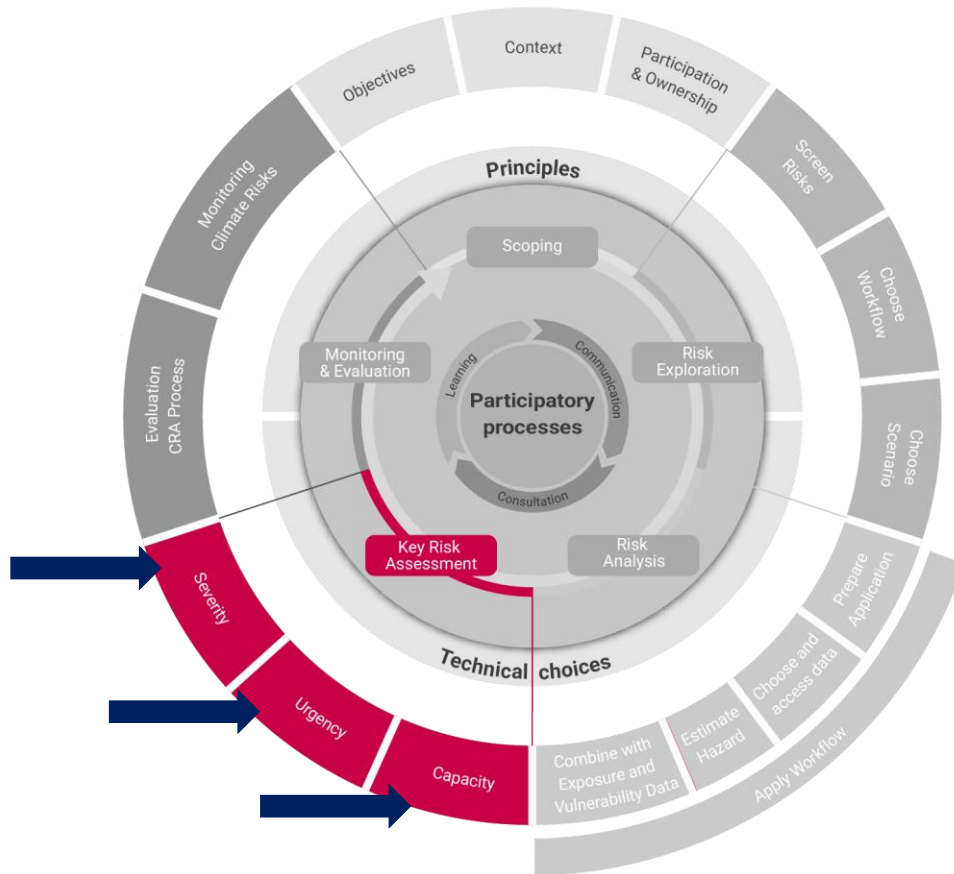
CLIMAAX consortium. #



$$\text{Risk} = \text{Hazard} \times \text{Exposure} \times \text{Vulnerability}$$



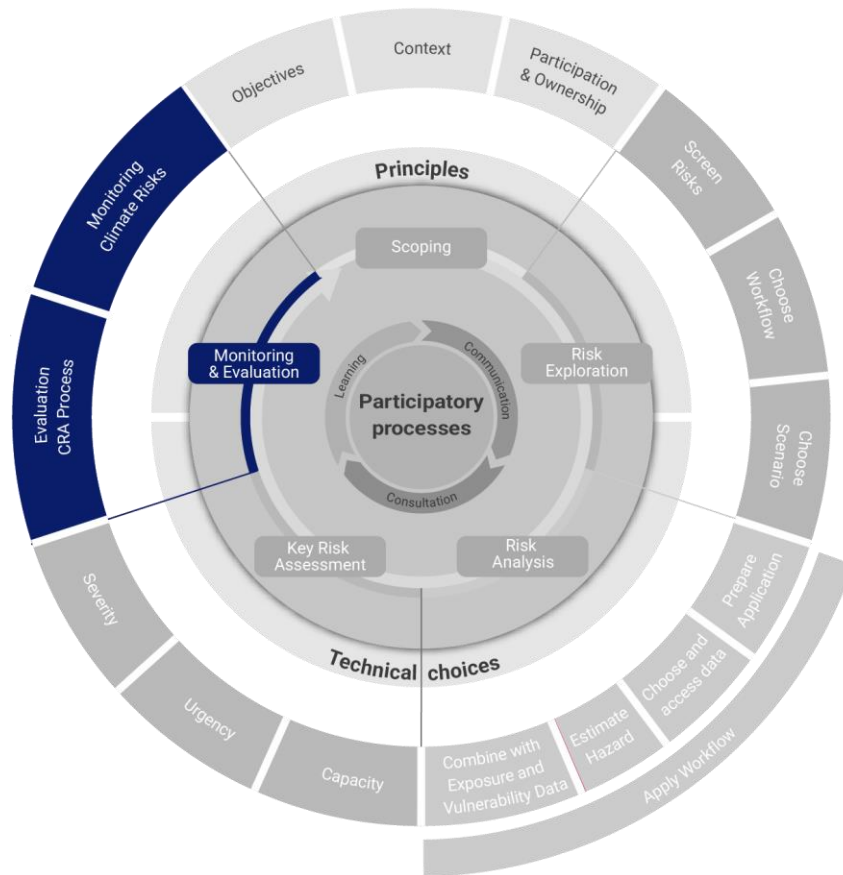
Key Risk Assessment



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Monitoring & Evaluation



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Screen Risks

The primary objective of screening risks is to quickly scrutinize a region's climate risk context. To do so, it is recommended to use participatory approaches such as consultations with experts, stakeholders and priority groups or also group consultations with all relevant actors. This can be complemented with data-driven methods to gather insights beyond the initial risk considerations from the [Scoping](#) step. Where possible, the exploration can dive deeper and cover relevant risk-related aspects, such as affected sectors, spatial extent, and implications across sectors, or regions.

Experts and stakeholders may also take into account participatory input. This can be used to ensure transparency, seek feedback or validate findings, by sharing a summary of key discussion points and risk screening results.

The overall output of the risk screening sub-step is to shortlist risks based on the knowledge and perception of stakeholders and experts while including past and ongoing impacts, expected future changes, and local concerns. Additionally, it helps to highlight areas where additional information, data, or knowledge is needed, thus paving the way for appropriate [Risk Workflow](#) selection.

Data Spaces and Hubs

Data spaces and hubs are designed to facilitate data sharing, collaboration, and analysis across different stakeholders and organizations.

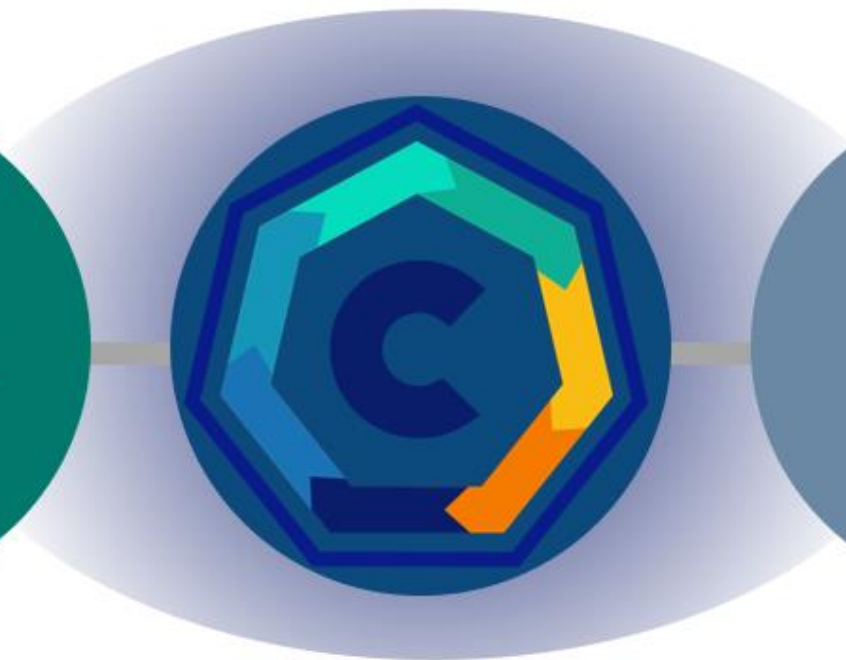
The [DRMKC Risk Data hub](#) is an extensive tool that explores disaster risk and vulnerability, provides and vulnerability assessments prepared in an EU context.

Guiding questions - Screen Risk

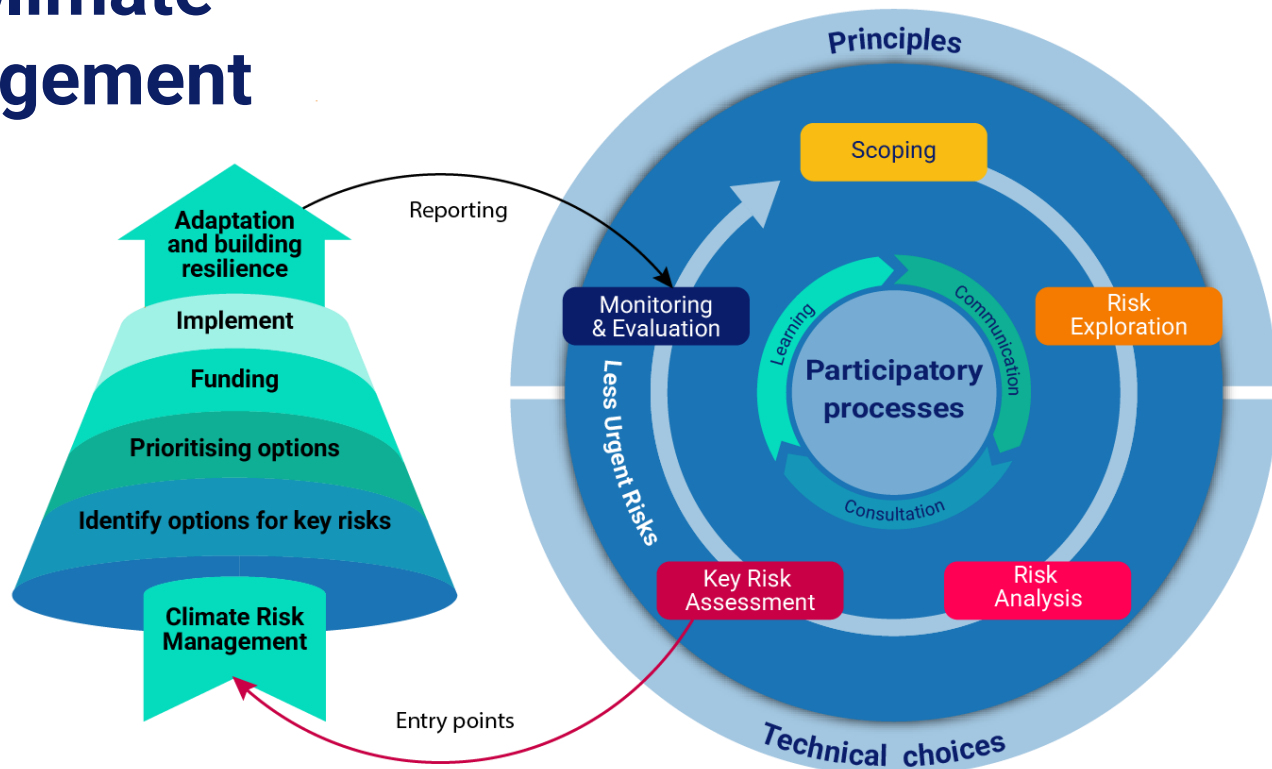
- Which climate-related hazards and potential risks are relevant for your context?
- What is the current situation? Where is the hazard occurring? Who is being affected?
- Which hazards are observed/expected for the community/region?
- How will this situation evolve in the future (e.g., 10, 20, 50 years)? How may this risk evolution influence your envisaged time horizon defined in the scoping phase?
- Do you want to focus on current or future hazards?
- Which hazards do you want to cover in this risk assessment?
- Which data or knowledge do you have on these

and vulnerability assessments prepared in an EU context.





Towards Climate Risk Management





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Thank you!



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Q&A SESSION



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