

EU-Level Technical Guidance on adapting buildings to Climate Change

Project Launch Webinar

RAMBOLL

Bright ideas.
Sustainable change.



Welcome

The purpose of the webinar is to present the project, as well as to inform on how you can contribute to developing the EU-Level Technical Guidance on adapting buildings to climate change.

Online etiquette

1. Please **mute** your microphone when joining the call.
2. For feedback, please use the **chat** during presentations.
3. However, at the end of the meeting there is a **Q&A session** which should be the main discussion and feedback opportunity.



Reminder: The meeting will be **recorded** and published on our website. Please do not intervene in case you do not want to show up in the record

Agenda

01

Welcome [14:00 – 14:05]

02

Opening by the European Commission [14:05 – 14:10]

03

The project [14:10 – 14:40]

04

Stakeholder engagement plan – How can you contribute? [14:40 – 14:45]

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Q&A session [14:45 – 15:15]

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Opening by the European Commission

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The focus of the project is to:

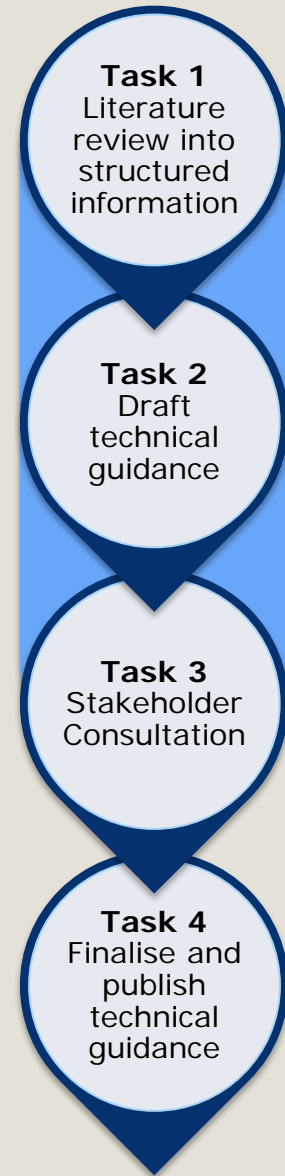
“to collect and synthesise existing methods, specifications, best practice and guidance for climate resilient buildings into a report that can provide practical advice.”

Overview

There are five workstreams:

1. European Policy & Standardization Environment Adaptation Review
2. Climate Resilience in Structural Design Review
3. Climate Vulnerability & Risk Assessment Methodology
4. Climate Resilience Rating Approach
5. Best Practice for enhancing Climate Resilience

The 'Best Practice Guidance' workstream will be the largest workstream in the project with the other four contributing on specific areas, and how to enable climate resilient buildings within that area.



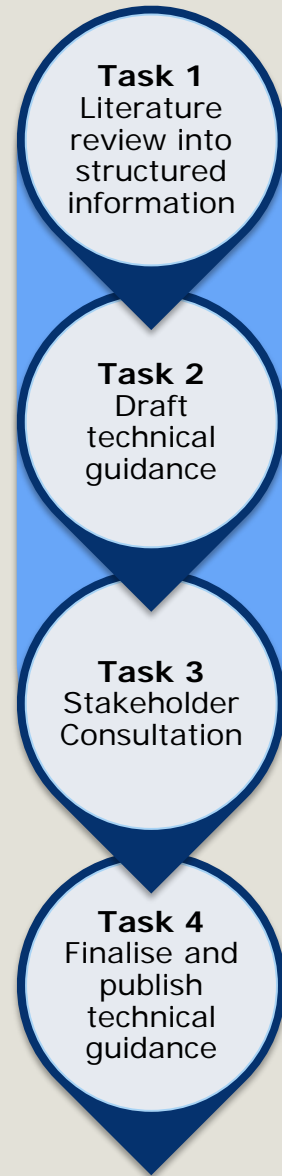
Project updates



<https://c.ramboll.com/adapting-buildings>



BuildingsAdapt@ramboll.com



Tell us what you think!

We would like to ask you some questions about climate resilience in buildings:

- Go on [menti.com](https://www.menti.com)
- Type in the code: **89 07 99 6**

Or scan the QR code:



Overview

PROJECT WORKSTREAMS

POLICY & STANDARDS REVIEW

European Policy & Standardization Environment Adaptation Review

TOR 3.2.2

Review of EU and member state national policies and regulations relevant to the adaptation of buildings for climate change.



Climate Resilience in Structural Design Review

TOR 3.2.3

Review of the structural design of buildings to the Eurocodes and national regulations relevant to designing for climate resilience in buildings.



RISK ASSESSMENT & RATING REVIEW

Climate Vulnerability & Risk Assessment Methodology

TOR 3.2.1

Review of Climate Vulnerability & Risk Assessment methodology for buildings and blocks of buildings from existing methodologies.



Climate Resilience Rating Approach

TOR 3.2.5

Review of rating approaches for climate resilience for buildings, exploring the criteria, approach type, and link to CVRA methodology.



BEST PRACTICE GUIDANCE

Best Practice for enhancing Climate Resilience

TOR 3.2.4 + 3.2.6

Assembly of best practice climate resilience guidance for buildings and as integrated into the local environment. Best practice case studies will be categorised by climatic hazards with supporting guidance given in reference to the different processes or priorities by climatic zone, project stage and building sector actor.



European Policy & Standardization Environment Adaptation Review



Review of EU and member state national policies and regulations relevant to the adaptation of buildings for climate change.

European Policy & Standardization Environment Adaptation Review

The document types that feed into the literature review process are:

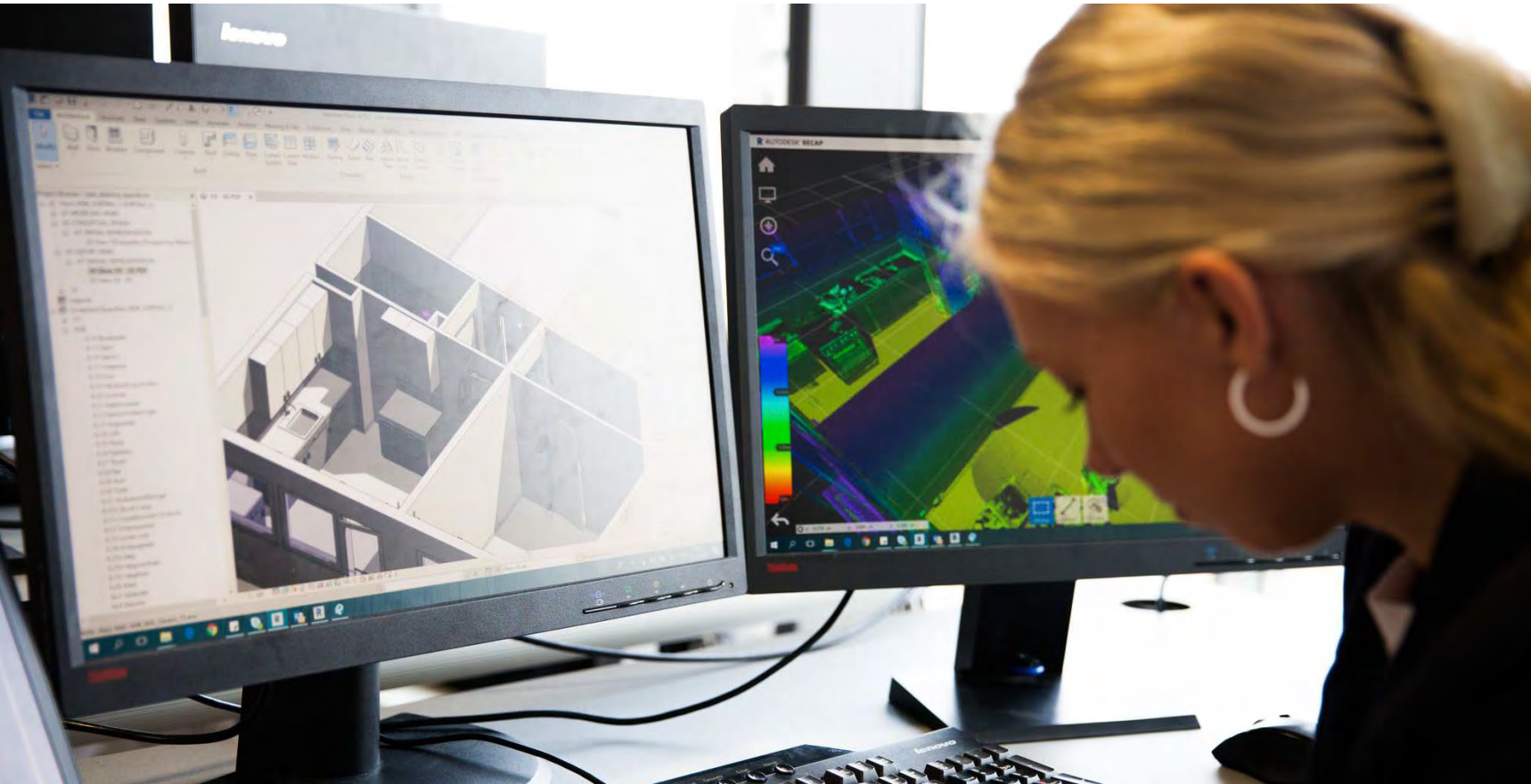
- EU legislation (e.g. EU Taxonomy, EPBD proposal)
- EU strategies (e.g. EU Adaptation Strategy, Renovation Wave)
- Standards and guidance (e.g. Level(s), Green Public Procurement Guidance)
- Funding schemes (e.g. EIB Climate Adaptation Plan)
- Available National Adaptation Plans



In the chat **OR** feedback after the webinar:

- What other EU policy documents may be relevant/useful for climate resilience?

Climate Resilience in Structural Design Review



Review of the structural design of buildings to the Eurocodes and national regulations relevant to designing for climate resilience in buildings.

Climate Resilience in Structural Design Review

The document types that feed into the literature review process are:

- Eurocodes
- National annexes
- National / regional technical guidance
- Industry guidance
- Academic guidance
- Consultant information
- Contractor information



In the chat **OR** feedback after the webinar:

- Are there any structural design documents or guidance related to climate resilience that you have used?
- What types of climate resilience measures have you seen or used on building projects (and what was the project location)?

Climate Resilience in Structural Design Review

Priority hazards affecting buildings:



Flooding

- Elevated ground floor



Overheating

- Reflective cool facades and roofs



Heavy precipitation (rain and hail particularly)

- Water attenuation, material durability



Subsidence (often from drought)

- Increased foundation size



Storm (high winds)

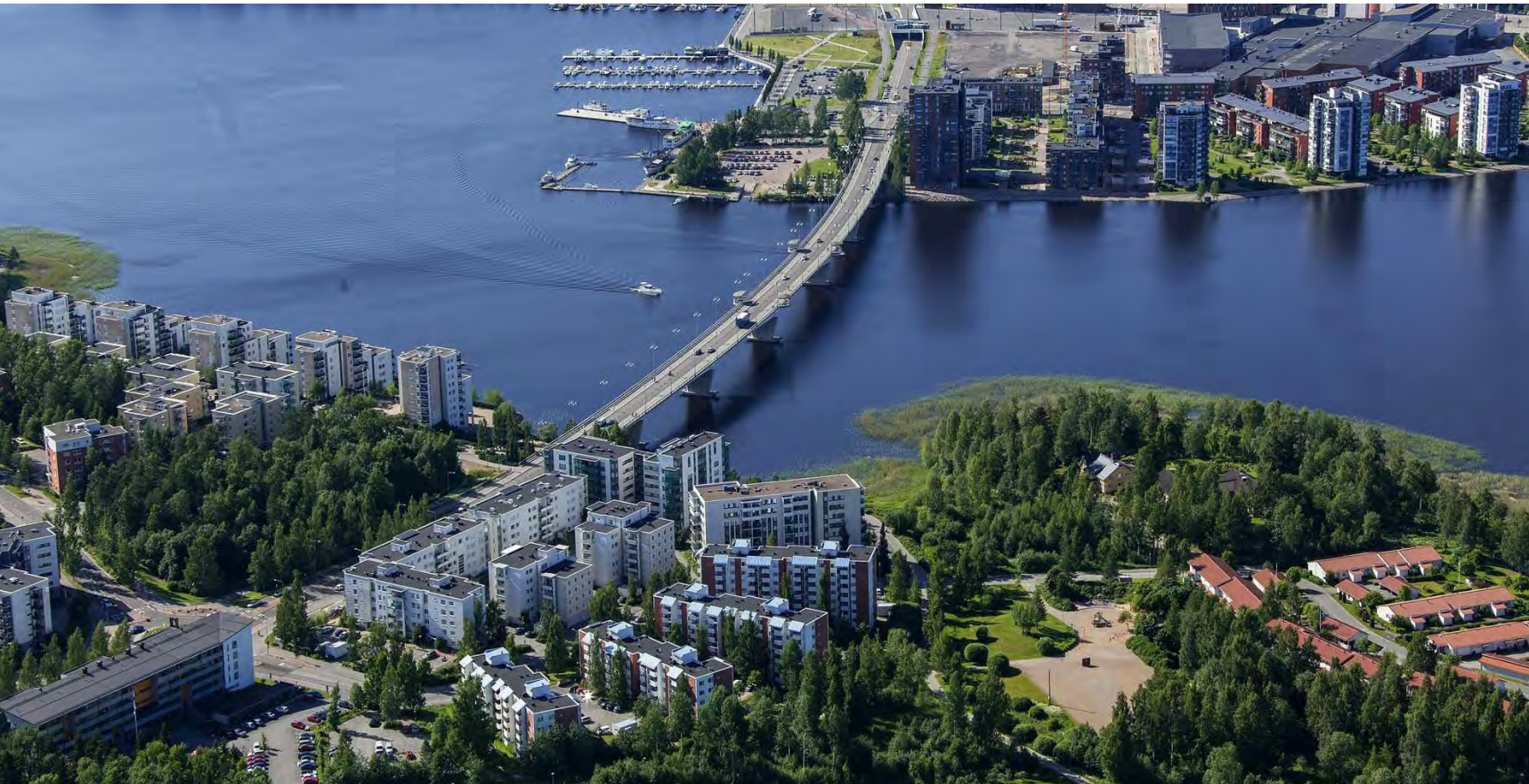
- Updated design loading



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Climate Vulnerability & Risk Assessment Methodology



Review of recent publications which provide information on robust approaches to climate vulnerability and risk assessment (CVRA) with a focus on those which are most applicable to the building sector.

Climate Vulnerability & Risk Assessment Methodology

The document types being included in this review of CVRA methodologies are:

- Recent EU studies, including the Commission's *Technical Guidance on the Climate Proofing of Infrastructure*
- Industry guidance and tools
- Academic studies
- Country-specific guidance documents and tools
- Guidance materials from the Insurance sector

This research will consider variations needed for different scales of buildings from individual buildings to blocks and provide commentary on impact, ease of use and synergies/conflicts of the methodologies.



In the chat OR feedback after the webinar:

- Which sources of climate projections do use when you undertake climate risk assessments?

Climate Resilience Rating Approach



Review of rating approaches for climate resilience for buildings, exploring the criteria, approach type, and link to CVRA methodology.

Climate Resilience Rating Approach

The document types being included in this review of climate resilience rating approaches are:

- Industry guidance and tools
- Country-specific guidance documents and tools
- Guidance materials and tools from the Insurance sector

This research will consider both process-oriented and result-oriented approaches to rating the resilience of buildings.

It will focus primarily on the feasibility of developing a rating approach and the relevance to different user groups.



In the chat **OR** feedback after the webinar:

- What tools are you aware of that rate a building's resilience to climate change?

Best Practice for enhancing Climate Resilience



Assembly of best practice climate resilience guidance for buildings and as integrated into the local environment.

Best Practice for enhancing Climate Resilience

The document types being included in the Best Practice literature review are:

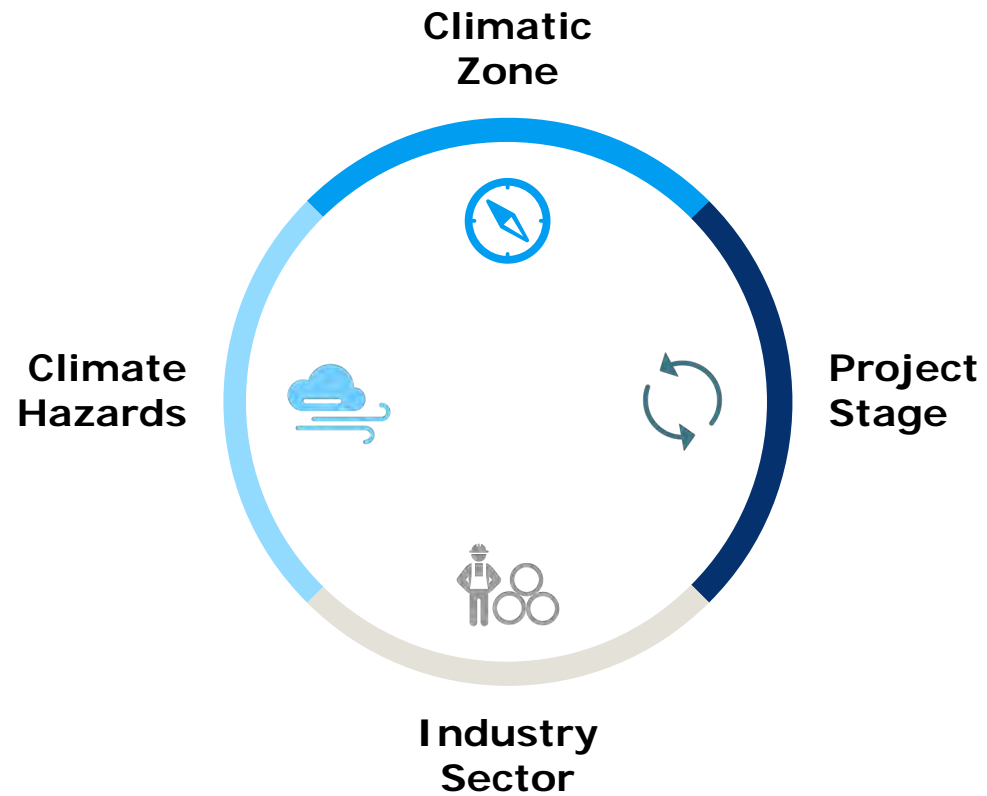
- Regional/City strategy
 - Tools
 - Certification
 - Technical/Design guide
 - Other guidance
 - Scientific research
 - Framework
 - Other
-
- Project example
 - Product example



In the chat **OR** feedback after the webinar:

- What best practice examples do you have or know of that should be included in the review?
- How could the best practice guidance be organised to make it easiest for you to engage with it?

Best Practice for enhancing Climate Resilience



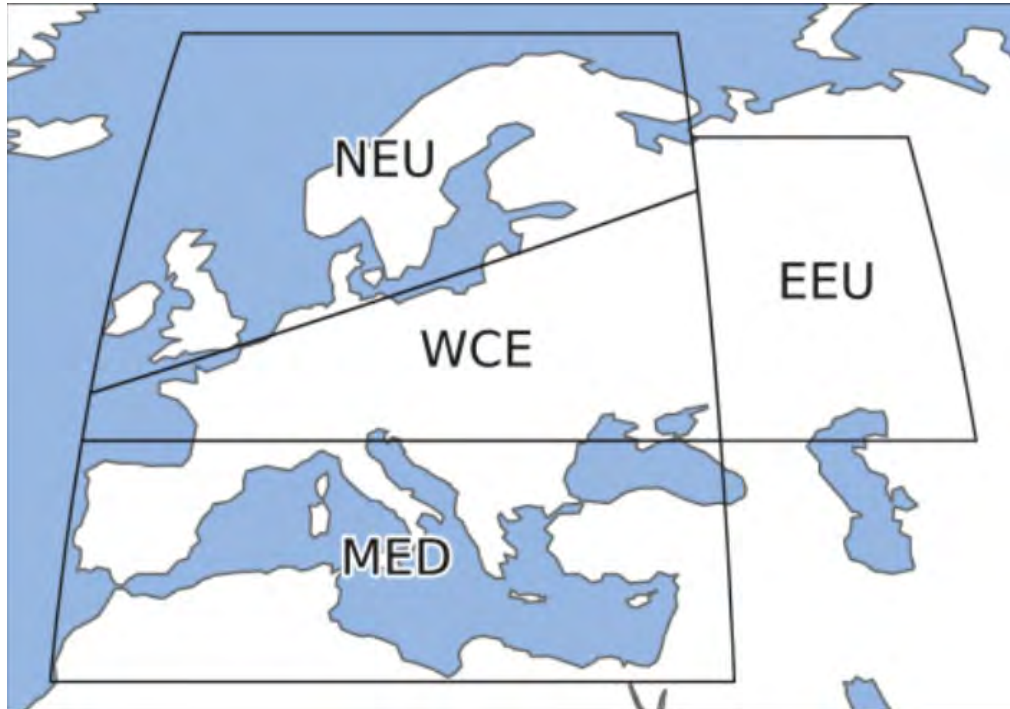
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Climatic Zone

Utilisation of the four IPCC regions for Europe:



NEU
Northern Europe

WCE
Western & Central Europe

EEU
Eastern Europe

MED
Mediterranean



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Project Stage

Project lifecycle stages:



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Industry Sector

Building industry actors:

Government, regulators
& local authority

Investors, developers &
insurance providers

Building users, facility
managers & owners

Design teams
(engineering &
architecture)

Contractors & builders

Manufacturers



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Climate Hazards

	Temperature-related	Wind-related	Water-related	Solid mass-related
Chronic	Changing temperature (air, freshwater, marine water)	Changing wind patterns	Changing precipitation patterns and types (rain, hail, snow/ice)	Coastal erosion
	Heat stress		Precipitation and/or hydrological variability	Soil degradation
	Temperature variability		Ocean acidification	Soil erosion
	Permafrost thawing		Saline intrusion	Solifluction
			Sea level rise	
			Water stress	
Acute	Heat wave	Cyclone, hurricane, typhoon	Drought	Avalanche
	Cold wave / frost	Storm (inc blizzards, dust and sandstorms)	Heavy precipitation (rain, hail, snow/ice)	Landslide
	Wildfire	Tornado	Flood (coastal, fluvial, pluvial, ground water)	Subsidence
			Glacial lake outburst	

EU Taxonomy Table 5 – Classification of climate-related hazards



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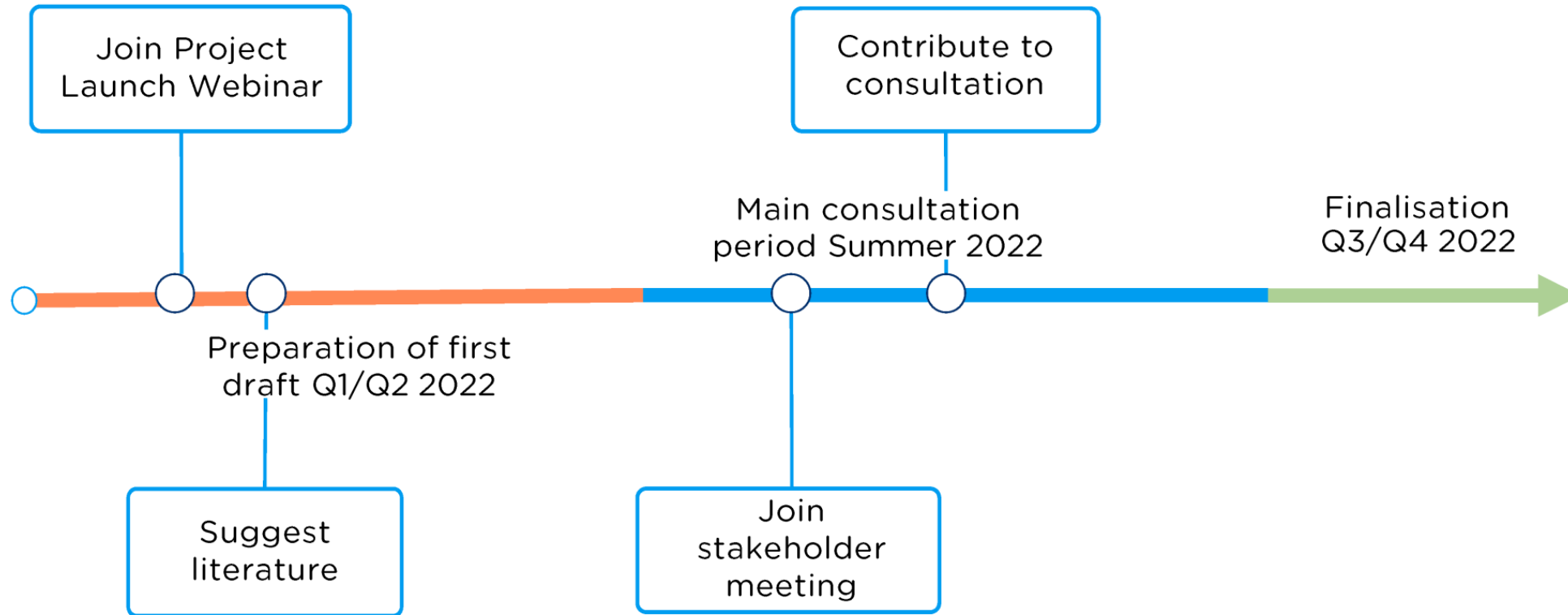
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Stakeholder engagement plan – How can you contribute? [14:40 – 14:45]

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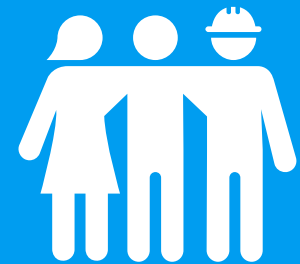
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Stakeholder engagement



Expert group

- **What**
 - Take part in 3 Expert Panel Webinars
 - Take part in the Stakeholder Meeting in June;
 - Be available for ad-hoc consultations/interviews throughout the project.
- **Who**
 - 20 actors
 - A balanced representation of the different types of stakeholder groups;
 - To the extent possible, geographical balance
- **How**
 - Signing up after the workshop



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Do you have any questions?

Let us know if you have questions about our study, by typing them in Mentimeter:

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Or scan the QR code:



Thank you

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