CrossEU

D5.1 – Stakeholder Mapping and Engagement Plan

WP5 - Task 5.1
March 2024

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Executive Summary

This Stakeholder Mapping and Engagement Plan provides a detailed description of the types of stakeholders and targeted groups that the project aims to engage with, before, during and after the project. It will also detail the means to interact with them and gain engagement throughout the life of CROSSEU.

Keywords

Climate change, socio-economic impacts and risks, climate policy, climate resilience, interdisciplinarity, climate adaptation and mitigation, decision support, cross-sectoral, climate change impact.

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Abbreviations and acronyms

Acronyms	Full word
CC	Climate Change
SE	Socio-Economic
DSS	Decision Support System
M&A	Mitigation and Adaptation
CCH	Climate Change Hotspots
STL	Storyline
CS	Case Studies

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Introduction

CROSSEU is a project funded by the European Union that aims to build a climate-sensitive framework, including a ready-to-use Decision Support System (DSS) platform and technical recommendations. This framework will help investment decisions, adaptation and mitigation decisions and policies.

To tackle all the objectives the project has set, CROSSEU was divided into 6 work packages. WP5 is dedicated to societal sharing, communication, dissemination, and exploitation. Task 5.1 is dedicated to identifying and mapping the stakeholders of this project. The stakeholders will be actively engaged all along the project, from early beginnings to the final delivery of the project.

They will particularly help co-designing and co-developing STLs, co-designing and co-evaluating DSS, and participate in the upscaling of the project.

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1. Scope and objectives

1.1. Scope

The Stakeholder Engagement Plan within the CROSSEU project outlines a strategy to identify, engage, and maximise the contribution and impact of stakeholders involved. It ensures coordination among work packages to gather feedback essential for developing the CROSSEU framework and Decision Support System (DSS).

This deliverable uses the pre-existing mapping of the partners and expand it per project case studies (CS) to define more specific stakeholders. It also defines synergies between all CS and among partners to optimise engagement activities and maximise the project's impacts.

This plan also serves as a foundation for targeted communication and dissemination efforts in WP5. A specific deliverable is dedicated to dissemination and communication activities (D5.2 – Dissemination and communication plan – V1 – M4).

The following mapping and engagement plan will be updated during the project lifetime whenever relevant to provide the most up-to-date information. Additional stakeholders will be included during the different stages of project implementation depending on the nature of the input needed, with means of reaching them and communicating with them.

1.2. Objectives

- The objectives of this stakeholder mapping and engagement plan are to:
- Ensure the effective use of the project's outcomes by key stakeholder groups involved in climate risk mitigation and adaptation (M&A).
- Continuously improve the CROSSEU DSS by taking the stakeholders' input into account.
- Actively involve the stakeholders throughout the project.
- Prepare the upscaling of the framework and DSS by engaging with a wider scope of stakeholders.
- Establish effective channels of communication and engagement with stakeholders to foster collaboration and thus develop tailored outreach activities.
- Promote and disseminate the project's results to relevant stakeholders.

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- Foster partnerships and networks among partners of different WPs and CS.
- Inform strategic decision-making during project implementation by understanding stakeholder perspectives and priorities.

1.3. Project Overview

The consortium of CROSSEU consists of 15 partners from 9 European countries (Table 1). Its diversity is represented in Figure 1.

Table 1: CROSSEU Consortium

Participant No.	Participant organisation name	Country
1	ADMINISTRATIA NATIONALA DE METEOROLOGIE R.A. (MeteoRo)	Romania
2	WORLD METEOROLOGICAL ORGANIZATION (WMO)	Switzerland
3	UNIVERSITA DEGLI STUDI DI PADOVA (UNIPD)	Italy
4	CONOSCENZA E INNOVAZIONE SOCIETA A RESPONSABILITA LIMITATA SEMPLIFICATA (K&I)	Italy
5	HELMHOLTZ-ZENTRUM HEREON GMBH (HEREON)	Germany
6	LGI SUSTAINABLE INNOVATION (LGI)	France
7	ELECTRICITE DE FRANCE (EDF)	France
8	UNIVERSITAET FUER BODENKULTUR WIEN (BOKU)	Austria
9	DANMARKS TEKNISKE UNIVERSITET (DTU)	Denmark
10	UNIVERSITATEA DIN BUCURESTI (UB)	Romania
11	CESKA ZEMEDELSKA UNIVERZITA V PRAZE (CZU)	Czech Republic
12	UNIVERSITY OF EAST ANGLIA (UEA)	United Kingdom

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13	UNIVERSITY COLLEGE LONDON (UCL)	United Kingdom
14	WORLD ENERGY & METEOROLOGY COUNCIL (WEMC)	United Kingdom
15	UNITED KINGDOM RESEARCH AND INNOVATION (UKRI)	United Kingdom

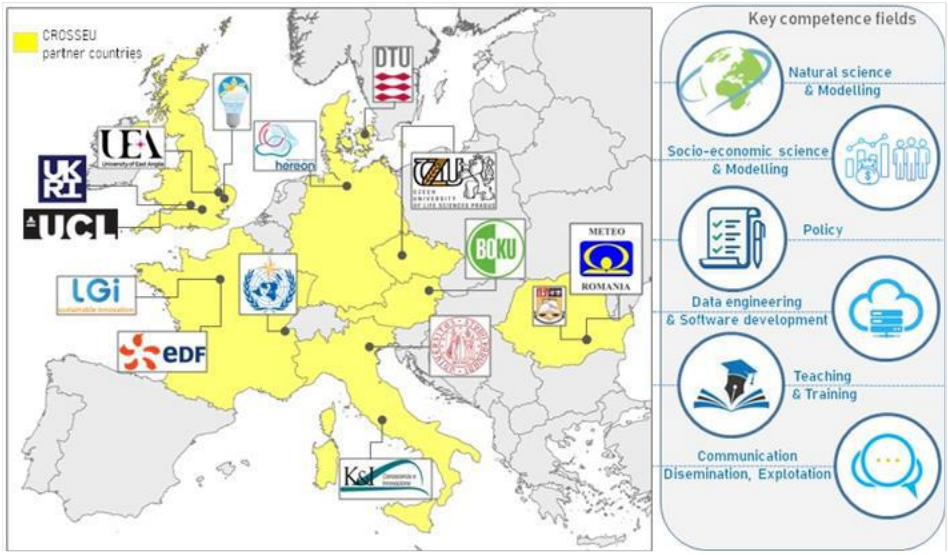

Figure 1: Diversity of the CROSSEU consortium

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2. Operational framework

2.1. Partners contribution

LGI is leading Stakeholder Mapping and Engagement activities. MeteoRo, UEA, WMO, K&I, HEREON, BOKU, WEMC and UB contribute to this task. All partners, especially those involved in WP1, WP2 and WP3 feed valuable inputs to this plan, to provide a relevant and up-to-date plan.

The Stakeholder Mapping and Engagement Plan will be followed by all partners. Its results feed into WP1 (T1.1), WP2 (T2.1, T2.4), WP3 (T3.1, T3.4), and WP4 (T4.5), highlighting its interdisciplinary relevance and contribution to the broader project objectives. Its operational framework is presented in Figure 2.

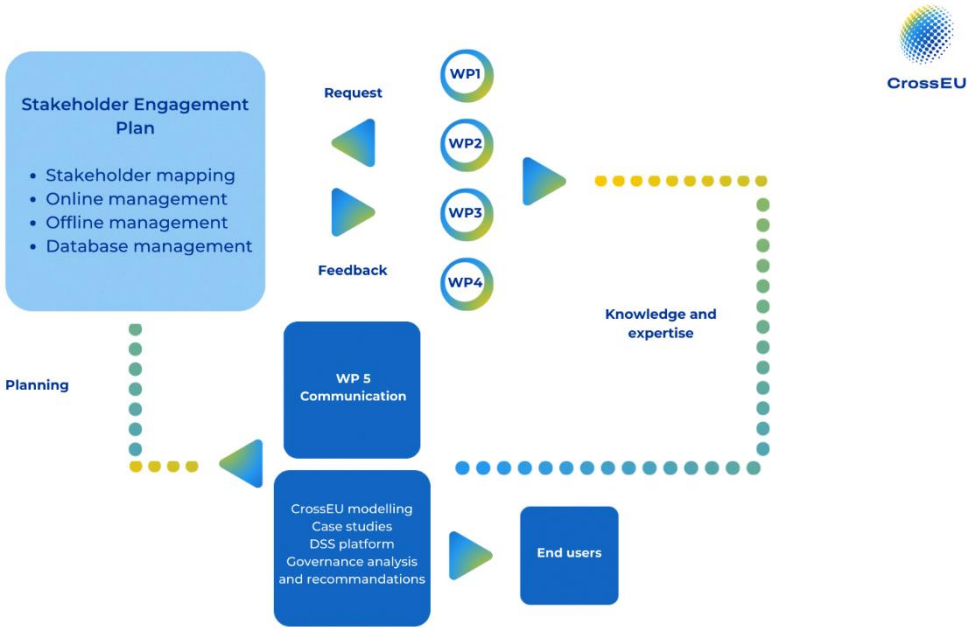

Figure 2: Operational Framework of the Stakeholder Engagement Plan

2.1. The role and type of stakeholders

Contrary to the target audiences who receive the end messages and results, stakeholders should be active participants in the project's lifecycle. They are engaged from its inception and involved throughout its implementation.

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In the CROSSEU project, the stakeholders play an important role in the methodological framework, in the storylines (STL) and the Climate Change Hotspot (CCH) areas, as well as in developing the DSS and upscaling the framework (Figure 3).

Engagement initiatives such as workshops, bilateral meetings, and round table discussions serve to co-design the project's decision-making tool, fostering collaboration and ownership among stakeholders.

The information gathered during those activities will serve as a foundation for addressing specific barriers, challenges, and opportunities in managing socio-economic (SE) risks induced by climate change (CC) across different sectors.

The type of stakeholders involved are decision and policy-makers, local, national and regional governments, practitioners, come from business and industry, civil society, research and academia, or other RDI projects. They can intervene as a local/national level, or to a European level, depending of their nature.

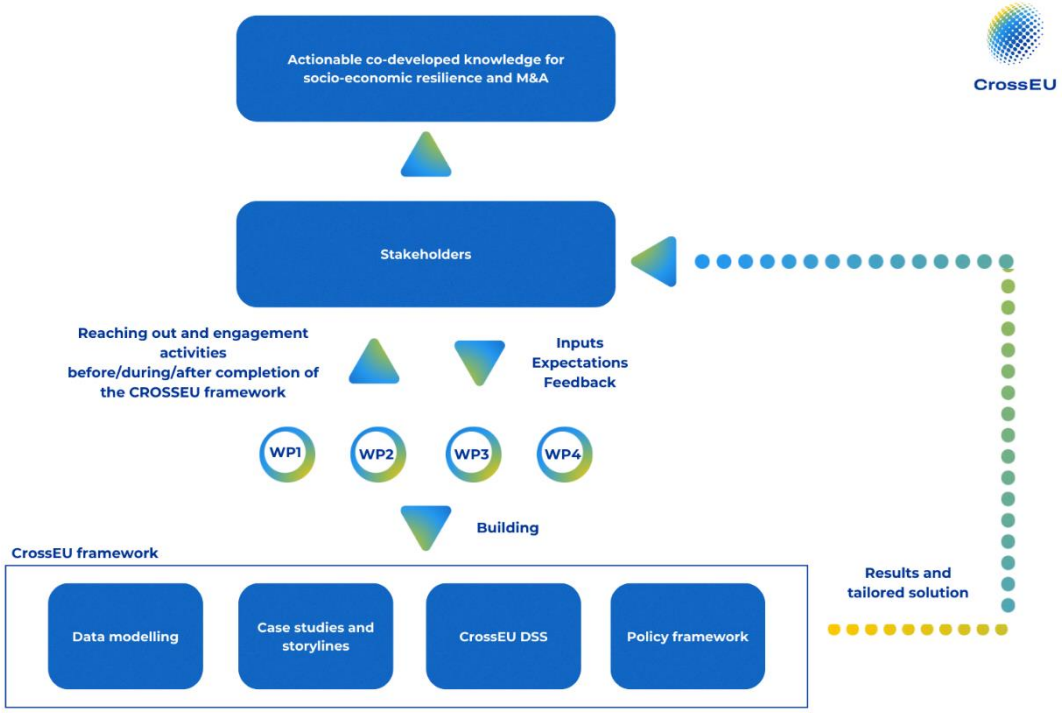

Figure 3: Stakeholder involvement in CROSSEU

The Stakeholder Mapping and Engagement Plan is meant to facilitate a smooth knowledge transfer and fosters effective dialogue among stakeholders and project partners. It was established during the project's kick-off meeting workshop that several partners already had a set of

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stakeholders with whom they usually work. Based on this preliminary work and an additional form filled per project study, a mapping of the stakeholders has been put in place.

2.2. The phases of engagement

Given its multi-sectoral and multi-faceted nature, the CROSSEU project requires an important involvement of the stakeholders throughout the different phases of the framework building. The engagement will be built around 4 key moments of the life of the project:

1. Scenarios and macro modelling phase (WP1)
2. Local/Regional case studies (CS) (WP2)
3. Functional DSS Implementation (WP3)
4. Policy framework for climate resilience and user adoption (WP4)

The stakeholder's engagement must be structured to avoid stakeholder fatigue and to keep them engaged throughout the whole process.

Those methods of engagement have different purposes, as presented in Table 2:

Table 2: Engagement purposes

		WP1	WP2	WP3	WP4
Before the CS	Expectations from CROSSEU				
	Co-generation of impact scenarios				
	Gathering data				
	Gathering existing policies				
	Information and feedback on mitigation and adaptation strategies				
	Advice for implementing new policies				
	Needs, barriers, recommendations, policy gaps				
During the CS	Testing the DSS prototype				
	Needs and recommendations to boost the upscaling				
	Feedback on the socio-economic survey				
	Knowledge on governance and decision-making processes				
	Insights on policy relevance and policy implementation status				
After the CS	Feedback on the DSS testing and functionalities				
	Developing new mitigation and adaptation options				

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2.3. A multi-level stakeholder engagement

The first stakeholders to be engaged will be at a local/regional level in all the Case Study Areas. Through several defined stakeholders' engagement activities (listed in Section 7), they will be solicited early in the project to understand their needs. This will be the foundation of the eight CS defined in the Grant Agreement.

The EU and UK stakeholders will be solicited to harmonise, upscale and disseminate the DSS and make sure that the M&A strategies and policies can be transferred to similar regions in the EU/UK.

The stakeholders will also be categorised by sectors, as the CS bring a specific focus on defined sectors, particularly impacted by CC and the risks it implies.

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3. Key messages

3.1. During engagement activities

The engagement activities of the stakeholders will be done in a way that conveys the following messages:

- The CROSSEU framework is a co-design, co-development approach.
- As it is based upon local CS, the CROSSEU framework will be designed to be used at a local/national level, by a wide variety of sectoral stakeholders.
- The data gathered from the stakeholders will be used to provide them with a tailored framework.
- The scenarios will be based upon real scenarios and fill some of the gaps meet the needs that were missing previously in the M&A strategies and policies.
- The scenarios will benefit a wider range of stakeholders, while still maintaining a tailored approach, based on the specificity of each end-user of the DSS.

3.2. By target group

As the stakeholders will also be part of the target audiences, some specific key messages have been identified in the Grant Agreement for different types of stakeholders (Table 3):

Table 3: Key messages for stakeholders as target groups

Stakeholder groups	Key messages
Decision and policy makers (ministries, administrations, European Commission offices)	Provide a better comprehension of SE risks of CC. The project will also be useful for local policy makers.
Local, and regional governments	CROSSEU will address the gaps and needs in knowledge regarding M&A strategies and investment planning.

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Practitioners (climate experts, sectoral stakeholders)	The tools developed will be user-driven and help facilitate climate-informed decisions.
Business and Industry	The knowledge gathered in different sectors will provide actionable knowledge and best practices, to support investment decisions and planning for M&A.
Civil society (NGOs, citizen communities)	The tools developed will be used to help reduce or prevent climate-related losses on multiple levels.
Research and Academia	The multidisciplinary knowledge and data produced by CROSSEU will further advance the knowledge in terms of SE risks of CC. Additional activities will be led by the partners to transmit the knowledge to other studies and students.
Other RDI projects from different programs	Knowledge, data and tools produced by the project will be accessible for follow-up projects and initiatives working in the same field.

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4. Methodology of the stakeholder mapping

4.1. Stakeholder mapping workshop

A first stakeholder mapping workshop was held during the CROSSEU kick-off meeting in Bucharest on 1 February 2024. This workshop was aimed at creating a first outline of the stakeholders that were targeted by the project partners. This workshop was held online and on-site to ensure that all partners might participate and put together possible stakeholder groups.

To help categorise the type of stakeholders the CS might want to reach, a framework was designed based on the preliminary identification of sectors concerned by the CS, as listed in the Grant Agreement.

The mural below (Figure 4) is available in an enlarged version in Section 5.

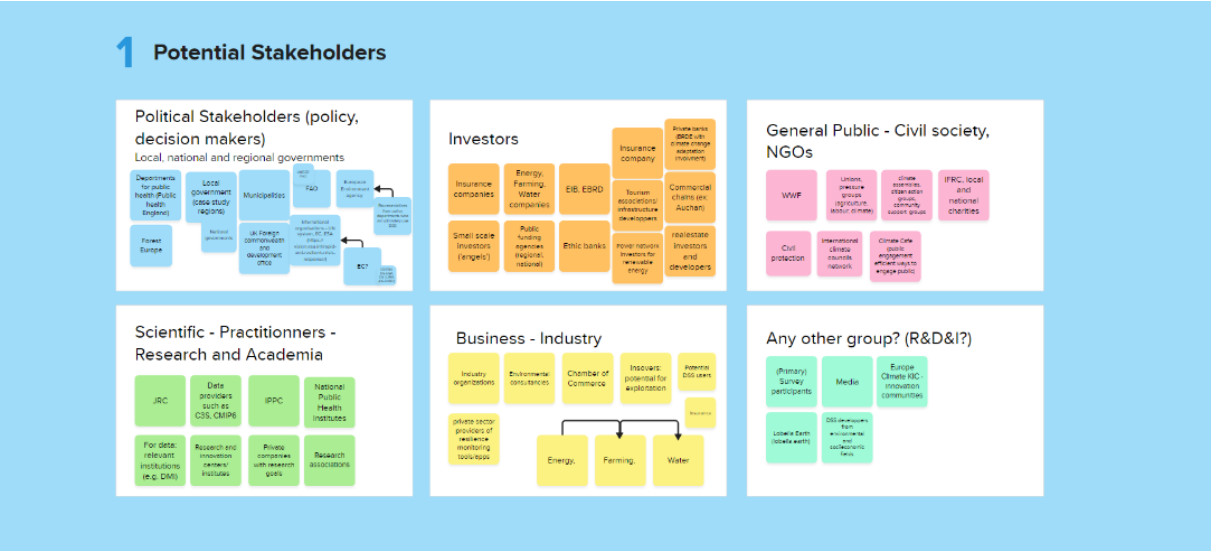

Figure 4: Extract of the mural filled by partners at CROSSEU KoM

The types of stakeholders identified by the partners during this workshop vary in terms of precision and audience. Some stakeholders are quite precise while others belong to wider categories. In this workshop, partners identified specific stakeholders they are in contact with or want to connect with. While this approach has proven beneficial in identifying potential stakeholders, the need for a more refined definition of stakeholder requirements tailored to partners' respective CS was observed.

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The high-level mapping served to carry out a more detailed mapping of sub-categories, target institutions, specific stakeholder interests, needs and challenges.

4.2. Form per case study and work package

An additional form has been sent to all partners responsible for CS (Figure 5).

This form had the objective of detailing:

- The level of knowledge of the stakeholders needed.
- If the partners are already in contact with some of them.
- The needs regarding how CROSSEU can help.
- The type of engagement activities that are planned.

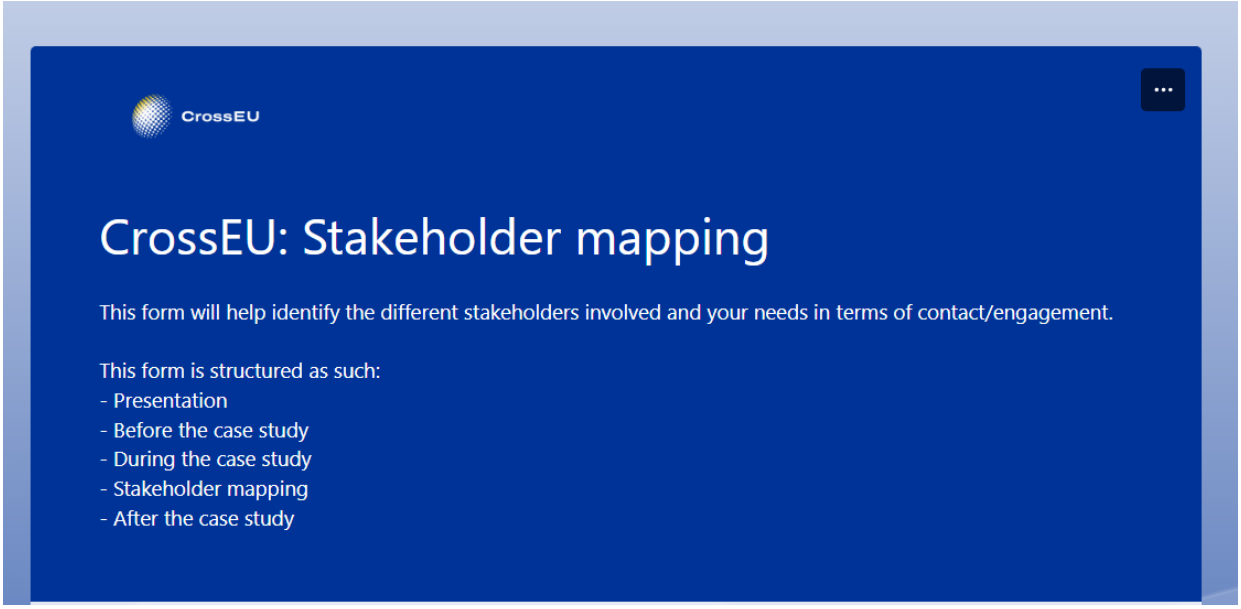

Figure 5 : CROSSEU Stakeholder mapping form extract

This present deliverable was also reviewed by partners to add any missing stakeholder mapping information.

The mapping will be updated throughout the project as partners gather additional insight during engagement activities (see Section 7).

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5. The mapping

5.1. The cross-sectoral stakeholder groups

The identified stakeholder groups are the following:

- Decision- and policy-makers (Local, National, European)
- Investors
- Civil society (NGOs, citizen communities)
- Scientific-Practitioners-Research and Academia
- Business-Industry
- Other

The stakeholders have been identified in the following sectors:

- Agriculture
- Biodiversity
- Energy
- Finance
- Food security
- Forestry
- Health
- Insurance
- Migration
- Social justice
- Tourism
- Transport
- Water

As referenced in Section 4, a stakeholder mapping workshop was made during the kick-off meeting of the CROSSEU project. This quick exercise, as we can see in Figure 6, was to make a first brainstorm of relevant stakeholders for the project. It contains discrepancies and the categories of stakeholders have been refined since, as descripted above. However, this base was an interesting exercise to help partners identify sectors and specific stakeholders that might not have been previously considered.

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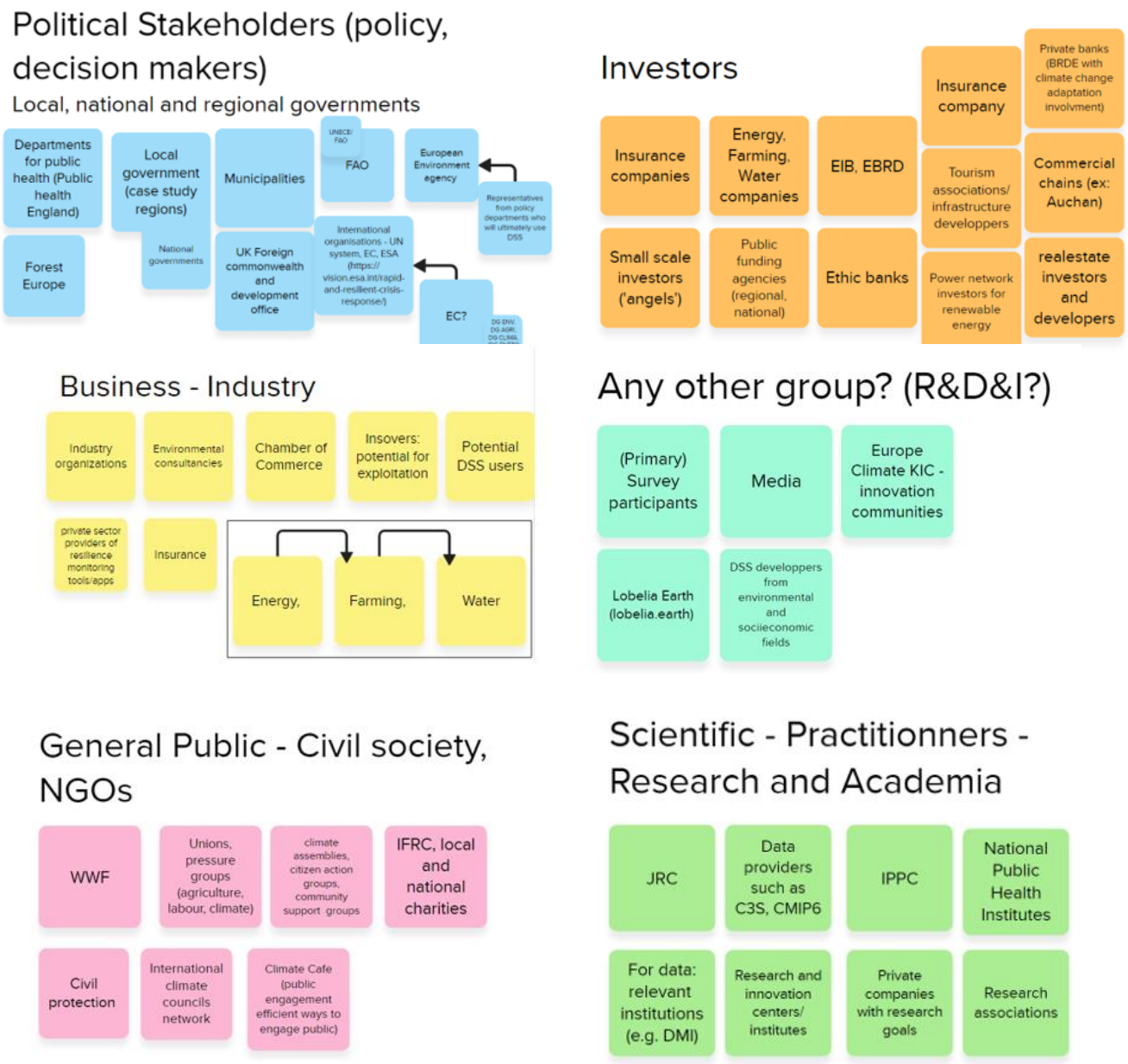

Figure 6 : Screenshots of the stakeholder mapping workshop

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5.2. The case studies

As the DSS is based on specific CS and regions, the priority is to identify the stakeholders that will effectively feed the CS and the data that the partners need. Those CS and STLs are organised in Table 4 as follows:

Table 4: The case study objectives (CS)

Case study	Objectives	Most impacted sectors	Partner Lead and contributors
The impact of the unprecedentedly hot decade (2010–2019) on the health sectors in the United Kingdom and Czech Republic	Analyse the links between heatwaves and detailed mortality data sets from selected countries.	Health Social justice Migration Finance Insurance	CZU Hereon Meteo Ro WMO DTU K&I
The impact of the 2018-2022 multi-year drought on agriculture and food security in Central and South-Eastern Europe (SEE)	Investigate: (1) features of the physical risks (2) disruptive SE fluxes that increased competition for and pressure on land, groundwater resources and rare ecosystems; (3) range of the SE drought-related risks, societal and policy interventions to secure food supply in the context of post COVID-19 transformation and geopolitical crisis.	Agriculture Food security Water Energy Forestry Biodiversity Tourism Social justice Migration Finance Insurance	MeteoRo BOKU UEA WMO Hereon UNIPD
Storm damages in South Western Denmark and Northern Germany	Investigate: (1) Impacts of flooding events on land use (2) Assessment of damage costs and risks of flooding events as	Agriculture Transport Health Tourism Biodiversity	DTU UNIPD K&I BOKU Hereon

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	inputs to decisions on adaptation measures (3) Establishment of open source digital GIS data system for land use and flooding risks.	Water Energy Social justice Migration Finance Insurance	
Valuation of social benefits of floods and flash floods adaptation and mitigation in Northeastern Italy	(1) Assess the magnitude and frequency of current and future impacts, and of their plausibility (2) Identify effective M&A strategies for relevant policy fields under a range of impact scenarios (3) Monetize the benefits that M&A strategies could provide to society in alternative impact scenarios (4) Explore how the social benefits of M&A strategies vary across different shares of the population.	Agriculture Transport Tourism Biodiversity Water Energy Infrastructure	DTU UNIPD K&I BOKU Hereon
Snow-related hazard risks in the European Alps and Carpathians under different climate scenarios and impacts on the tourism sector and mountain communities.	(1) Assess the observed and projected CC-related impacts and changing the damage potential of snow avalanche on tourism activities and life of mountain communities (2) Establish an upscaling framework of the snow avalanche risk under different climate M&A scenarios. (3) Examination of the effects in other relevant sectors and policy fields.	Tourism Forestry Transport Social justice Migration Finance Insurance	MeteoRo UB K&I BOKU Hereon

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Shifting climate seasonality and water availability: risks for socio-ecological systems in the Lower Danube (LD)	(1) Assess the multiple impacts derived from the shifting climate seasonality, diminished water availability and increasing occurrence of extreme events on the socio-ecological systems (2) Empower practice stakeholders with co-developed tools and methodologies for rapid analysis and assessment of the CC impact on key ecosystem services (ES) and human well-being in the sectoral CCHs of the LD region.	Agriculture Water Biodiversity Health Energy Social justice Migration Finance Insurance	UB MeteoRo K&I BOKU CZU DTU Hereon
Impacts on energy demand and energy security in systems with high shares of renewable energy from heatwaves, drought and storms concurrent climate hazards on energy systems in Europe	(1) Assess the impacts on the electricity system under different assumptions of generation mix and cooling demand (2) Assess the supply side perspectives and the impacts on consumers and behavioural responses (3) Needs for policy adaptations jointly developed with practice stakeholders.	Energy Social justice Migration Finance Insurance	WEMC DTU EDF K&I Hereon
Transboundary effects on agriculture and labour productivity due to climate impacts in the rest of the world.	(1) Assess how CC impacts in other regions of the world will affect the production, consumption and trade of agricultural and non-agricultural goods in Europe, and (2) Assess the costs and benefits of adaptation measures	Agriculture Social justice Migration Finance Insurance	UCL MeteoRo K&I Hereon UNIPD UB

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	applied in the two impact categories, under different scenarios and ambitions.		

5.3. Stakeholders by Case Study

As the CS are all managed by different teams in different countries, and CROSSEU is still in the beginning, the stakeholders' group/list/characteristics depends of the level of advancement of each team in charge of the CS. This mapping will be updated and might evolve throughout the project.

The stakeholders listed below have been listed according to the methodology described in Section 4, as well as the ones previously listed in the Grant Agreement. They are a congregation of the Grant Agreement, the stakeholder mapping workshop the kick-off meeting of the project and the online form sent to the partners.

5.3.1. CS1 - Heat - The impact of the unprecedentedly hot decade (2010–2019) on the health sectors in the United Kingdom and Czech Republic. (Table 5)

Table 5: CS1 stakeholders identified

Category	Stakeholder groups/names identified
Government and Policy	Representatives of municipalities and NUTS 3 regions (Prague, Liberec region) - CZ European Commission relevant agencies Regional and national DRR and civil protection agencies – CZ and UK
Research & Academia	Representatives of the academia – CZ and UK
Health	Representatives of the National institute of Public Health, Regional emergency departments - CZ
Meteorology	National Meteorological/hydro agencies:

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	Czech Hydrometeorological Institute - CZ

An initial meeting with stakeholders for CS1 has been planned. Engagement activities include interviews, focus groups, and questionnaires to foster meaningful collaboration.

5.3.2. CS2 - Drought - The impact of the 2018-2022 multi-year drought on agriculture and food security in Central and South-Eastern Europe (SEE) (Table 6)

Table 6: *CS2 stakeholders identified*

Category	Stakeholder groups/names identified
Government and Policy Representatives	Ministry of Environment, Water and Forests - RO Ministry of Agriculture and Rural Development - RO Municipalities (public administration) National Platform for Disaster Risk Reduction - RO Federal Ministry Republic of Austria Climate Action, Environment, Energy, Mobility, Innovation and Technology - AT Amt der Burgenländischen Landesregierung - AT
Environment and Conservation	WWF Romania - RO
Agriculture and Farming	Romanian Farmers Association - RO Agricultural extension services – AT Fundația pentru Dezvoltarea Agriculturii - RO
Energy and Infrastructure	Hidroelectrica National Company - RO National Company for Road Infrastructure Administration – RO Nuclearelectrica National Company - RO
Water management	National Institute of Hydrology and Water Management - RO

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Tourism and Leisure	Tourism Industry
Research and Academia	Institute of Geography of the Romanian Academy - RO National Institute for Research and Development in Forestry "Marin Drăcea" - RO National Institute for Research and Development in Tourism - RO

Partners in CS2 have already conducted semi-structured interviews with land users at the beginning of the multi-year drought period.

Those answers will be complemented with additional semi-structured interviews, co-design workshops, questionnaires and/or evaluation forms to better understand how it led to adaptation in the cultural sector.

Some additional stakeholders must be identified in NGOs, local municipalities, and the tourism industry.

5.3.3. CS3 – Storm - Storm damages in South Western Denmark and Northern Germany. (Table 7)

Table 7: CS3 stakeholders identified

Category	Stakeholder groups/names identified
Local Government and Authorities	Municipalities in Northern Germany and South-West Denmark – DE, DK Emergency management authorities– DE, DK Harbour authorities -DE, DK Regional public authority – DE, DK Inter-ministerial Working Group for the Implementation of the Sendai Framework – DE, DK
Private Sector (and independent organisations)	Private company (Hydro & meteo GmbH) - DE

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	Private companies involved in offshore wind power in the region serviced from the harbours – DE, DK Independent think-tank – DE, DK

The partners in charge of this case study will base the engagement activities on an already actively engaged stakeholder community in South Western Denmark and Northern Germany.

Partners have yet to initiate contact with some of the stakeholders mentioned above. Efforts to engage them will begin as the project progresses. Engagement activities primarily involve in-person discussions, including workshops, to facilitate dialogue and collaboration among stakeholders.

5.3.4.CS4 - Storm - Valuation of social benefits of floods and flash floods adaptation and mitigation in Northeastern Italy. (Table 8)

Table 8: CS4 stakeholders identified

Category	Stakeholder groups/names identified
Government & Tourism	Regione Veneto - Osservatorio del Turismo Regionale - IT
Agriculture & Energy	ARPA Veneto - IT
Water management	Ufficio Idrografico Bolzano - IT Servizio Bacini Montani Trento - IT
Water management & Infrastructure	Viacqua - IT
Environmental Conservation & Management	Parco Nazionale Dolomiti Bellunesi - IT
Transport & Infrastructure	Azienda Nazionale Autonoma delle Strade, Veneto and Friuli Venezia Giulia - IT

In this case study, partners are mostly in contact with the stakeholders they wish to involve. These stakeholders operate at various levels (regional, local) and across different sectors.

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Engagement activities will take the form of consultation, and discussion groups with stakeholders; partners are in contact with and network in the concerned areas.

The first workshop will take place on 27th March 2024, and will allow to co-create impact scenarios and M&A strategies. Regular feedback will be gathered to ensure the way the study is conducted is in accordance with the needs of the stakeholders.

5.3.5. CS5: Snow - Snow-related hazard risks in the European Alps and Carpathians under different climate scenarios and impacts on the tourism sector and mountain communities. (Table 9)

Table 9: CS5 stakeholders identified

Category	Stakeholder groups/names identified
Government	National Platform for Disaster Risk Reduction – RO, AT Ministry of Environment, Water and Forests– RO, AT Municipalities – RO, AT
Tourism	Ski Resorts Administrators – RO, AT Tourists – RO, AT Tourists operators – RO, AT
Civil protection	Avalanche Warning Service in Sibiu - RO Salvamont Romania RO Bergrettung Tirol – AT
Academia	National Institute for Research and Development in Tourism – RO National Institute for Research and Development in Forestry "Marin Drăcea" - RO
Forestry	Conservation Carpathia (NGO) - RO
Transport	National Company for Road Infrastructure Administration - RO

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Insurance	Insurance companies – RO, AT
Environment	OGSL - AT

The partners in this case study have already identified a list of potential organisations to engage in crisis simulation exercises, co-design workshops, questionnaires, interviews, and evaluation forms. They will be engaged to identify needs, barriers, and recommendations, and will be mobilized in the testing of the DSS platform and functionalities.

A further identification of stakeholders in the tourism industry, NGOs and local municipalities is still needed.

5.3.6. CS6 – Indirect – Shifting climate seasonality and water availability: risks for socio-ecological systems in the Lower Danube (LD) (Table 10)

Table 10: CS6 stakeholders identified

Category	Stakeholder groups/names identified
Government	Ministry of Environment, Waters and Forestry - RO Ministry of Agriculture - RO Ministry of Energy - RO Ministry of Structural Funds - RO National Platform for Disaster Risk Reduction - RO
Agriculture	National Agency for Fisheries and Aquaculture - RO Agricultural Research and Development Station – Braila - RO
Water management	National Administration "Romanian Waters" - RO Water company - RO
Forestry	Romanian Forest Administration – Brăila Branch - RO

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Biodiversity	WWF – World Wide Fund for Nature Balta Mica a Brailei Natural Park Administration - RO
Health	Skin Cancer Research Association - RO
Navigation	To be identified

The partners in this case study have listed some identified stakeholders to co-build scenarios based on the local socioecological systems. They will rely on focus groups, questionnaires, interviews and simulation exercises to gather data during the case study. Some stakeholders in navigation and water companies are yet to be identified.

5.3.7. CS7 - Impacts on energy demand and energy security in systems with high shares of renewable energy from heatwaves, droughts and storms concurrent climate hazards on energy systems in Europe (Table 11)

Table 11: CS7 stakeholders identified

Category	Stakeholder groups/names identified
Energy	Distribution System Operators
Infrastructures	Transmission System Operators European Network of Transmission System Operators for Electricity RTE in France
Finance	European Investment Bank

The partners in this case study will gather relevant stakeholders that have faced these types of challenges on previous occasions. Government and power plant stakeholders will need further identification. Interviews and discussion groups are to be conducted and establish links between the energy sector and finance.

Policy options will be co-developed in collaborative workshops.

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5.3.8. CS8 - Transboundary effects on agriculture and labour productivity due to climate impacts in the rest of the world. (Table 12)

Table 12: CS8 stakeholders identified

Category	Stakeholder groups Identified
Research	Joint Research Centre

The partners involved in CS8 will rely on the same stakeholders as the other CS, as they are not bound to a specific region. They will identify all the stakeholders that might be interested in the transboundary effects on agriculture and labour productivity, for example in case study 2. They will use the other CS meetings and interactions to avoid stakeholder fatigue.

5.4. WP4 - Governance analysis and recommendations for policies and investments

An additional mapping will be necessary for WP4.

The identification of stakeholders will depend on the identification of relevant policies. Interviews will be conducted to explore the policy gaps and elaborate the document analysis conducted by WP4. However, WP4 could benefit, among others, also from most (if not all) the stakeholders identified and that will be further identified in the 8 case-studies.

5.5. EU and International level stakeholders

Some relevant EU and International level stakeholders were identified to be included in the engagement activities, as they have gathered a precious amount of data and government policies that will need to be included in the analysis.

- United Nations systems
- Food and Agriculture Organisation of the United Nations – FAO
- United Nations Economic Commission for Europe (UNECE)
- World Meteorological Organization (WMO)
- United Nations Environmental Program (UNEP)
- International climate council networks
- European Commission

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  - DG ENV
  - DG AGRI
  - DG CLIMA
  - DG ENTR
- European Commission's Joint Research Centre.
- European Space Agency
- European Environment agencies
- International Plant Protection Convention – IPPC
- European Investment Bank - EIB
- European Bank for Reconstruction and Development – EBRD
- Forest Europe
- Climate-Kic

5.6. Upscaling

After the CS and DSS are completed, similar regions in Europe, in the UK, and possibly worldwide, could benefit from the results.

The extensive stakeholder mapping and engagement made during the project will be the base of a wider mapping of end-users of the DSS and CROSSEU framework.

Similar stakeholders as the ones involved in the CS will be contacted to present them the results of CROSSEU and the benefits to use the DSS.

5.7. Synergies between case studies

As the CS are addressing some common SE sectors and problematics, synergies can be found to address some stakeholder needs (Figure 7). The exchange of good practices and knowledge will enhance the chances of meeting the stakeholders' needs. Some activities as well can be tailored for those specific groups and SE sectors.

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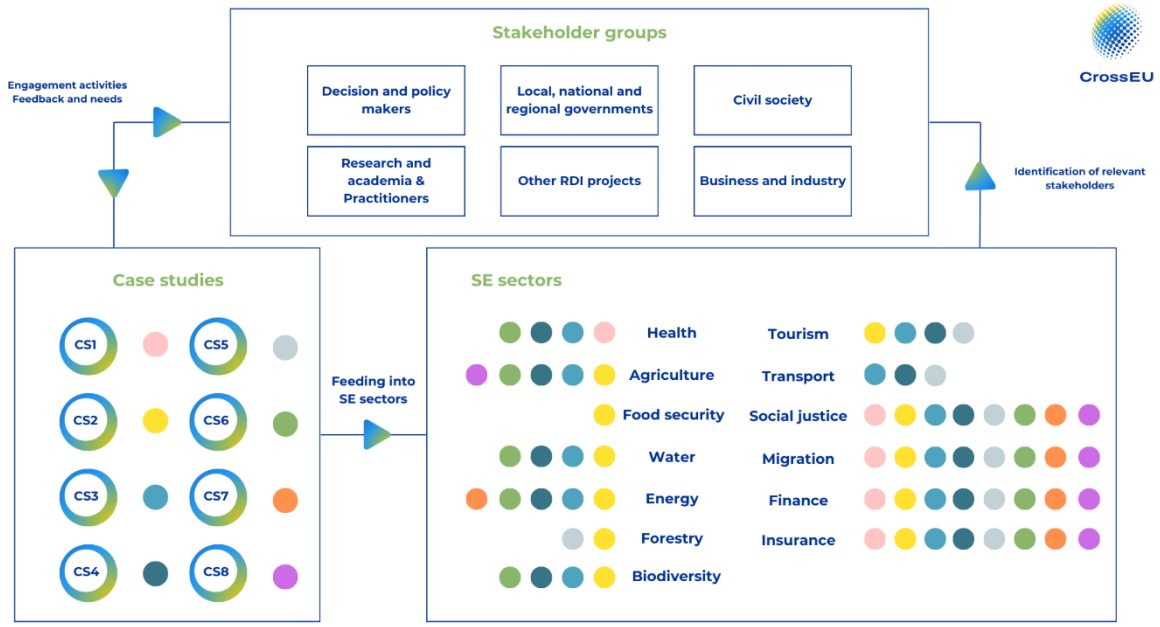

Figure 7: Synergies between case studies

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6. Communication tools

6.1. Communication tools

Communication materials will be produced as part of the CROSSEU Communication and Dissemination Plan and overall communication strategy, detailed in Deliverable 5.2 and led by T5.2.

These will include:

- Social media accounts (LinkedIn and X)
- A printable poster
- Flyers
- A rollup
- PowerPoint and Word templates,
- Project website
- Online meeting backgrounds

All the communication material and channels will be used to present the project to the stakeholders and will facilitate their engagement. A dedicated graphic identity will help build recognition and facilitate the engagement of stakeholders.

During the engagement activities, the stakeholders involved will be encouraged by partners to follow and interact with CROSSEU on social media, as well as visit the website. That way, they get to stay updated on the latest developments of the project and are kept engaged.

The partners will also ask the stakeholders if they agree to be tagged on social media by CROSSEU, at personal and organization level. The partners will give to WP5 communications team the names of the organisations present in the engagement activities, so the project can tag them on social media (when the account exists).

This authorization can be revoked by the stakeholders at any moment, by contacting contact@crosseu.eu

The flyer will have an online version and will be printed on demand, depending on the engagement activity nature.

6.2. Specific communication needs

In addition to those tools, specific types of communication materials have been identified by partners, to facilitate contact with stakeholders, especially the ones they are not in contact with yet:

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- A standardised PowerPoint presentation to showcase the project's details and objectives to stakeholders during the workshops, or interviews.
- Formal project introduction letters to communicate with institutions, depending on the case study needs.

These additional tools are especially relevant for engagement activities as listed in Section 7.

Continuous communication efforts are crucial for ongoing participation in project implementation, especially in community-based initiatives.

These different forms of communication are crucial in ensuring clarity, engagement, and successful outcomes throughout the project lifecycle.

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7. Engagement activities

7.1. Co-design workshops

Under the direction of WP1, two separate types of workshops will be organised at the beginning of the project to gather project partners and sectoral stakeholders at a local/national level and at an international level.

The local/national co-design workshop will focus on the eight storylines CS as defined in the Grant Agreement and will gather the needs and expectations of the stakeholders. The partners in charge of the CS will conduct the workshops individually by the end of M4, depending on the type of data they need. Relevant information will be collected through open discussions and online surveys during the workshops.

The global workshop, also organised by the end of M4, will gather some of the local/national stakeholders, as well as European-level stakeholders. This workshop aims to harmonise the approach of the CS and prepare the upscaling phase of the project.

At least 3 co-design and co-production of knowledge workshops will be held to co-design the DSS.

7.2. Additional engagement activities

The stakeholders will be engaged with different interactive methods:

- Interviews
- Questionnaires
- Focus groups
- Simulation exercises
- Evaluation forms

The methods will vary according to the type of needs as well as the advancement of the project and have been detailed by each case study in Section 5. They will aim to gather stakeholder input, and help implement it in the most useful ways, tailored to the needs of the case study region.

All data that collected will be in compliance with GDPR regulations.

Each partner in charge of the CS will decide of the best tool to engage with its specific stakeholders. Work package 1 will make sure that those different methods still complete the goals set to build the DSS.

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The communication tools described in Section 6 will come as a support to facilitate engagement.

7.3. Dissemination activities

The dissemination activities led by T5.3 will enable even more contacts with additional stakeholders and target audiences. Events, conferences, and publications are important moments in the project and will increase potential opportunities and synergies.

The dissemination activities of CROSSEU include:

- At least 3 interactive webinars to engage stakeholders and present project findings.
- Collaborations with related projects and networks at various levels.
- An annual newsletter to update stakeholders, partners and target groups on project progress.
- Visual materials like booklets and factsheets to showcase project outcomes.
- Participations in relevant conferences and events to share project results.
- At least 3 joint meetings with other RDI projects.
- At least 12 publications in peer-reviewed journals and open-access repositories.
- Dissemination of public reports and publications through various platforms, including the project website and partners' portals.

The dissemination activities will be detailed in the deliverable 5.2 Dissemination and Communication plan.

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8. Stakeholder Engagement Guidelines

All CROSSEU partners are encouraged to reach out and collaborate with the stakeholders highlighted in the CS above (see Section 5), as some partners may still need to connect with certain stakeholders and may find synergies among those groups.

Partners should also consult and inform lead partners about their engagement activities with specific stakeholder groups.

Additionally, partners are required to fill out an Excel document provided by WP leaders to them to update the status of their stakeholder contacts. This will help in keeping this document up to date.

The database will then be built by WP1 and stored on a read-only Excel file in a restricted SharePoint folder. Access to the folder will be restricted to WP leads and nominated representatives as required. Other partners will be able to consult and use the file but will not be able to make changes nor download the file.

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9. Key Performance Indicator

To ensure that the project gather enough engagement from the stakeholders, a Key Performance Indicator (KPI) have been defined and is to be achieved by the end of the project (Table 13).

Table 13: Key Performance Indicator

KPI	Means of verification and target value
A ready-to-use science-based DSS, Operational at the end of the project, delivering actionable co-developed knowledge	Downloads/visits, stakeholder endorsements; About 500 registered sectoral users from at least 20 countries

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Conclusion

The Stakeholder mapping and engagement plan developed in this document will contribute to prioritising stakeholder outreach in line with the project's objectives and milestones and more specifically with the CS of the project. It will be updated as the partners reach a more detailed level of the stakeholder mapping.

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CROSSEU Partners

Meteo Romania	WORLD METEOROLOGICAL ORGANIZATION	UNIVERSITÀ DEGLI STUDI DI PADOVA / TESAF
K&I Conoscenza e Innovazione	Helmholtz-Zentrum hereon	LGI sustainable innovation
EDF	BOKU	DTU
UNIVERSITY OF BUCHAREST	CZU	UEA University of East Anglia / NORWICH BUSINESS SCHOOL
UCL	WEMC World Energy & Meteorology Council	UKRI UK Research and Innovation

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