



DISSEMINATION AND COMMUNICATION PLAN, V3

ClimEmpower Work Package 5, D5.4, v3



Project ClimEmpower: User Driven Climate Applications Empowering Regional Resilience

Work package 5, Deliverable D5.4

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List of Acronyms

AIT	Austrian Institute of Technology GmbH (ClimEmpower Coordinator)
CC BY 4.0	Creative Commons Attribution 4.0 International license
CFS	Certificate on the Financial Statements
CSF	Case Study Facilitators
CT	Coordination Team
DEC	Dissemination, Exploitation and Communication
DMP	Data Management Plan
DoA	Description of Action
DOI	Digital Object Identifier
DPO	Data Protection Officer
EC	European Commission
ECMWF	European Centre for Medium-Range Weather Forecasts.
FAIR	Findable, Accessible, Interoperable and Reusable
GA	Grant Agreement
HE	Horizon Europe
ICARIA	Improving ClimAte Resilience of crltical Assets (HE project)
INSPIRE	Infrastructure for Spatial Information in Europe
IPCC	Intergovernmental Panel on Climate Change
IPR	Intellectual Property Rights
JSON	JavaScript Object Notation (data format)
JSON_LD	JSON for Linking Data (data format)
KISS	Keep It Simple, Silly
KPI	Key Performance Indicator
MAIA	Maximising impact and accessibility of European climate research (HE Coordination Action)
OGC	Open Geospatial Consortium (Standardization organisation)
PAB	Project Advisory Board
PMT	Project Management Team
PSB	Project Steering Board (also known as “General Assembly”)
SM	Strategic Managers

SO	Strategic Objective
SyGMa	Grant Management System
URI	Uniform Resource Identifier
WP	Work Package
WPL	Work Package Leader

Glossary

Climate impacts	The consequences of realized risks on natural and human systems, where risks result from the interactions of climate-related hazards (including extreme weather and climate events), exposure, and vulnerability. Impacts generally refer to effects on lives; livelihoods; health and well-being; ecosystems and species; economic, social and cultural assets; services (including ecosystem services); and infrastructure (based on IPCC, 2018)
OpenAIRE	Pan-European open and sustainable scholarly communication infrastructure harvesting research output from connected data providers (https://www.openaire.eu/).
Zenodo	A general-purpose open repository developed under the European OpenAIRE program and operated by CERN (https://zenodo.org/)

Executive summary

This deliverable presents the **third and final version of the ClimEmpower Dissemination and Communication Plan** and provides a consolidated assessment of communication and dissemination activities implemented throughout the project period. Building on D5.2 and D5.3, it reviews the implementation of the communication strategy, reports final results against the planned activities and key performance indicators, assesses the effectiveness of the approaches used, identifies lessons learned and outlines measures supporting the continued visibility, accessibility and use of ClimEmpower results beyond the formal end of the project.

During the project, communication and dissemination activities progressively evolved in line with the maturity of ClimEmpower results. The early phase focused on establishing the project identity, creating the website and communication channels, raising awareness, building Communities of Practice and engaging regional stakeholders around climate-resilience challenges. As scientific, technical and regional outputs became available, the communication focus shifted towards the dissemination of concrete project results, practical stakeholder engagement, validation, replication and preparation for future uptake.

The **ClimEmpower website** served as the central communication and results repository and recorded **7,389 visitors** during the project period. Its role expanded during the second half of the project, moving from general project communication towards long-term access to results, regional outputs, policy-oriented materials and educational resources. Educational content developed during the project was further organised into a web-based **Educational Library**, supported by AI-assisted functionality and several navigation pathways designed to make climate-resilience knowledge easier to access and adapt to different user needs.

Communication activities were supported by social media, newsletters, news items, press releases, visual materials, factsheets, infographics, flyers, policy-oriented outputs and region-specific dissemination. Social media performance varied across platforms and implementation periods, while project and partner channels continued to support the promotion of events, scientific results, regional activities and newly available resources. The communication portfolio became increasingly focused on reusable outputs that could remain relevant after project completion.

Scientific dissemination maintained a strong presence throughout the project. ClimEmpower results were presented through scientific and professional conferences, workshops, publications and other specialised dissemination activities. The target related to participation in **at least 20 scientific and professional events** was reached. The publication portfolio also expanded during the second half of the project, although the original target for peer-reviewed journal publications was not fully achieved by the formal project end.

Regional stakeholder engagement remained one of the central elements of the communication and dissemination strategy. The regional workshop cycle progressed from stakeholder consultation and indicator prioritisation to trial preparation, hands-on validation and replication activities. Across the full project period, at least **253 participant attendances** were documented within the regional workshop cycle. Five structured regional trials enabled stakeholders in Sicily, Andalusia, Osijek-Baranja County, Central Greece and Troodos to assess mature

ClimEmpower outputs under realistic regional conditions. Five follower-region mini-trials extended this process to new territorial contexts and explored the transferability, scalability and future exploitation potential of project results.

The final project phase also included the **ClimEmpower Final Conference, “Turning Climate Science into Regional Action”**, held online on 24 July 2026 with **61 participants**. The event brought together the scientific, technical, regional, educational and sustainability dimensions of the project. The three originally planned EU-level workshops were consolidated into this single final event after the requested project extension was not approved and the remaining implementation period became too compressed to organise three separate events at meaningful intervals. The conference covered the planned EU-level themes, including applicability of project results, educational resources, the ClimEmpower Toolbox and technical solutions, regional experience, sustainability, exploitation, replication and future cooperation.

Some of the original quantitative dissemination and participation targets were **not fully reached in all categories**. The final assessment shows that this was influenced by several factors, including the evolution of planned workshops into smaller and more targeted validation activities, cumulative stakeholder involvement over the three-year project period, institutional workload and limited stakeholder availability, the concentration of several final activities within the last implementation months and the shortened timeframe resulting from the non-approval of the requested extension. In the final phase, the emphasis increasingly moved from maximising attendance towards engaging stakeholders able to provide meaningful feedback on the usability, relevance and potential future uptake of project results.

The implementation experience showed that quantitative reach and quality of engagement should be considered as complementary measures of communication effectiveness. Larger audiences remain relevant for awareness raising and broad dissemination, while co-creation, validation and replication activities benefit from smaller and more targeted groups of practitioners, decision-makers and potential users. Hands-on testing, regional examples, interactive discussion and direct links to stakeholders' professional responsibilities generated particularly useful evidence on usability, localisation, data requirements, interoperability and institutional conditions for future adoption.

Monitoring throughout the project supported adjustments to communication formats, channels and priorities. The final phase placed stronger emphasis on mature and reusable project outputs, including risk and resilience methodologies, regional risk maps, resilience indicators, recommendations, Policy Recommendation Letters, software tools, educational resources and training materials. Regional adaptation of communication, use of local partner networks and a flexible combination of face-to-face, online and hybrid formats helped maintain stakeholder interaction under different implementation conditions.

An important final lesson is that the communication of mature project results requires sufficient time after technical outputs have reached a stable form. Several key ClimEmpower results became available during a highly concentrated final implementation period. For this reason, the consortium is continuing targeted dissemination beyond the formal project end through the planned **ClimEmpower Legacy Event: “Practical Tools for Regional Climate Resilience”**, scheduled for 20 October 2026. The event will focus on the sustainability, accessibility, replication and long-term use of project results and will present practical resources through three themes: understanding climate risks, planning and decision-making, and capacity build-

ing and knowledge transfer. The Legacy Event is not intended to retrospectively replace project-period activities or modify achieved KPIs, but to extend the dissemination process and create additional opportunities for uptake and continued use of mature ClimEmpower outputs.

The final communication and dissemination portfolio provides multiple pathways for continued access to ClimEmpower results by scientific, regional, policy, educational and wider stakeholder communities. The combination of the project website, scientific dissemination, regional validation, follower-region replication, policy-oriented materials, educational resources, technical tools, the Final Conference and planned legacy activities supports the transition from project communication towards the **continued accessibility, practical application, replication and long-term use of ClimEmpower results after project completion.**

1. ClimEmpower summary

ClimEmpower is a Horizon Europe collaborative research project dedicated to addressing the ongoing Climate Crisis in Europe by empowering the regional stakeholders in some of the most vulnerable European regions, Figure 1, is giving an overview of the project depicting the **reason** the project exists, **what** the aim of the project is, **where** it will take place, **how** it will do **what** it promises to do and **who** is involved in these activities. .

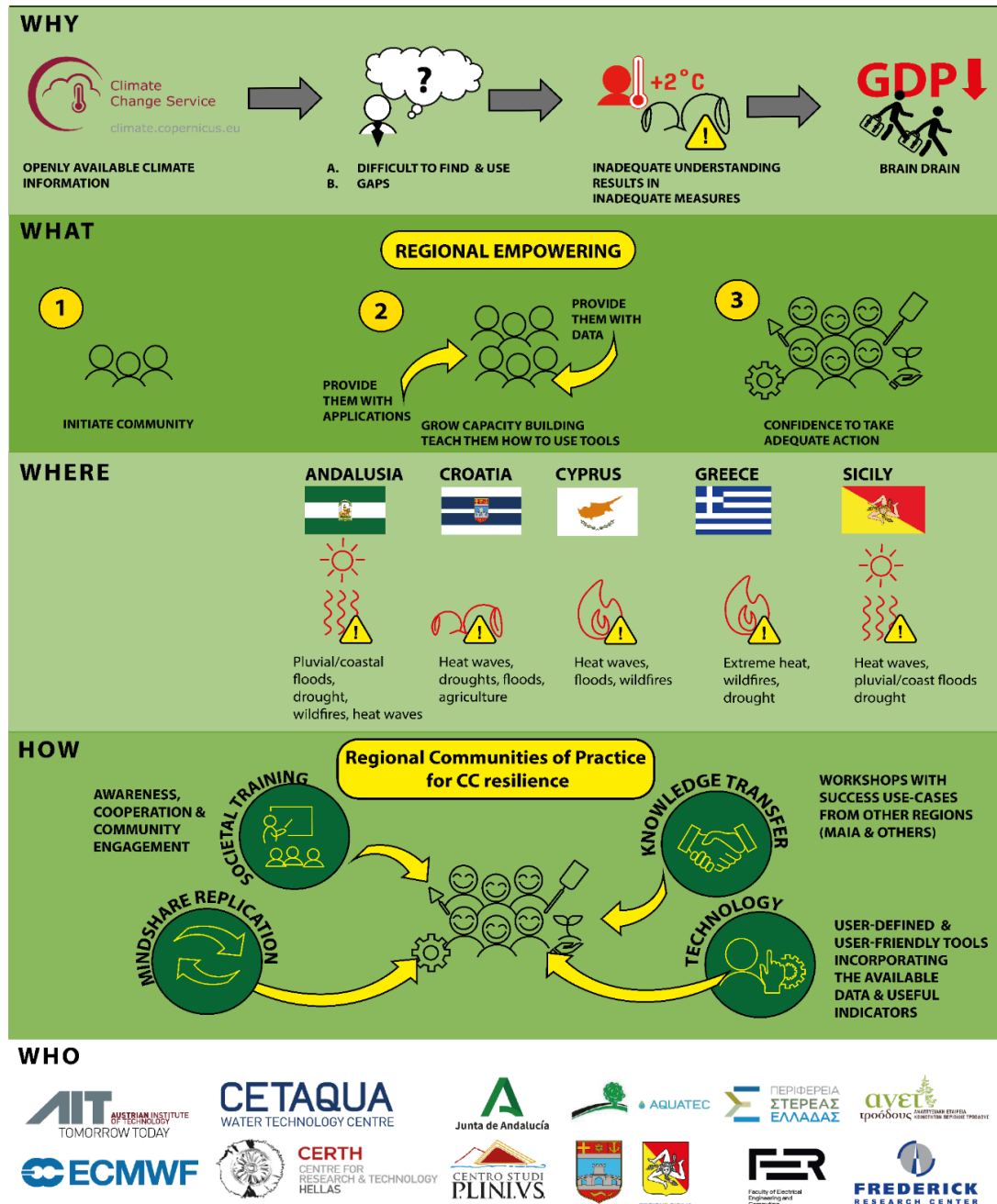


Figure 1: ClimEmpower at a glance: why, what, where, how, and who.

1.1 Project context

Climate risks result from a combination of hazards, exposure, and vulnerability (REF). Addressing all three aspects is crucial for an effective increase of regional resilience. However, exposure, vulnerability, and related aspects (such as adaptive capacity) strongly depend on available knowledge and climate literacy. Consequently, the global climate crisis frequently has a higher impact on socioeconomically vulnerable regions, since more affluent regions have a higher human and economic potential for addressing the issue. To maximize its impact, ClimEmpower has therefore chosen to address the EU regions featuring a combination of high potential CC impacts and low and/or stagnant regional GDP/capita. This is mainly the case for regions in South and Southeast Europe (Figure 2).

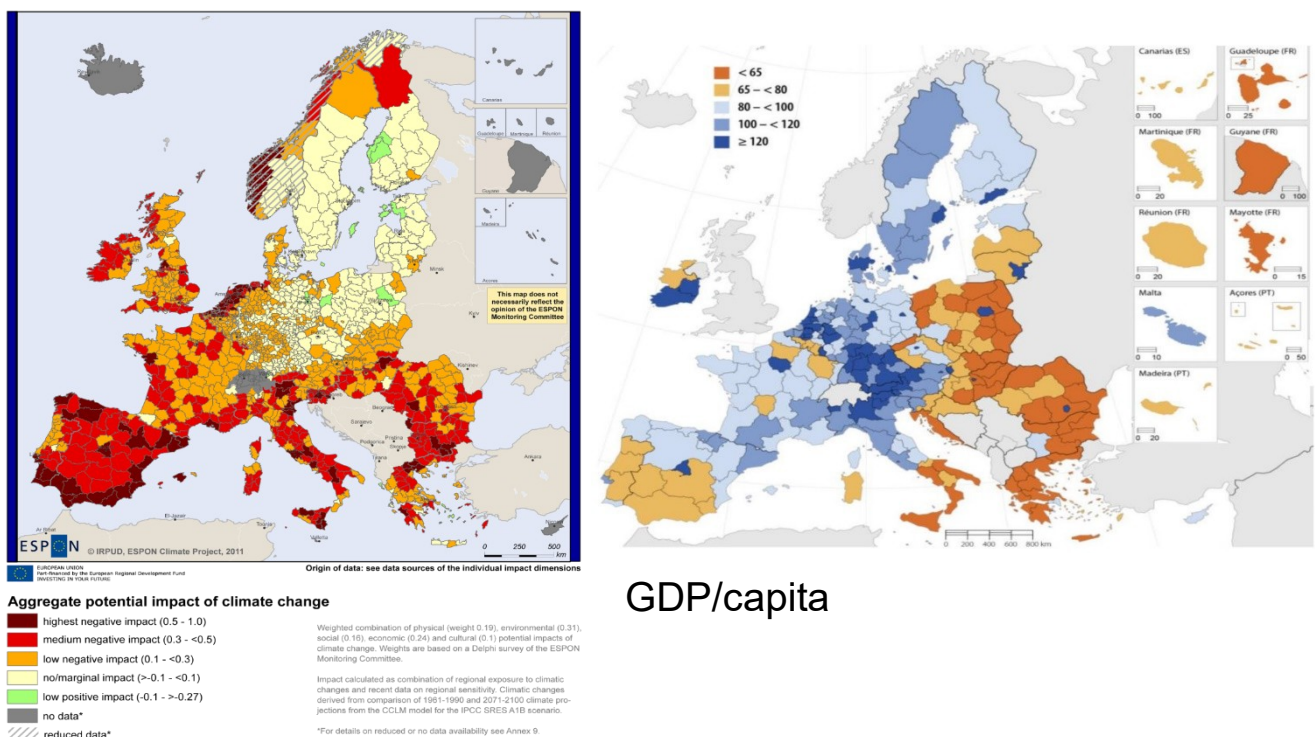


Figure 2.- aggregated potential impact of climate change (<https://www.espon.eu/climate-2012>); GDP/capita (based on <https://ec.europa.eu/eurostat/web/products-eurostat-news/-/ddn-20210303-1>)

The context the project addresses is thus one of an ongoing global warming, high regional vulnerability and low coping capacity of the participating regions, and the **overarching strategic objective of ClimEmpower** is to empower the Regional Authorities (RAs) and other Mission Users (MUs) in five EU-regions featuring a combination of exceptionally high climate hazards and exceptionally low coping capacity by improving their collective understanding of the Climate Change (CC) hazards, risks and resilient development pathways and support their knowledge-based regional planning and development through providing relevant data, knowledge and user-defined and user-friendly decision support applications.

1.2 Project objectives

To achieve this overarching goal, **ClimEmpower has identified six SMART¹ Strategic Objectives (SO)**, each one related to one or several work packages. The SOs have also been classified according to different categories: societal, contributing to improved dialogue, awareness, co-operation and community engagement as highlighted by the European Climate Pact (SO1, SO5); scientific, corresponding to research activities for advances beyond the state of the art (SO2, SO3); technological, suggesting and/or developing novel solutions, integrating state-of-the art and digital advances (SO4); and outreach, aimed at sharing ClimEmpower results to a broader scientific and non-scientific audience, including additional regions and communities, to maximize project impact (SO6).

- SO1 Understand regional backgrounds, challenges and expectations (WP1, societal)
- SO2 Address the gaps in availability and usability of CC data and services (WP2 and WP4, scientific)
- SO3 Identify, define, estimate, and communicate the climate impact/resilience indicators suitable for local end-users (WP2 and WP4, scientific)
- SO4 Simplify access to CC data and develop end user applications (WP3, technological)
- SO5 Empower the regions to activate and enhance their potential for addressing the climate change challenge (WP4, societal)
- SO6 Ensure the use and impact of the ClimEmpower outputs (WP4 and WP5, scientific and societal)

Key ambition of ClimEmpower is to **prove beyond doubt that CC-resilience should, and can, be an integral part of regional development everywhere in the EU and beyond it**. That is, we anticipate that the regional stakeholders will recognise that CC-resilient development pathways offer multiple benefits to them, including but not limited to higher quality of life and reviving economy, and that these can be understood using available data, tools, and services. The second key ambition of the project is to **help the regions address CC resilience in key community systems addressed in five ClimEmpower trials**.

The underlying philosophy of the project is to “**help the regions help themselves**”. This will be achieved through various mechanisms, including the co-creation and mediation of the regional “**Communities of Practice**”, provision of **Climate Change -resilience training materials**, as well as the provision and training regarding the use of user-centric data and services – including those that have already been made available through previous research projects and EU initiatives.

¹ Specific (related to WPs), Measurable (by relevant KPIs), Achievable (the WPs in which they will be achieved are listed), Realistic (since they are referred to and explained in the methodology section), and Timebound (each KPI is related to a deliverable and a month of achievement).

2 Introduction

2.1 Deliverable summary

This deliverable is part of WP5 - **Enhancing the Outreach and Impact** of the ClimEmpower project. As the third and final version of the Dissemination and Communication Plan, it provides a comprehensive overview and final assessment of the communication and dissemination activities implemented throughout the project lifecycle.

The deliverable reviews the implementation of the strategy defined in D5.2 and further developed in D5.3, assesses the effectiveness of the communication tools and channels used, and evaluates progress against the defined objectives and Key Performance Indicators (KPIs). It also summarises key achievements, challenges, lessons learned and good practices, and provides recommendations for sustaining the visibility, accessibility and use of ClimEmpower results beyond the formal end of the project.

2.2 Results and expected impact

This document represents the third and final version (D5.4) of the Dissemination and Communication Plan for the ClimEmpower project. It builds on the initial strategy defined in D5.2 and the progress assessment and strategic adjustments presented in D5.3.

While D5.2 established the overall dissemination and communication framework and D5.3 assessed the first phase of its implementation, D5.4 provides a final assessment covering the full project period. It reviews the implementation of planned activities, evaluates their effectiveness and results, and assesses their contribution to project visibility, stakeholder engagement, knowledge sharing and the uptake of ClimEmpower results.

The deliverable also examines how the communication and dissemination approach evolved during the project in response to project progress, stakeholder needs, monitoring results and lessons learned. The final assessment provides a basis for identifying successful approaches and areas where continued dissemination and use of project results can support ClimEmpower's impact beyond the formal end of the project.

2.2.1 Progress and key achievements

Throughout the project, ClimEmpower implemented a broad range of dissemination and communication activities aimed at reaching different stakeholder groups and supporting the visibility and use of project results. Key achievements include:

- increased project visibility through a combination of digital communication, participation in conferences and events, workshops, media activities and direct stakeholder engagement;
- strengthened engagement with regional authorities, policy makers, researchers, practitioners, potential end users, climate initiatives and other relevant stakeholders;
- maintained and expanded the project's digital presence through the project website, social media channels, newsletters, publications and other communication materials;

- supported the dissemination of key project results through targeted communication materials, including materials presenting ClimEmpower methods, tools, recommendations and other project outputs in formats adapted to different audiences;
- contributed to scientific dissemination through participation in scientific events, conferences and publication activities;
- supported knowledge exchange and wider outreach through regional and European-level events, workshops and cooperation with related projects and climate-resilience initiatives;
- used monitoring data, engagement metrics and stakeholder feedback to assess communication performance and adapt dissemination activities during project implementation.

D5.4 brings together the results of these activities and provides a final assessment of their implementation over the full project period. The assessment is based on the communication and dissemination objectives, planned activities and monitoring indicators defined in the previous versions of the Plan.

2.3 Relation to other work

D5.4 is closely linked to the activities and outputs developed across the ClimEmpower work packages. As the final version of the Dissemination and Communication Plan, it provides a horizontal overview of how project results have been communicated and disseminated to relevant target audiences.

Results from WP1, WP2, WP3 and WP4, including climate-related data and indicators, the ClimEmpower toolbox, educational materials and climate-resilience recommendations, have provided key content for dissemination to scientific, professional, regional and policy audiences.

D5.4 is also directly connected to other WP5 activities, including the project website, public and professional communication, scientific dissemination, workshops for followers and replicators, and liaison activities. It brings these activities together in a final assessment of their implementation and contribution to the project's communication and dissemination objectives.

The deliverable also maintains links with stakeholder engagement and WP6 project management activities, which support coordinated communication, risk management and the responsible dissemination and accessibility of project outputs.

2.4 Data, security, and ethics

2.4.1 Data accessibility and reuse

No (new) data sets relevant for ClimEmpower Data Management Plan were used or produced in preparation of this deliverable.

Project documents that were used in preparation ClimEmpower D5.3 are summarised in Table 1.

Table 1: Data used in preparation of ClimEmpower deliverable D5.3

Data set name	Format	Size	Owner & re-use conditions	Potential Utility within and outside	Unique ID
ClimEmpower Grant Agreement	PDF	5.2MB	Sensitive	The Grant Agreement is a legally binding contract between the consortium and the EC. The document is available on SyGMA.	GA number 101112728
ClimEmpower D6.1 Project Management Manual	PDF	1.8MB	Sensitive	Establishes project management.	Deliverable D6.1
ClimEmpower D6.3 Implementation plan and risk contingency plan v2	PDF	2.09MB	Sensitive	Establishes project implementation and defines risks.	Deliverable D6.3
ClimEmpower D6.8 Data management plan	PDF	1.4MB	Public	Establishes data management plan.	Deliverable D6.8
ClimEmpower D5.1 Project website	PDF	3.46MB	Public	Establishes project's website.	Deliverable D5.1
ClimEmpower D5.2 Dissemination and Communication plan, v1	PDF	1.19MB	Public	Establishes the ClimEmpower Dissemination plan	Deliverable D5.2
ClimEmpower D5.3 Dissemination and Communication plan, v2	PDF	1.93MB	Public	Discloses the results of ClimEmpower dissemination until m18 of the project	Deliverable D5.3
ClimEmpower D5.6 Stakeholder engagement plan and events report, v1	PDF	5.29MB	Sensitive	Establishes the stakeholder engagement plan.	Deliverable D5.6
Deliverable D5.7 Stakeholder engagement plan and events report v2	PDF	2,44 MB	Sensitive	Discloses the results of stakeholder engagement until m18 of the project	Deliverable D5.7

Deliverable D5.8 Stakeholder en- gagement plan and events report v3	PDF	2,44 MB	Sensitive	Discloses the results of stakeholder engagement until M36 of the project.	Deliverable D5.8
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2.4.2 Security and ethics

This deliverable is not considered sensitive in terms of ethics or security. Project outputs described in this deliverable have been screened for ethical issues before publication.

3 ClimEmpower Dissemination and Communication plan, v3

3.1 Final Dissemination and Communication strategy

Building on the dissemination and communication strategy established in D5.2 and further refined in D5.3, this third and final iteration provides a consolidated view of its implementation across the full ClimEmpower project period. It reflects how the communication approach evolved from initial awareness raising and stakeholder mobilisation towards dissemination of mature project results, regional validation, replication, sustainability and long-term accessibility of project outputs.

The main principles of the strategy remained consistent throughout the project: reaching relevant target audiences, increasing the visibility of ClimEmpower, supporting stakeholder participation and making scientific and technical results accessible and understandable to different user groups. At the same time, the implementation approach was adapted as project results matured, stakeholder needs became clearer and monitoring provided evidence on the effectiveness of individual channels and activities.

Communication and dissemination were implemented through a combination of the project website, social media, newsletters, press releases, scientific publications, conferences and professional events, dissemination materials, Communities of Practice, regional workshops, trials, follower-region mini-trials, educational and public-awareness activities, media coverage and cooperation with related European initiatives.

During the final project period, stronger emphasis was placed on communicating **tangible and reusable results**. These included resilience indicators and related factsheets, climate-risk methodologies and regional risk maps, regional resilience and adaptation recommendations, Policy Recommendation Letters, the ClimEmpower Decision Support System and reusable software components, the Educational Library, AI-supported learning tools, manuals, training resources and regionally adapted awareness materials.

The strategy also increasingly addressed the sustainability of communication beyond the formal project period. The project website and Educational Library were developed as resources that can remain accessible after project completion, while the planned **ClimEmpower Legacy Event - “Practical Tools for Regional Climate Resilience”** will provide an additional opportunity to communicate mature project results, demonstrate their practical use and support continued knowledge transfer, replication and uptake.

D5.4 provides the final assessment of this approach, including its quantitative reach, the quality of stakeholder engagement, adjustments made during implementation and lessons relevant for future research and innovation projects.

3.1.1 Strategic approach and evolution throughout the project

The initial dissemination strategy identified a broad range of target groups, including regional and local authorities, policy makers, public administrations, practitioners, researchers, scientific communities, educators, civil society, businesses, climate initiatives and potential future adopters. The communication approach was designed to combine broad project visibility with more targeted engagement of stakeholders directly relevant to the development and use of ClimEmpower results.

One of the central elements of this approach was the establishment and continued involvement of **regional Communities of Practice (CoPs)**. The CoPs provided a structured connection between project development and regional needs. Their role evolved throughout the project: from identifying climate challenges and stakeholder requirements, through discussing resilience indicators and regional data, to preparing and participating in the final validation of project outputs.

This progression became especially visible during the final implementation phase. Stakeholders moved from consultation towards direct interaction with ClimEmpower outputs through five regional trials. The trials enabled regional actors to assess the platform, hazard and risk maps, resilience indicators and recommendations, educational resources and decision-support functionalities in the context of their own regional responsibilities.

The engagement model was subsequently extended through **five follower-region mini-trials**, which introduced ClimEmpower results to stakeholders outside the original case-study regions. These activities added a replication and exploitation perspective by assessing how first-time users perceived the usefulness, transferability and potential future application of individual project results.

The communication strategy followed a **multi-channel approach** throughout the project. The project website developed into the central source of project information and results and recorded **7,389 visitors across the project period**. Its function progressively expanded from general project communication towards providing access to final outputs, regional results, policy materials and educational resources.

Social media channels supported the promotion of project news, events, publications, regional activities and newly available outputs. Engagement varied between platforms and reporting periods, showing that maintaining comparable levels of interaction across multiple social media channels was challenging. During the final phase, communication increasingly prioritized relevant project milestones and mature outputs rather than maintaining the same posting intensity across all channels.

Scientific and professional dissemination provided an important route to specialized audiences. ClimEmpower partners participated in conferences and professional events throughout the project, with the target of participation in at least **20 scientific and professional events achieved**. Scientific publications, conference papers, presentations and related outputs supported the positioning of ClimEmpower results within wider discussions on climate resilience, adaptation, risk assessment and regional planning. The original target for peer-reviewed journal publications was not fully achieved by the formal project end, reflecting in part the longer publication cycles associated with scientific results becoming mature towards the end of the project.

Media and public-facing communication complemented scientific dissemination. Project and regional activities received coverage through institutional and external media channels, while public-awareness activities helped communicate climate-resilience topics beyond specialised professional audiences.

As project outputs matured, the strategy increasingly shifted from communicating **what ClimEmpower intended to do** towards communicating **what ClimEmpower had produced and how those results could be used**. This shift was reflected in the expansion of visual materials, policy-oriented outputs, Educational Library resources, region-specific communication and practical demonstrations.

The final communication phase also required adjustment to the implementation schedule. Following the non-approval of the requested project extension, the three planned EU-level workshops were consolidated into the **ClimEmpower Final Conference, “Turning Climate Science into Regional Action”**, held on 24 July 2026 with 61 participants. The combined event covered the planned scientific, technical, regional, educational, sustainability, exploitation and replication themes.

The subsequent planning of the ClimEmpower Legacy Event further extends this evolution. Rather than functioning as another general project presentation, the event is structured around the long-term usability of project results: **understanding climate risks, planning and decision-making, and capacity building and knowledge transfer**. This supports the transition from project-period dissemination towards continued accessibility and uptake of ClimEmpower results.

expanded.

3.2 Communication and dissemination objectives – final assessment

The original communication and dissemination objectives focused on increasing awareness of ClimEmpower, engaging relevant stakeholders, disseminating scientific and technical results, supporting regional participation, promoting project outputs and creating conditions for their wider use and replication.

The final assessment shows that these objectives were achieved to different degrees across communication channels and target groups.

Project visibility and access to information were successfully established through the project website, visual identity, communication materials, partner channels and social media. The website became an increasingly important repository for project outputs. Its role evolved from project presentation towards long-term access to results and educational resources.

Regional stakeholder engagement was one of the strongest elements of the communication strategy. The Communities of Practice created sustained interaction with regional actors throughout the project and enabled communication to develop into co-creation and validation. Regional trials and follower mini-trials further strengthened this approach by involving stakeholders directly in the assessment of project outputs and their replication potential.

Scientific and professional dissemination achieved broad coverage through conference participation and related dissemination activities. The target for participation in scientific and

professional events was reached, while the publication target was only partially achieved within the formal project duration. Continued publication of results after project completion remains relevant due to the timing of final scientific outputs and normal academic publication cycles.

Policy-oriented communication became more prominent during the second half of the project. Regional recommendations, Policy Recommendation Letters, risk and resilience outputs and direct engagement with public administrations created more concrete pathways for communicating ClimEmpower findings to policy and decision-making audiences.

Educational and capacity-building communication developed substantially during the project. Educational materials were expanded and reorganized into an online Educational Library supported by AI-assisted functionalities, while manuals, training materials, regionally adapted resources and public-awareness activities broadened the range of audiences able to access and use project knowledge.

The project was less successful in achieving equally strong engagement across all stakeholder categories and communication channels. **Private-sector and industry participation remained more limited than engagement from public authorities, research institutions and regional practitioners**, while some civil-society groups were more difficult to involve consistently. Social media performance also varied between platforms, and some quantitative communication and stakeholder-participation targets were not fully reached.

These differences provided an important lesson for the final assessment. Communication effectiveness cannot be measured exclusively through aggregate audience size. During the final project phase, many activities required smaller and more specialized groups capable of testing project results, assessing their relevance and discussing conditions for practical uptake. This was especially important for regional trials and replication activities.

The final strategy consequently places the strongest emphasis on **continued access to mature project outputs, targeted communication to potential users and long-term knowledge transfer**. The project website, Educational Library, policy materials, technical resources and planned Legacy Event provide mechanisms through which communication and dissemination can continue after the end of the funded implementation period.

3.2.1 Stakeholder engagement and target audiences - final assessment

Stakeholder mapping provided the foundation for ClimEmpower engagement activities and was progressively refined through practical experience in the five case-study regions. The project engaged a wide range of stakeholders, but the intensity and continuity of participation differed between groups and regions.

Regional and local public authorities and administrations were among the most consistently engaged stakeholder groups. Their participation was especially important because many ClimEmpower results were designed to support regional planning, climate adaptation, infrastructure assessment, civil protection and evidence-based decision-making. Public-sector representatives contributed regional knowledge and data, participated in CoP discussions and provided direct feedback during the regional trials.

Researchers and technical experts were also strongly represented throughout the project. They contributed to the development and validation of methodologies, indicators, risk assessments and technical tools and supported scientific dissemination through conferences, publications and professional networks.

Civil protection, environmental, planning and sectoral practitioners provided important perspectives, particularly during regional engagement and validation activities. Their input helped identify practical requirements related to local data, interpretation of maps and indicators, interoperability, usability and integration with existing institutional procedures.

Educators and capacity-building audiences became increasingly relevant as the Educational Library, manuals, Knowledge Bites, AI-supported tools and other training resources matured. These outputs created possibilities for reaching audiences beyond those directly involved in regional climate planning.

Engagement with **businesses and private-sector actors** was less consistent. While some activities reached economic and technical stakeholders, the project was more successful in maintaining long-term participation from public authorities, research organizations and regional practitioners. Private-sector engagement therefore remains an area where future initiatives could apply more specialized outreach approaches linked to concrete commercial, technical or investment opportunities.

Participation from **civil society and the wider public** varied between regions. Public-awareness and educational activities successfully reached broader audiences in several cases, while sustained involvement of civil-society organizations within the technical co-creation process was more difficult to maintain. This indicates the value of using different engagement formats for professional stakeholders and wider community audiences rather than expecting the same participation model to work equally well for all groups.

The project experience also highlighted the challenge of maintaining stakeholder involvement over an extended three-year period. Many core stakeholders were repeatedly invited to CoP meetings, surveys, consultations and validation activities while simultaneously managing their regular institutional responsibilities. Participation was affected by workload, competing priorities and the scheduling of several final activities within a concentrated period. To address this, regional partners used combinations of face-to-face meetings, online sessions, bilateral consultations, surveys and shorter targeted workshops.

The final trials confirmed that **relevance is a key driver of stakeholder participation**. Engagement was strongest when activities dealt with concrete regional problems and when stakeholders could directly interact with outputs relevant to their own responsibilities. Risk maps, regional indicators, resilience recommendations, decision-support functions and locally adapted educational resources generated more substantive discussion than general project information.

The follower-region mini-trials provided an additional test of the project's ability to engage new audiences. These stakeholders had not participated in the earlier co-design process and encountered ClimEmpower outputs as first-time users. Their responses showed that different users are interested in different components of the project. Technical administrations tended to prioritize local data, mapping and interoperability, while educational and outreach-oriented organizations showed stronger interest in learning resources, AI-supported content and awareness materials.

This experience suggests that future dissemination should continue to use **audience-specific entry points rather than presenting ClimEmpower as one fixed package of results**. Policy makers may be best reached through recommendations and concise policy materials; technical users through data, methodologies and software components; researchers through scientific outputs; and educators and broader audiences through the Educational Library and accessible learning resources.

The final stakeholder-engagement approach consequently moved from broad stakeholder mapping towards a more differentiated understanding of **who is likely to use which project results, for what purpose and under which conditions**. This represents an important basis for the sustainability, replication and continued use of ClimEmpower outputs beyond the formal project period.

ClimEmpower addressed a diverse set of audiences whose roles, information needs and expected use of project results differed considerably. The outreach approach was consequently based on **audience relevance rather than a single communication model**, combining broad public communication with targeted engagement of stakeholders directly involved in climate-resilience planning, research, education and regional decision-making.

The principal target audiences were:

Table 2: ClimEmpower audience

Target audience	Main interest in ClimEmpower	Main outreach approach
Regional and local authorities and public administrations	Climate-risk information, regional resilience indicators, adaptation planning, decision support, policy recommendations	Communities of Practice, regional workshops and trials, bilateral consultations, policy materials, direct invitations, Final Conference
Policy makers and public-sector decision makers	Evidence for climate adaptation, regional planning and policy development	Policy Recommendation Letters, recommendations, concise visual materials, events and direct institutional communication
Researchers and scientific communities	Methodologies, scientific results, indicators, risk assessment, models and technical developments	Scientific publications, conferences, professional events, project website and research networks
Technical practitioners and climate-resilience professionals	Risk maps, datasets, methodologies, tools, interoperability and practical applications	Demonstrations, trials, technical presentations, workshops, software and methodological resources
Follower regions and potential replicators	Transferability and applicability of ClimEmpower approaches in new territorial contexts	Mini-trials, demonstrations, interviews, educational materials, replication-oriented discussions
Educators and capacity-building actors	Accessible climate-resilience knowledge, teaching and training materials	Educational Library, manuals, Knowledge Bites, AI-assisted learning and awareness materials

Businesses and private-sector actors	Climate-risk information, innovation opportunities and potential use of technical results	Professional events, partner networks, dissemination activities and project communication channels
Civil society, communities and the general public	Awareness of climate risks, regional resilience and practical adaptation	Public events, educational and awareness activities, social media, media coverage and accessible materials
EU projects, networks and climate initiatives	Synergies, methodological exchange, re-use of results and future cooperation	Networking, joint events, cross-project communication, conferences and direct cooperation

The relative intensity of engagement differed between these audiences. Public authorities, researchers, technical experts and regional practitioners were the groups most directly involved in the co-creation and validation of project results. Other audiences, including the wider public, educators and civil-society actors, were reached through more accessible communication and educational formats.

As the project progressed, outreach became increasingly **result-oriented**. Early communication focused on introducing ClimEmpower and building stakeholder networks, while later outreach was linked to specific results and potential user needs. This allowed the consortium to move from a general question of *who should know about ClimEmpower* towards a more practical question of *who could use which ClimEmpower result and for what purpose*.

This differentiated approach is also relevant for post-project communication. Rather than promoting ClimEmpower as a single package, future outreach can direct individual audiences towards the project resources most relevant to them.

3.3 Key messages and audience-tailored communication

The central message of ClimEmpower remained consistent throughout the project: regional climate resilience can be strengthened by combining scientific knowledge, locally relevant information, practical decision-support resources and active stakeholder participation.

The way this message was communicated, however, was adapted to the needs and responsibilities of different audiences. Regional and local authorities were primarily addressed through messages emphasizing the practical value of climate-risk information, resilience indicators and recommendations for planning and adaptation. For policy makers, communication focused on the translation of scientific evidence into concise and actionable information that could support informed regional and local decisions.

Technical users were approached through more detailed information on risk maps, methodologies, indicators, data and software functionalities. Scientific audiences received communication focused on methodological advances, research results and the evidence generated through regional validation. For follower regions and other potential replicators, the main mes-

sage was that ClimEmpower results can be adapted and reused selectively according to regional needs and that replication does not necessarily require adoption of the complete project approach.

Communication with educators and wider capacity-building audiences focused on making complex climate-resilience knowledge accessible and reusable. The Educational Library, manuals, training materials and AI-supported functionalities enabled project knowledge to be communicated in formats suitable for different levels of expertise and different learning contexts.

For wider audiences, communication emphasized that climate change has concrete regional and local consequences and that access to understandable information can support greater awareness and participation in resilience-building efforts.

The messages also changed as the project progressed. During the early phase, communication focused on project objectives, expected benefits and opportunities for stakeholder participation. During the middle phase, messages increasingly addressed regional challenges, emerging methodologies and the contribution of stakeholders to project development. In the final phase, the emphasis shifted towards what ClimEmpower had produced, where the results could be accessed, how they had been tested and how they could continue to be used or adapted after the project.

This final shift was important for moving communication beyond the presentation of project achievements towards sustainability, replication and continued use of results.

3.4 Dissemination of key ClimEmpower results and outputs

As ClimEmpower progressed from development towards validation and completion, dissemination increasingly focused on **concrete and reusable project results rather than general information about project activities**. Particular attention was given to outputs that could continue to support research, regional planning, decision-making, education and replication after the formal project period.

The **ClimEmpower Resilience Framework and resilience indicators** were communicated through scientific activities, regional stakeholder engagement, related factsheets and educational resources. Their dissemination aimed to make the concept of regional climate resilience more understandable and to provide stakeholders with practical ways of assessing different resilience dimensions.

Climate-risk methodologies and regional risk maps represented another important group of outputs. Scientific dissemination provided the methodological background, while regional trials and project events demonstrated how the resulting information could be interpreted and used in specific territorial contexts. Complementary manuals and educational materials helped translate technical methodologies into formats suitable for wider use.

The **Hazard-Sector Translation Framework** was communicated as a practical method for linking climate hazards with affected sectors and supporting structured discussion of regional impacts and priorities. Its dissemination focused on practical application rather than solely on the underlying methodology.

The **Decision Support System and related software components** were presented and demonstrated to regional and technical users. As the project matured, dissemination increasingly focused on the specific functionalities and reusable technical components developed within the project, rather than presenting the platform simply as a complete stand-alone product.

Regional resilience and adaptation recommendations provided a direct connection between scientific and technical results and regional action. These were complemented by **Policy Recommendation Letters**, which translated key project findings into shorter and more accessible formats intended for policy and decision-making audiences.

A major contribution to long-term knowledge transfer was the development of the **Educational Library and AI-supported learning environment**. Educational materials originally developed during the project were reorganized into accessible web-based resources that can be explored according to different user needs. Manuals, courses, training materials and region-specific awareness resources further expanded the possibilities for reuse by professionals, educators and wider audiences.

Scientific results continued to be disseminated through publications, conferences and specialist events, while the findings from regional trials and follower mini-trials provided additional evidence on usability, operational requirements, transferability and conditions for future uptake.

An important feature of the final dissemination approach was the effort to make project results **accessible independently of the formal deliverables in which they were originally reported**. Technical deliverables remain an essential record of project work, but many potential users are more likely to engage with a map, factsheet, recommendation, educational resource, software component or methodological guide than with a complete project report. Scientific and technical knowledge was consequently repackaged into more practical and audience-appropriate formats wherever possible.

This also supports the long-term sustainability of ClimEmpower. Different stakeholders can continue to use different parts of the project according to their needs. Regional authorities may primarily use risk information and recommendations, technical organisations may focus on methodologies and software components, researchers may build on scientific results, while educators can use the Educational Library and training resources.

The planned **ClimEmpower Legacy Event** further supports this result-oriented approach by presenting the most mature project outputs according to their practical function: **understanding climate risks, supporting planning and decision-making, and building capacity and transferring knowledge**. In this way, dissemination continues to provide a bridge between completed project outputs and their future use, adaptation and replication.

4 WP5 Enhancing the outreach and impact

Within the ClimEmpower project, Work Package 5 (WP5) focuses on dissemination, communication, outreach, and stakeholder engagement. The partners have specific roles and responsibilities within this work package.

The Faculty of Electrical Engineering and Computing (FER) will spearhead communication and dissemination tasks, working closely with partners. FER and the rest of the consortium regularly updates the Dissemination and communication plan to ensure no communication or dissemination opportunities are overlooked.

4.1 Work package 5 - Enhancing the outreach and impact

WP5 includes all dissemination and communication tasks. Specific objectives are:

- Develop dissemination and communication strategy and specific actions related to communication and dissemination.
- Coordinate scientific publications.
- Share knowledge with similar projects.
- Raise awareness among different audiences, including public administration, stakeholders, and general society, of the need for long-term planning to improve resilience and reduce CC impacts.
- Promote and encourage the broadest possible application of project methods and tools beyond the project's lifetime.
- Promote and encourage the replication of ClimEmpower case studies in other regions, as a pre-requisite for exploitation and sustainability.

WP5 is divided into five tasks:

4.1.1 Task 5.1. Develop and maintain project web site [M1-M36]

This task involves the establishment of the project's graphical standards and the development of a project website. The website features main project information, including an overview, objectives, and partner profiles. It also serves as a platform for project-related updates, covering news, workshops, conferences, and communication efforts.

Deliverable: D5.1.

- Leader: FER
- Contributors: AIT & all partners

Table 3: Website results

Planned						Achieved (realised) M1-M18	Achieved (realised) M19-M36
Tool or material	Description	Objective	Target audience	Timing	Specific KPI		
Logo and project templates	A logo serves as a visual representation of the project, creating a unique and recognizable identity. Templates provide a consistent format for various project materials. This consistency reinforces the project's messaging, maintains a unified visual style, and helps establish a cohesive communication strategy.	The objective is to establish a professional and consistent visual identity that enhances brand recognition and facilitates streamlined communication.	All audience	M1	Unique set of templates and logo	The project logo has been designed and created. Templates for deliverables, PowerPoint presentations, posters, sign-in sheets, GDPR consents, and reports have been developed and secured.	During M19-M36, the existing deliverable template was further refined to better reflect the project's needs and improve consistency across project outputs. A new template for educational materials was also developed and introduced. Existing templates for PowerPoint presentations, posters, sign-in sheets, GDPR consent forms and reports continued to be used throughout the final project period.

Project website	www.climempower.eu The ClimEmpower project website is useful for disseminating project information, updates, and results, providing stakeholders and the public with easy access to essential details, progress reports, and multimedia resources.	The objective is to provide updated information for the project's audience.	All audience	M1 – M36 + at least 5 years after project ends	≥3000 visitors per year	2589 visitors 1.9.2023 – 17.2.2025.	4800 visitors 18.2.2025.-31.08.2026.
Brochures presenting regional activities	Brochures for each regions 1) depicting the key CC hazards locally 2) how they are dealing with the aftermath 3) who are the regional partners involved and 4) how they are empowering the specific area 5) contact person representing ClimEmpower	This objective will concentrate information location based	Regional stakeholders e.g. public authorities and citizens in the area	M1-M36	3 brochures	3 Brochures on local languages presented in CoP meetings.	For each CoP meeting, the Case Study Facilitator (CSF) prepared an introductory presentation in the local language covering the key elements originally planned for the regional brochures. The presentations included: 1) the main climate change hazards affecting the region, 2) how the region is addressing their impacts and aftermath, 3) the regional partners involved, 4) how ClimEmpower is supporting and empowering the specific area, and 5) contact details of the local ClimEmpower representative. In this way, the planned brochure content was delivered directly to local stakeholders in a format adapted to the CoP meetings.

4.1.1.1 Final assessment and key observations

The core communication infrastructure established during the first half of the project remained in use throughout M19-M36 and was further adapted to project needs. The visual identity and project templates were maintained, while the refinement of the deliverable template and the development of a dedicated template for educational materials supported greater consistency across final project outputs. The KPI related to the establishment of the project logo and templates had already been achieved during M1-M18, with the final project period focusing on their continued use and improvement.

The project website remained the central public source of information on ClimEmpower activities and results. Website traffic increased considerably during the final project period, from **2,589 visitors in M1-M18 to 4,800 visitors in M19-M36**. The level of traffic recorded during M19–M36 corresponds to more than 3,000 visitors per 12-month period on average, showing improved website visibility during the second half of the project. In total, **7,389 visitors** were recorded over the project implementation period.

The KPI of three regional brochures had already been achieved during M1-M18. In the final project period, the regional communication approach was continued through introductory presentations prepared by the Case Study Facilitators for CoP meetings in the respective local languages. These presentations retained the content originally defined for the regional brochures, while allowing it to be adapted to the context and needs of each CoP meeting. This provided regional stakeholders with locally relevant information on climate hazards, regional responses, project partners and ClimEmpower activities in a format suitable for direct presentation and discussion.

The tools established at the beginning of the project provided a stable basis for communication throughout ClimEmpower, while the final implementation period focused on their continued use, refinement and adaptation to emerging project outputs and regional communication needs.

4.1.2 Task 5.2. Public and professional communication [M1-M36]

This task involves the creation of material intended for the public, including the government, local administration and industry. The objective is to raise awareness about climate change and its potential impacts, inform the audience about their role in addressing climate change, and educate them about the project and their potential interactions with it. Activities encompass the development and distribution of project newsletters, social media posts, press releases, printable brochures, leaflets, and posters. Partners contribute by providing images, creating articles, sharing campaigns on their web pages and channels, and translating communication materials into local languages.

Deliverables: D5.2, D5.5, D5.6

- Leader: FER
- Contributors: All partners

Table 4: Public and professional communication results

Planned						Achieved (realised) M1-M18	Achieved (realised) M19-M36
Tool or material	Description	Objective	Target audience	Timing	Specific KPI		
Social media	Facebook: https://www.facebook.com/project-climempower-41431b296/ LinkedIn: https://www.linkedin.com/company/climempower-41431b296/ Quora: https://climempower.quora.com/ Zenodo: https://zenodo.org/communities/climempower?q=&l=list&p=1&s=10&sort=newest	The objective is to utilize these platforms as less formal communication tools, tailored for a broader audience. The goal is to enhance visibility, encourage dialogue and promote awareness and understanding of climate-resilient development.	Broader audience, potential end users	M3 – M36	≥36 posts; at least one monthly	35 posts on Facebook 8 posts on LinkedIn 11 posts on Quora 10 posts on Zenodo	18 posts on Facebook 11 posts on LinkedIn 2 posts on Instagram 6 posts on X 7 posts on Quora
Roll-up (posters)	Printed materials including the branding of the ClimEmpower project, the partner's logos and a QR code to access the project website.	To identify the project at CoP meetings, conferences, and other events.	All audiences	M1 – M36	≥7 posters	4 posters	3 posters
e-newsletter	Annual digital newsletter to describe the project's progress and milestones. It will include links to the project's main news and results.	To provide a structured communication tool that consolidates project updates, achievements, and key insights.	All audiences	M12 M24 M36	3 Newsletters 3,000 recipients across Europe	1 Newsletter	2 Newsletters

Planned						Achieved (realised) M1-M18	Achieved (realised) M19-M36
Tool or material	Description	Objective	Target audience	Timing	Specific KPI		
Info-graphic	Key facts and outputs in form of digital graphics in an easy-to-understand way.	To present complex information in a visually engaging and easily digestible format, enhancing communication effectiveness.	All audiences	M6 – M36	3 sets of infographics	0	8 Infographics
Leaflet(s)	Project brochure with key information presented in an easy-to-understand way for a general audience.	To create accessible and user-friendly materials that quickly convey essential project details.	All audiences	M5 – M35	500 downloads or copies	3 project leaflets	37 downloads
Videos	Professionally made videos illustrating the regional problem statements and proposed solutions.	To visually articulate the specific challenges faced by each region regarding climate resilience and to present clear, impactful solutions.	All audiences	M30 – M36	≥5000 views on Youtube	2 project videos	2 project videos - YouTube views not applicable since videos are on the project website

Planned						Achieved (realised) M1-M18	Achieved (realised) M19-M36
Tool or material	Description	Objective	Target audience	Timing	Specific KPI		
Training and educational material	A set of educational and training materials	To provide accessible and structured learning opportunities, enabling informed decision-making and proactive engagement in addressing climate challenges at various levels.		M12 – M36	≥150 visits/downloads	1 set of educational materials	During M19-M36, the educational materials developed in the first reporting period were further improved and transformed into a web-based Educational Library. Resources are now directly accessible through the project website without the need for individual downloads and can be explored through several navigation pathways, including user groups, climate hazards, sectors and resilience dimensions. An AI chatbot was also integrated to support users in navigating the content and accessing relevant educational information more easily.

4.1.2.1 Final assessment and key observations

The project maintained an active presence across several social media platforms throughout the implementation period. A total of **108 social media posts** were reported across M1-M36: 64 posts during M1-M18 and 44 posts during M19-M36. This substantially exceeded the original KPI of at least 36 posts. During the final project period, communication was distributed across Facebook, LinkedIn, Instagram, X and Quora, allowing project activities and results to reach different audiences through several channels.

The target for printed and visual promotional materials was also achieved. **Seven posters** were produced over the project period, meeting the defined KPI, while the planned three newsletters were completed, with one issued during M1-M18 and two during M19-M36. The available reporting confirms production of all three newsletters; the separate target related to 3,000 recipients should be assessed against mailing statistics where available.

The use of infographics increased considerably during the second half of the project. While no infographics were reported during M1-M18, **eight infographics** were produced during M19-M36, exceeding the planned target of three sets. The final project period placed greater emphasis on visual and result-oriented communication, reflecting the increased availability of mature project outputs that could be translated into concise dissemination materials.

For project leaflets, three materials were produced during the first reporting period and 37 downloads were recorded during M19-M36. Based on the available monitoring data, the quantitative KPI of 500 downloads or distributed copies cannot be confirmed. The project nevertheless continued to use the leaflets as supporting dissemination material alongside an expanding portfolio of digital resources.

Two project videos were produced during M1-M18. However, the videos were finalised late and available reporting does not provide sufficient YouTube viewing statistics to confirm achievement of the KPI of 5,000 views. Video content formed part of the broader multimedia communication approach, while the final project period placed stronger emphasis on website-based materials, infographics and other reusable digital content.

The educational materials also evolved substantially during M19-M36. The initial set developed during the first reporting period was upgraded into a web-based **Educational Library**, where resources can be accessed and explored directly instead of being provided primarily as downloadable files. The library introduced several navigation pathways and an AI chatbot to assist users in finding relevant educational content. As a result of this change, the original KPI based on visits/downloads does not fully reflect the way the educational materials are now accessed and used. The final solution provides a more integrated and user-oriented form of access, although achievement of the original quantitative KPI should be reported only where corresponding usage statistics are available.

4.1.2.2 Awareness-raising and educational activities

During M19-M36, consortium organised **seven local educational and awareness-raising activities** targeting children, students and the general public. The activities connected climate change and climate resilience with topics that are directly relevant to everyday life and the

local environment, including sustainable lifestyles, biodiversity, mobility, agriculture, nature protection and the Danube ecosystem.

- **MudTown - 1 March 2025**

MudTown was organised as an activity for children focusing on sustainable family life, cooperation with civil society and practical climate action. The activity provided an opportunity to introduce younger participants to the connection between everyday choices, sustainability and climate change in an accessible and age-appropriate setting.

- **Eco Day - 11 April 2025**

Eco Day targeted high-school students and combined the celebration of protected areas with awareness raising on climate change. The activity linked climate-related challenges with the protection of natural areas and encouraged students to consider the role of biodiversity conservation and responsible environmental behaviour in climate resilience.

- **Educational and Recreational Bike Tour - 10 May 2025**

The Educational and Recreational Bike Tour addressed the general public and promoted cycling as a sustainable alternative to car use. Through a practical outdoor activity, participants were encouraged to consider the relationship between everyday mobility choices, environmental impacts and climate action. The event provided a simple way of connecting climate-related messages with behaviour that can be applied in daily life.

- **Celebrating Nature Protection and Biodiversity with an Emphasis on the Impact of Climate Change - 24 May 2025**

This public event focused on the importance of nature protection and biodiversity in the context of climate change. It raised awareness of the pressures that climate change places on natural ecosystems and highlighted the role that individuals and local communities can play in their preservation. The activity connected ClimEmpower themes with locally relevant environmental issues and practical awareness raising.

- **International Danube Day - 29 June 2025**

International Danube Day was used as an opportunity to educate the public about the Danube, communities living along the river and the importance of climate resilience. The activity presented the river as a natural and social system affected by climate-related pressures and supported discussion about the need to protect water resources and strengthen the resilience of river-dependent communities.

- **Climate Change in Nature Protection and Agriculture - 9 December 2025**

A public quiz was organised to communicate climate change topics in an interactive and informal format. The activity focused on the links between climate change, agriculture and nature protection and encouraged participants to test and expand their knowledge. Using a quiz format helped present climate-related information in a more engaging way and supported direct interaction with the general public.

- **International Danube Day and the Impact of Climate Change - 4 July 2026**

The 2026 International Danube Day focused more directly on the impacts of climate change on the Danube and on life in the surrounding area. Topics included the effects of climate

change on crops and vineyards, water supply, food production and other activities dependent on the river and its ecosystem. The event provided a locally grounded example of how climate change can affect interconnected environmental, economic and social systems.

As part of its broader public awareness activities, ClimEmpower was also presented at two external public events organised by third parties. These opportunities enabled the project to reach general audiences beyond its usual stakeholder networks:

- **Europe Day - Lamia, 2026, “United in Diversity”**

ClimEmpower was presented at the Region of Central Greece information stand during the Europe Day celebrations in Lamia. The activity reached more than 100 citizens and local stakeholders and provided an opportunity to introduce the project, its objectives and results in a public-facing setting outside the project’s regular scientific and professional communication channels.

- **ATTICA GREEN EXPO 2026, 27-30 May 2026**

ClimEmpower was presented at ATTICA GREEN EXPO, a large public event bringing together the general public, private-sector representatives and public services. The project reached more than 300 participants, increasing awareness of ClimEmpower activities and results among audiences beyond the project’s established stakeholder network.

These activities complemented the project’s scientific and professional dissemination by bringing climate-resilience topics closer to local communities and younger audiences. The use of outdoor activities, public events and interactive formats helped translate broad climate-change concepts into examples connected with the local environment and everyday life.

4.1.3 Task 5.3. Scientific dissemination [M1-M36]

This task will coordinate scientific dissemination activities of the project, including presentation of the project results at scientific conferences and publication of scientific papers.

Deliverables: D5.2, D5.5, D5.6

- Leader: FER
- Contributors: All partners

Table 5: Scientific dissemination results

Planned Action	Description	Objective	Target audience	Tim- ing	Specific KPI	Achieved (realised) M1-M18	Achieved (realised) M19-M36
Attend- ance to confer- ence	Different events, con- gresses, workshops, and conferences will be at- tended by the project part- ners with the objective of disseminating the project to potential end-users, specialised audiences and the scientific community through presentations and posters. More in the Table 8.	To dissemi- nate project research, findings, and approaches to a special- ized audi- ence.	Potential end-us- ers, associations and platforms, dis- semination multi- pliers and scien- tific community.	M1 – M36	Participation in at least 20 confer- ences and scien- tific events	Attended 11 confer- ences	Participation in 9 ad- ditional scientific and professional confer- ences/events, with 10 conference contribu- tions including oral presentations, scien- tific papers and a dedicated scientific session.

Planned Action	Description	Objective	Target audience	Timing	Specific KPI	Achieved (realised) M1-M18	Achieved (realised) M19-M36
Scientific publication	Several scientific papers in relevant journals will be published in High-level peer-review international open journals. More in the Table 9.	To disseminate the project's findings, methodologies, and insights. Publishing in reputable journals enhances the project's visibility, establishes credibility in international academic circles.	Scientific community, potential end-users.	M6 – M36	≥5 publications in peer-reviewed journals	2 publications	5 additional published scientific and professional outputs: 2 journal papers, 2 conference papers/proceedings and 1 professional publication. Two additional scientific manuscripts were in preparation/planned at project end.

4.1.3.1 Conference and scientific event participation

During the second half of the project, ClimEmpower partners continued to present project methodologies, case-study results and emerging findings at scientific and professional events across Europe. The events covered a broad range of climate-resilience topics, including flood-risk assessment, drought monitoring, climate-resilience indicators, urban climate, mountain regions, stakeholder engagement and the development of regional adaptation approaches. Participation in these events enabled project partners to communicate results to specialized scientific and technical audiences and to exchange knowledge with researchers, practitioners and public authorities working in related fields.

- **AI-NATURE Interreg Plenary Meeting, Zadar, Croatia, 19-20 March 2025**

ClimEmpower was presented during the plenary meeting of the **AI-NATURE Interreg project** in Zadar. The event brought together AI-NATURE project partners and associated stakeholders working on natural hazards and climate resilience, including representatives of the Firefighters Association of Zadar County.

The presentation introduced ClimEmpower activities and results to a specialized audience of approximately **15-20 participants**. In addition to increasing project visibility, the event created an opportunity for knowledge exchange between initiatives addressing climate-related hazards and resilience from complementary perspectives. It also supported the project's wider objective of connecting ClimEmpower with relevant European and regional initiatives working on climate adaptation, risk management and natural hazards.

- **European Geosciences Union General Assembly, EGU 2025, Vienna, Austria, 30 April 2025**

ClimEmpower was presented at the **European Geosciences Union General Assembly 2025**, one of the major European scientific events in the geosciences. AQUATEC presented the project with a focus on the **Andalusian case study**, introducing its main objectives and the modelling framework developed to support climate-risk assessment.

The conference attracted approximately **18,000 on-site participants**, while around **50 participants attended the relevant scientific session**. The presentation provided ClimEmpower with visibility among a highly specialized technical and scientific audience and enabled the project approach to be positioned within wider scientific discussions on climate risks, modelling and regional adaptation.

- **13th World Congress of EWRA on Water Resources and Environment, EWRA 2025, 24-28 June 2025**

ClimEmpower research was presented at the **13th World Congress of the European Water Resources Association**, through the contribution *A Multi-source Methodological Framework for Drought Monitoring: Integration of Remote Sensing and Meteorological Indicators*.

The work presented a methodological framework combining **remote-sensing information and meteorological indicators for drought monitoring**. The contribution demonstrated how different data sources can be integrated to support a more comprehensive assessment of drought conditions. The event enabled the project to communicate its methodological work to researchers, academics and practitioners working in water resources, climate monitoring and environmental management.

- **ICUC 12, 7-11 July 2025**

ClimEmpower made a strong contribution to **ICUC 12**, with **two separate scientific presentations** addressing complementary aspects of climate resilience.

The first, *Empowering Local Authorities through Collaborative Climate Resilience Research: Findings from Five South-European Regions*, presented results emerging from ClimEmpower work across its five regional contexts. It focused on the role of collaborative research and stakeholder involvement in supporting local authorities in understanding climate risks and developing locally relevant resilience responses.

The second presentation, *Indicators for Urban Climate Resilience - Availability, Applicability, and Usefulness*, addressed the use of resilience indicators and their practical relevance for climate-resilience assessment. It examined questions surrounding the availability of indicators, their applicability in different regional contexts and their usefulness for supporting resilience-oriented decision-making.

Together, the two contributions demonstrated both the **stakeholder-oriented** and the **indicator-based analytical dimensions** of the ClimEmpower approach.

- **Urban Drainage Modelling Conference, Innsbruck, Austria, 16 September 2025**

AQUATEC presented ClimEmpower at the **Urban Drainage Modelling Conference** in Innsbruck. The presentation focused on the Andalusian case study, the project's modelling approach and preliminary results relevant to urban drainage and flood-risk assessment.

The conference attracted around **290 participants**, with approximately **80-100 participants attending the relevant session**. The event provided access to a specialized community working on urban drainage, hydrological modelling and flood-risk management and allowed ClimEmpower methodologies and early case-study results to be discussed within a highly technical setting.

- **RSCy2025/SPIE International Conference on Remote Sensing and Geoinformation of Environment, 19 September 2025**

ClimEmpower results related to mountain regions were presented through the conference paper *Building Climate Resilience in Mountain Regions*.

Using the **Troodos region** as a case study, the work compiled practical climate-resilience indicators and combined data assessment with feedback gathered through the project's Community of Practice. The analysis identified major climate threats as well as gaps in exposure and vulnerability information and highlighted needs related to capacity building, policy development and interdisciplinary cooperation.

The work also demonstrated the value of participatory processes for knowledge exchange and co-creation. The resulting approach provides a methodological basis that can support the development of tailored adaptation strategies in Troodos and offers insights that can be transferred to other mountain regions facing similar climate pressures.

- **Jornadas de Ingeniería del Agua, JIA, Zaragoza, Spain, 23 October 2025**

At the **Jornadas de Ingeniería del Agua**, AQUATEC presented findings related to **data gaps in flood-risk assessment in Spain**. The work originated from the early analytical activities carried out within ClimEmpower and ICARIA and addressed limitations identified in the information currently available for flood-risk assessment.

The event attracted around **300 participants**, including technical experts and representatives of public administrations, while approximately **50-80 participants attended the relevant session**. The presentation helped transfer project findings into a professional environment closely connected with water engineering and public-sector flood-risk management.

- **Congreso de Cambio Climático en Andalucía, Jerez de la Frontera, Spain, 24 October 2025**

CETAQUA presented ClimEmpower at the **Congreso de Cambio Climático en Andalucía**, introducing the project as an innovative initiative addressing climate-change challenges.

Participation in the congress increased project visibility within the Andalusian climate-change and adaptation community and provided an opportunity to connect the ClimEmpower approach with discussions taking place in one of the project's case-study regions. The event also supported regional dissemination of the project beyond the stakeholders directly involved in ClimEmpower activities.

- **Scientific Session on Climate Resilience, Vienna, Austria, 4-8 May 2026**

AIT convened a scientific session in Vienna focused on **climate-resilience indicators and stakeholder engagement**. Approximately **50 academics and researchers** participated.

The session brought together two central dimensions of the ClimEmpower methodology: the use of evidence and indicators for assessing resilience and the involvement of stakeholders in defining needs and interpreting climate-resilience challenges. It provided a dedicated scientific setting for discussion of approaches closely linked to the project's regional and methodological work.

These activities strengthened the scientific visibility of ClimEmpower and created opportunities to present project methodologies, regional findings and technical results to specialised audiences across Europe. Participation in conferences and scientific events also supported exchange with researchers, practitioners and public authorities and helped position project results within wider discussions on climate resilience, adaptation, flood and drought risk, land-use planning and stakeholder engagement. The diversity of events and themes reflects the multidisciplinary nature of ClimEmpower and the progressive maturation of its scientific results during the second half of the project.

4.1.3.2 Scientific publications and conference outputs

Scientific dissemination during ClimEmpower resulted in a portfolio covering **peer-reviewed journal articles, conference papers and proceedings, scientific presentations and professional publications**. The outputs reflect the multidisciplinary character of the project and address climate resilience from methodological, technological, regional and planning perspectives.

- **A Comprehensive Review of Deep Learning-Based Anomaly Detection Methods for Precision Agriculture**

This peer-reviewed article published in **IEEE Access** reviewed and systematically categorised deep-learning approaches used for anomaly detection in precision agriculture.

The study mapped existing methodological approaches, identified current research trends and highlighted gaps that continue to limit the broader application of deep-learning techniques in agricultural monitoring. One of the identified challenges was the availability of sufficiently large

and representative datasets needed to support future development and validation of data-driven approaches.

The publication contributed to ClimEmpower's wider scientific context by addressing the role of advanced digital technologies and data-driven methods in sectors that are increasingly exposed to climate-related pressures.

DOI:10.1109/ACCESS.2024.3522248

- **User-Driven Climate Resilience Across Southern European Regions**

Published in **Climate**, this peer-reviewed, open-access article established a common baseline for understanding climate resilience across the **five ClimEmpower regions**.

The paper identified regional climate hazards, stakeholder needs, adaptation priorities and gaps related to data availability, climate services, institutional coordination and technical capacity. A central contribution was the presentation of a **user-driven framework based on Communities of Practice**, linking scientific assessment with the knowledge and needs of regional stakeholders.

The study provided a common methodological foundation for the development of tailored climate services, capacity-building activities and region-specific adaptation approaches within ClimEmpower. It also demonstrated how stakeholder involvement can be systematically integrated into climate-resilience research across regions with different hazard profiles and institutional contexts.

<https://doi.org/10.3390/cli13010002>

- **Assessing Climate Change Impacts on Troodos Mountain Through Methodological Approaches and Community Engagement in the ClimEmpower Project**

This scientific abstract and presentation focused on the **Troodos UNESCO Global Geopark** and combined climate-data assessment with stakeholder and Community of Practice engagement.

The work identified key climate risks, local vulnerabilities, stakeholder needs and gaps in available data. By combining scientific evidence with local knowledge, the contribution provided a basis for the development of tailored climate services and locally relevant adaptation and resilience measures for the Troodos region.

This output illustrates the project's approach of combining quantitative climate information with participatory processes rather than treating regional climate-risk assessment as a purely technical exercise.

- **Analysis of Climate Change Indicators in Troodos Mountain Geopark, Cyprus: Quantitative and Qualitative Perspectives**

This open-access **IOP conference paper** presented an integrated analysis of climate change in the Troodos Mountain Geopark.

The research combined **long-term climatic data, hadrochemical analysis, wildfire records and ecosystem-service mapping**. The analysis identified significant warming, decreasing precipitation, more frequent dry periods and increasing ecological and wildfire risks. At the same time, the assessment found that groundwater remained chemically stable.

By examining several environmental dimensions together, the study created an evidence base relevant to climate adaptation, environmental monitoring, land-use planning and the protection of key ecosystem services such as carbon sequestration, soil stabilisation and biodiversity conservation.

DOI 10.1088/1755-1315/1558/1/012046

- **A Multi-source Methodological Framework for Drought Monitoring: Integration of Remote Sensing and Meteorological Indicators**

Presented in connection with **EWRA 2025**, this scientific work developed a multi-source methodological framework for drought monitoring.

The approach integrates **remote-sensing observations with meteorological indicators**, bringing together complementary information sources to improve the assessment of drought conditions. The work contributes to the development of evidence-based approaches for identifying and monitoring climate-related water stress and illustrates how Earth-observation data can be combined with conventional climatic information within climate-resilience assessments.

ISBN: 978-618-84419-2-7

- **Building Climate Resilience in Mountain Regions**

Published as an open-access **SPIE conference paper**, this work addressed the specific climate-resilience challenges faced by mountain regions.

Using Troodos as the main case study, the research combined available indicators with Community of Practice input to identify major climate threats and gaps in information related to exposure and vulnerability. It also identified priorities for capacity building, policy advocacy and interdisciplinary cooperation.

An important contribution of the work was the demonstration of how scientific evidence and participatory stakeholder processes can be combined to support the co-creation of regional resilience strategies. The methodology provides a transferable basis for supporting adaptation planning in other mountain regions facing comparable challenges.

<https://doi.org/10.1117/12.3073018>

- **Evaluación del riesgo de inundación: estado actual y perspectivas futuras en España**

Published in the journal **Ingeniería del Agua** in April 2026, this paper examined the current state of flood-risk assessment in Spain and identified major gaps and opportunities for future improvement.

The work builds on preliminary analysis carried out within **ClimEmpower and ICARIA**, during which gaps in available data and flood-risk assessment practices were identified. The article transferred findings emerging from project activities into a scientific publication relevant to researchers, technical practitioners and professionals working on water engineering and flood-risk management.

The publication is also a concrete example of scientific cooperation between ClimEmpower and another European research initiative, showing how project synergies resulted in joint scientific outputs rather than remaining limited to networking activities.

<https://doi.org/10.4995/ia.24696>

- **Urban Flooding: Constructing Climate-Resilient Infrastructure**

Published in **Open Access Government** in April 2026, this joint **ICARIA–ClimEmpower** publication addressed urban flooding and the need for more climate-resilient infrastructure.

The publication introduced the two projects and communicated how their research contributes to advancing flood-risk assessment beyond existing approaches. Its technical but accessible format helped transfer research findings beyond a strictly academic readership and supported dissemination to practitioners and a broader audience interested in climate-resilient infrastructure and urban flood-risk management.

<https://www.openaccessgovernment.org/article/urban-flooding-constructing-climate-resilient-infrastructure/206358/>

- **Climate-Resilient Land-Use Planning Across Heterogeneous Southern European Hazard Regions**

Published as a peer-reviewed, open-access article in **Land** in July 2026, this paper represents one of the key scientific outputs from the final phase of ClimEmpower.

The study developed the **Hazard–Sector Translation Framework**, a six-step planning method designed to translate regional climate-risk knowledge and stakeholder needs into traceable and context-specific land-use recommendations.

Application of the framework across five Southern European regions showed that diverse climate hazards converge around five major planning domains: **buildings, agriculture, blue-green infrastructure, transportation and protected-area conservation**.

The framework connects identified hazards and affected territorial systems with recommendation families, available planning instruments and resilience functions. In this way, the paper addresses the gap between climate-risk assessment and practical planning action and provides regional authorities with a transferable approach for developing locally appropriate adaptation strategies.

<https://doi.org/10.3390/land15081352>

Scientific dissemination portfolio expanded through journal articles, conference proceedings, conference papers and professional publications. Additional manuscripts were under preparation at project end.

Scientific dissemination activities were expected to continue beyond the formal project period. At project end, the manuscript *Assessing Regional Resilience of Southern-European Regions - The Potential and Barriers of Quantitative Regional Resilience Indicators* were under preparation for submission to *Frontiers in Climate*. A further paper focusing on the data analysis and modelling work developed within the Andalusian case study was also planned for submission after project completion. These outputs are reported as follow-up scientific activities and are not included among the publications realised during the project period.

4.1.3.3 Final assessment and key observations

Scientific dissemination remained an active component of ClimEmpower throughout the project and became more result-oriented during M19–M36 as methodological, regional and technical outputs matured. Participation in scientific and professional conferences enabled partners to present ClimEmpower results to specialised audiences across Europe and covered a broad range of topics, including drought monitoring, flood-risk assessment, urban and regional climate resilience, resilience indicators, stakeholder engagement, mountain regions and land-use planning. Based on the activities reported for both project periods, the target of participation in at least 20 conferences and scientific events was reached.

The scientific publication portfolio also developed progressively during the project. ClimEmpower results were disseminated through peer-reviewed journal articles, conference papers and proceedings, scientific abstracts and professional publications. The outputs reflect the multidisciplinary scope of the project and provide documented scientific results related to climate-risk assessment, digital and data-driven methods, stakeholder-based resilience approaches and regional adaptation planning. Several publications also resulted from cooperation with related European projects, demonstrating that project synergies contributed to concrete joint scientific outputs.

When assessed strictly against the KPI of at least five publications in peer-reviewed journals, the target was not fully reached within the formal project period. Four peer-reviewed journal articles were published, while additional scientific results were disseminated through peer-reviewed conference proceedings and other scientific and professional publications. Further manuscripts were under preparation or planned for submission after project completion. This indicates that scientific dissemination continued beyond the formal project timeline, while the broader portfolio of realised outputs provided several channels for communicating and preserving ClimEmpower research results.

4.1.4 Task 5.4: Workshops for followers and replicators [M6-M36]

This task includes three EU-level workshops and 3x5 regional “public” workshops (joint activity with WP4). The EU-level workshops will be organized for regions not directly participating in the project but who could benefit from the project’s results and will include topics such as: “*climate change and its impacts*”; “*your role in combating climate change*”; “*data on climate change and how to use it*”; “*climate change resilience boosting recommendations*”. Workshops will be face-to-face (f2f) or hybrid (f2f+online) when possible, online otherwise.

Deliverables: D5.2, D5.5, D5.6

Leader: FER

Contributors: AIT, all, especially the CSF and RA partners

Table 6: Workshops results

Planned						Achieved (realised) M1-M18	Achieved (realised) M19-M36
Tool or material	Description	Objective	Target audience	Timing	Specific KPI		
Re-regional workshops	The first three regional workshops will be “invitation only”, for RAs and CoP members. The next two will include at least follower regions and the final workshops will be open for other potential adopters, policy makers and possibly even for the general public.	To facilitate direct engagement with local stakeholders, fostering collaboration, knowledge exchange, and co-creation of climate-resilient strategies.	RAs, and other regional stakeholders, future adopters	M1 – M30	≥350 participants	2 workshops per ClimEmpower region Approx. 150 participants	The regional workshop cycle continued across all five ClimEmpower regions through WS3 indicator-prioritisation and trial-preparation activities, WS4 regional trials and follower mini-trials. At least 103 participant attendances/respondents are documented for M19-M36 activities for which quantitative data are available: ≥21 in additional CoP/WS2 activities, ≥59 in the five regional trials and ≥23 in the five follower mini-trials. Together with approximately 150 participants reported for M1–M18, at least 253 participant attendances are documented across the full project period.

Planned						Achieved (realised) M1-M18	Achieved (realised) M19-M36
Tool or material	Description	Objective	Target audience	Timing	Specific KPI		
3 EU workshops	Key outputs of the ClimEmpower project, other relevant initiatives and studies on climate hazards, impacts and adaptation measures.	To share comprehensive project outcomes, lessons learned, and innovative approaches in climate-resilient development with a wider European audience, fostering knowledge dissemination and collaboration.	Broader public, including future adopters and policy makers	M36	≥100 participants	To be planned	The three planned EU-level workshops (EWS-1, EWS-2 and EWS-3) were consolidated into one ClimEmpower Final Conference, “Turning Climate Science into Regional Action”, held online on 24 July 2026. The event attracted 61 participants and covered the themes planned for the EU-level workshops, including project results and applicability, educational resources, the ClimEmpower Toolbox, regional experiences, sustainability, exploitation, replication and future cooperation.

Planned						Achieved (realised) M1-M18	Achieved (realised) M19-M36
Tool or material	Description	Objective	Target audience	Timing	Specific KPI		
Final regional event(s)	Final regional events in Croatia, Grece, Cyprus, Italy, and Spain.	To locally showcase and celebrate project achievements, engage stakeholders, and facilitate the exchange of knowledge and experiences in implementing climate-resilient strategies tailored to the unique contexts of each region.	Regional audience, regional authorities, policy makers	M36	≥100 participants	To be planned	5 final regional trial and validation events were implemented in Sicily, Andalusia, Osijek-Baranja County, Central Greece and Troodos and were complemented by the project-level Final Conference. Across these 6 final-stage events, at least 120 participant attendances/respondents were documented

4.1.4.1 Implementation of regional workshops, validation and replication activities

During M19-M36, the workshop and stakeholder-engagement activities evolved from consultation and preparation towards the practical validation and replication of mature ClimEmpower results. The activities were closely connected with WP4 and followed the progression of the regional Communities of Practice from the identification of needs and priorities to testing project outputs in real regional contexts.

The first part of the period focused on indicator prioritisation and preparation of the regional trials. Stakeholders assessed the relevance of proposed resilience indicators, identified suitable regional data sources and discussed data availability, spatial and temporal resolution and the level of detail required for regional decision-making. The process was adapted to the circumstances of each case-study region and combined face-to-face and online CoP meetings, targeted consultations and structured surveys. This allowed stakeholder input to be incorporated into the preparation of regional risk assessments, resilience indicators, recommendations and trial scenarios before the final validation phase.

The engagement process was deliberately iterative. Stakeholders were asked to move from discussing regional climate challenges to assessing increasingly concrete project outputs. In this way, the workshops served as a working interface between the scientific and technical development carried out within the project and the regional authorities and practitioners expected to use the results.

4.1.4.2 Regional trials - validation in the five case-study regions

The regional engagement process culminated in five structured trials in Sicily, Andalusia, Osijek-Baranja County, Central Greece and the Troodos Mountain Area. These were designed as validation activities rather than conventional dissemination workshops. Using the Trial Guidance Methodology, regional stakeholders acted as evaluators of ClimEmpower outputs under realistic planning and decision-making conditions. The tested elements included the ClimEmpower platform, indicator visualisations, hazard and risk maps, regional resilience recommendations, customisable dashboards and educational resources. Evidence was collected through a combination of surveys, interactive polling, observation during task execution and follow-up interviews.

The composition of the groups was intentionally oriented towards users able to assess the practical relevance of the developed solutions. Participants included representatives of local and regional administrations, regional planners, researchers, civil-protection actors, civil society organisations and technical experts.

In Sicily, the final trial focused strongly on the institutional use of ClimEmpower outputs. Public servants from regional and metropolitan administrations worked with the climate-risk results and platform and considered how the outputs could support infrastructure climate verification and sectoral planning. Participants assessed the relevance of the project results to their daily work at 8.4/10. The combination of structured presentation, hands-on testing and live polling generated detailed feedback on usability, data requirements and institutional relevance.

In Andalusia, stakeholders examined the transferability and practical applicability of risk-mapping methodologies for heatwaves, drought, wildfire and flooding. The value of the project results for participating organisations was rated 4.3/5, while the trial also identified practical

requirements for future use, including multilingual access, simplified terminology and stronger compatibility with municipal workflows.

The Osijek-Baranja County trial engaged 24 participants, the highest attendance among the five regional trials. Participants represented public administration, academia, agriculture and forestry and assessed ClimEmpower mainly as a potential planning and decision-support instrument. Resilience recommendations, risk maps and regional resilience indicators attracted the strongest interest, while drought, flooding, water regimes and agriculture emerged as the principal regional climate-resilience priorities.

In Central Greece, the trial combined presentation of the final regional outputs with guided platform testing and open discussion. Participants identified long-term climate adaptation planning and public awareness and stakeholder communication as strong potential applications, alongside civil protection, spatial planning, infrastructure-risk assessment and regulatory reporting. The exercise also highlighted the importance of high-resolution local data and integration with existing regional systems.

The Troodos Mountain Area trial connected scientific evidence with locally grounded knowledge on wildfire risk, water management, heat-health impacts and emergency preparedness. The process involved local authorities, community representatives, researchers, civil-society actors and civil-protection stakeholders and demonstrated the importance of interpreting technical outputs together with users who understand the specific conditions of mountain communities.

Across the five case-study regions, the trials showed a consistent pattern: stakeholders recognised the strategic relevance of ClimEmpower for climate-risk awareness, planning and evidence-based decision support, while also identifying the conditions needed for routine institutional use, such as localisation, clearer interpretation of results, local-data integration and interoperability with existing administrative and GIS systems.

4.1.4.3 Follower-region mini-trials - testing replication beyond the original regions

Following the regional trials, the engagement process was extended to five follower regions: Campania, Costa del Sol, the Croatian follower region, Western Greece and Sitia UNESCO Global Geopark. The mini-trials were intentionally designed for stakeholders who had not participated in the original ClimEmpower co-design process and were encountering the project tools and results as first-time users. Their purpose was to assess whether ClimEmpower outputs could be understood, considered relevant and transferred to other territorial and institutional contexts.

The methodology was adapted accordingly. Rather than reproducing the complete hands-on trial procedure, the mini-trials combined presentation of final project results, demonstration of the ClimEmpower application, interactive Mentimeter consultation and, where appropriate, interviews with regional representatives. The assessment covered the Educational Library and AI-supported learning environment, the mapping and decision-support platform and the potential for future exploitation. Specific attention was given to scalability, transferability, institutional conditions for sustained adoption and the possibility of embedding ClimEmpower-type solutions into existing regional planning frameworks.

The mini-trials provided useful evidence that replication does not need to involve transferring the entire ClimEmpower solution as one fixed package. Different follower regions identified

different components as their most relevant entry points. Technical administrations placed greater emphasis on local data, GIS interoperability and links with existing planning systems, while education- and outreach-oriented stakeholders valued the Educational Library, AI-supported learning formats and locally relevant awareness materials.

Several concrete examples emerged. In Campania, municipal planning and GIS expertise was used to assess downscaled multi-hazard mapping, the decision-support platform and the Educational Library with its AI assistant. In Western Greece, the educational environment was considered intuitive and useful for locating and adapting climate information for different audiences, while the platform was considered potentially relevant for climate-adaptation planning, spatial planning and infrastructure-risk assessment. In Sitia Geopark, the educational materials generated direct interest, with the Fire Detective Guide requested for possible future community use.

The follower mini-trials thus added a different dimension to the regional workshops: instead of asking whether the tools worked for regions involved in their development, they explored how first-time external users perceived their usefulness and what would be required for future adoption.

4.1.4.4 **ClimEmpower Final Conference - *Turning Climate Science into Regional Action***

The **ClimEmpower Final Conference, “Turning Climate Science into Regional Action”**, was held online via Microsoft Teams on **24 July 2026**, from 10:00 to 12:00 CEST, and attracted **61 participants**. The event represented the main project-level closing dissemination activity and brought together the scientific, technical, regional and exploitation dimensions of ClimEmpower.

The conference was designed to communicate mature project results while creating space for reflection on their practical relevance, future use and replication. The programme was structured around three main thematic blocks: **Scientific & Engineering Achievements**, **Regional Empowerment**, and **Beyond ClimEmpower**. This structure enabled the project to move from the presentation of technical results to the experience of regional users and, finally, to questions of sustainability, exploitation and future cooperation.

The **Scientific & Engineering Achievements** session presented and discussed the main methodological and technical outputs of the project, including regional risk maps and resilience indicators, climate-resilience methodologies, and the ClimEmpower Decision Support System and related technical services. The panel brought together project partners involved in the development of these outputs and included an open discussion on issues such as data gaps, weighting within risk assessments and lessons from the development and prototyping process.

The **Regional Empowerment** session focused on the practical experience of applying the ClimEmpower approach in the five case-study regions. Representatives from **Andalusia, Sicily, Osijek-Baranja County, Central Greece and Troodos** joined the discussion, together with project partners involved in stakeholder engagement. The session addressed Communities of Practice, the Educational Hub and AI-assisted learning resources, and the development of regional policy recommendations. It gave regional representatives an opportunity to reflect

on lessons learned, the usefulness of project outputs in their own contexts and the expected relevance of the work beyond the formal end of the project.

The third thematic block, **Beyond ClimEmpower**, focused on the continuation and uptake of project results. Discussions covered long-term sustainability and commercialization, links and synergies with CLIMAAX and other initiatives, and opportunities for future research and cooperation. In this way, the event connected dissemination of completed work with the project's sustainability and exploitation perspective.

Participant profile and thematic interests

Interactive polling was used throughout the conference to complement the presentations and panel discussions and to collect structured feedback from participants. Among respondents to the participant-profile poll, the largest group consisted of people **providing research, technology or expertise (62.5%)**, followed by respondents **working in government or public administration (25%)** and those **running a business or economic activity (12.5%)**. Although the poll represents a subset of the 61 conference participants, it shows that the event reached the core professional audiences relevant to the future use and further development of ClimEmpower results.

When participants were asked which project issues they considered most important, **risk assessment methodology and maps clearly emerged as the strongest priority**. Resilience assessment methodologies and indicators, methods and libraries for developers, resilience and adaptation recommendations, and the web platform and data visualization were also selected. The result reflects strong interest in the evidence and methodological foundations needed to translate climate information into practical regional decision support.

Perceived potential impact

Participants were also asked to rank the potential impacts of ClimEmpower. The highest-ranked expected impact was **better capacity to address regional challenges**, with an average rank of **2.33**. This was followed by **more transparent and evidence-based decision-making (2.78)** and **better ability to adapt and apply solutions locally (3.11)**. Other recognized potential impacts included **more resilient and effective regional governance (3.33)** and **greater trust and collaboration among stakeholders (3.44)**.

These results are consistent with the central approach of ClimEmpower: supporting regional actors in understanding climate risks, using evidence in decision-making and adapting available methodologies and tools to their own territorial and institutional context.

Participants also associated the project's contribution to fair governance with **more transparent, inclusive and evidence-based decision-making**. Making climate information easier to access and understand, while involving local communities and vulnerable groups, was seen as a way to support adaptation decisions that are more responsive to different regional needs.

Satisfaction and expectations for longer-term impact

Feedback collected at the end of the conference showed a strong positive assessment of the event itself. Among the **eight respondents** to the final evaluation question, satisfaction with the organisation of the webinar reached an average score of **4.63 out of 5**. Five respondents gave the highest score of 5 and three gave a score of 4, meaning that **all respondents assessed the organisation positively**.

Expectations regarding the longer-term impact of ClimEmpower were positive but more cautious. The average score was **3.88 out of 5**. None of the respondents assessed the expected long-term impact negatively: two gave a score of 3, five a score of 4 and one gave the highest score of 5. This suggests that participants recognized the potential of the project results while remaining aware that longer-term impact will depend on continued uptake, maintenance, regional adaptation and integration of the developed outputs into existing institutional processes.

The difference between the high satisfaction with the conference and the somewhat more cautious assessment of long-term impact is useful in interpreting the final stakeholder feedback. Participants responded positively to the quality, content and organisation of the event, while their assessment of future impact reflected a realistic view that the value of ClimEmpower after the project will depend on how its methodologies, tools, educational resources and recommendations are maintained and taken forward.

Final assessment

With **61 participants**, the Final Conference provided a common European-level forum for presenting the final ClimEmpower results and connecting them with the experiences of the five case-study regions. Its value extended beyond the numerical participation figure. The programme combined scientific and technical dissemination, regional experience, sustainability and exploitation discussion, while the use of live polling enabled the consortium to collect additional evidence on participant profiles, thematic priorities, perceived impact and satisfaction.

The event also served as the consolidated implementation of the themes originally envisaged for the three EU-level workshops. Bringing these themes together at the end of the project made it possible to present the project as a connected pathway from **scientific and technical development, through regional co-creation and validation, to replication, sustainability and future use**.

4.1.4.5 Final assessment and key lessons learned

The implementation of Task 5.4 evolved throughout the project from a conventional workshop-based engagement approach into a structured process of co-creation, validation, replication and final dissemination. Regional stakeholders were progressively involved in identifying climate-related needs, discussing available data, prioritising resilience indicators, preparing trial scenarios and, during the final project phase, testing and assessing mature ClimEmpower outputs.

The regional trials represented the most intensive stage of this process. Rather than serving mainly as dissemination events, they enabled stakeholders to interact directly with the ClimEmpower platform, hazard and risk maps, resilience indicators and recommendations, educational resources and decision-support functionalities. Surveys, interactive polling, observations and follow-up discussions were used to collect feedback on usability, practical relevance, user acceptance and conditions for future use. This approach generated detailed information on how project results could be applied in real regional planning and decision-making contexts.

The follower-region mini-trials added an important replication perspective. Stakeholders outside the original case-study regions encountered ClimEmpower results as first-time users and assessed their relevance, transferability and potential for future uptake. Their feedback showed that replication does not necessarily require transferring the complete ClimEmpower

solution as a single package. Different regions identified different entry points, including risk maps, resilience recommendations, the digital platform, educational resources and AI-supported learning tools. This modularity increases the potential for continued use of project results in different institutional and territorial settings.

The ClimEmpower Final Conference completed the engagement process by bringing together the scientific, technical, regional and sustainability dimensions of the project. It provided a common forum for presenting mature project results, sharing the experiences of the five case-study regions and discussing sustainability, exploitation, replication and future cooperation. The event attracted 61 participants. Participant feedback showed a high level of satisfaction with the organisation of the event, while expectations regarding longer-term impact were positive but more cautious, reflecting a realistic understanding that continued impact will depend on maintenance, localisation, institutional uptake and integration with existing regional systems.

Some of the original quantitative participation targets were not fully reached in all activity categories. Several factors contributed to this. The targets were defined at an early stage of the project, when the later workshops were envisaged mainly as broader regional and EU-level dissemination events. As the project progressed, the final engagement activities evolved towards smaller and more targeted validation sessions involving stakeholders with direct relevance to the use, assessment and potential uptake of ClimEmpower results. This reduced the potential number of participants per event, while allowing more intensive interaction, hands-on testing and collection of detailed feedback.

Participation was also affected by the cumulative nature of the engagement process. Many regional stakeholders had already been involved through several CoP cycles, surveys, bilateral consultations and other project activities, and maintaining the same level of attendance throughout a three-year process proved challenging. Institutional workload, limited staff availability and the timing of several final activities during the summer period further affected participation, especially among regional and local public authorities.

The implementation schedule also influenced the EU-level activities. Following the non-approval of the requested project extension, the remaining period for organising the three planned EU workshops became very compressed. Instead of organising three separate events within a short timeframe, the consortium consolidated their planned themes into one Final Conference. This allowed mature project results to be presented together in a coherent closing event covering scientific and technical achievements, regional experience, educational resources, sustainability, exploitation, replication and future cooperation.

These adaptations mean that the quantitative results need to be interpreted together with the type and depth of engagement achieved. The regional trials and follower mini-trials were structured validation and replication exercises rather than large-scale awareness events. Participants were expected to assess concrete outputs, interact with project tools, provide feedback and discuss conditions for future uptake. The emphasis in the final phase shifted from maximising attendance towards obtaining relevant evidence from stakeholders able to evaluate the practical applicability of ClimEmpower results.

One of the main lessons from Task 5.4 is that the relevance of an engagement activity to participants' actual responsibilities strongly influences the quality of their involvement. Practi-

cal demonstrations, locally relevant data and clear links with planning, infrastructure, civil protection and climate-adaptation responsibilities generated more substantive discussion than general project presentations. Stakeholders became more engaged once they could interact with concrete outputs and understand how these could support their own work.

The experience also showed that smaller and well-targeted groups can provide highly valuable feedback during validation activities. Hands-on testing with relevant practitioners produced detailed observations on usability, data quality, interoperability, localization and institutional requirements. These insights were important for understanding the difference between the strategic value of the developed solutions and their readiness for routine operational use.

Face-to-face interaction proved especially effective for in-depth regional engagement, supporting trust, open discussion and collaborative problem-solving. Online and hybrid formats remained useful for widening accessibility and addressing practical constraints and were especially suitable for follower-region activities and the Final Conference. A flexible combination of formats appears to be the most appropriate approach for future activities.

Another lesson concerns the timing and intensity of stakeholder engagement. Participation can decrease when stakeholders are invited to a long sequence of meetings, especially when activities coincide with periods of high operational workload. Future initiatives could benefit from fewer and more focused engagement moments, clearer objectives and earlier communication of how stakeholder contributions will influence project development and final results.

The trials also confirmed the value of introducing hands-on validation as soon as sufficiently mature tools are available. Practical interaction with the platform and project results made it possible to identify concrete requirements that are difficult to capture through surveys or conceptual discussions alone. Recurring issues included the need for local data, clearer interpretation and metadata, multilingual access, export functions, GIS interoperability and stronger links with existing administrative procedures and planning instruments.

The replication activities demonstrated that future uptake is likely to follow different pathways in different regions. Technical administrations may prioritize risk maps, data integration and decision-support functions, while educational or outreach-oriented organizations may find greater immediate value in learning materials, AI-supported content and awareness resources. Maintaining this flexibility can support wider use of ClimEmpower results after the end of the project.

A further lesson relates to the design of performance indicators for stakeholder-engagement activities. Quantitative participation targets remain useful for monitoring reach, but they do not fully capture the value of intensive co-creation, validation and replication activities. Larger audiences are more appropriate for awareness-raising and dissemination events, while validation activities often require smaller groups of stakeholders with sufficient knowledge, responsibility and interest to provide meaningful feedback. Future projects could distinguish more clearly between KPIs for reach-oriented dissemination and KPIs for validation and co-creation. For the latter, indicators such as stakeholder relevance, quality of feedback, completion of testing activities, representation of intended user groups, evidence of replication potential and concrete interest in future use may provide a more meaningful assessment than participant numbers alone.

Despite lower-than-planned attendance in some categories, Task 5.4 delivered a continuous engagement pathway from regional consultation and co-creation to hands-on validation, follow-up replication and final European-level dissemination. The activities generated evidence on usability, institutional requirements, barriers to uptake and possible pathways for continued use of ClimEmpower results beyond the project

4.1.5 Task 5.5: Liaison meetings [M6-M36]

This task will help the project engage and collaborate with the Mission governance, enable a flow of information between ClimEmpower and other Mission projects and facilitate synergy between them to maximise project achievements and/or impacts. This task supports activities as the participation of ClimEmpower stakeholders in joint workshops, the exchange of knowledge, the development and adoption of best practices, as well as joint communication activities with other Mission projects.

Deliverables: D5.2, D5.5, D5.6

- Leader: FER
- Contributors: AIT, PLINVIS, AQUA

Synergies with related projects support knowledge exchange, sharing best practices and innovative solutions. Joint activities (e.g. cross-project participation in regional workshops, co-organisation of joint workshops, joint publications...) allow pooling of resources and maximisation of the impacts of projects dissemination and communication activities. Collaboration with similar projects can also enhance both the scientific and technological work and the project's stakeholder engagement efforts. Being part of a larger network increases credibility which can ensure additional support and stakeholder engagement.

Some of these synergies will arise through cross-project activities organised by the commission and dedicated CSA projects. Others may arise through personal contacts of the project partners and involvement of the project partners in similar projects. This includes the following projects:

ICARIA - Improving ClimAte Resilience of critical Assets

www.icaria-project.eu

Project ICARIA - Improving ClimAte Resilience of critical Assets (HORIZON-MISS-2021 program, Grant agreement No. 101093806) will use asset-level modelling to understand climate-related direct and indirect impacts provoked by complex, compound and cascading disasters and the risk reduction that suitable, sustainable, and cost-effective adaptation solutions provide. The project focuses on critical assets and infrastructures not designed to consider potential changes to climate, as well as on housing and natural land areas. ICARIA will implement and replicate innovative methods and multi-risk assessment approaches in the Barcelona Metropolitan Area, the South Aegean archipelago, and the Salzburg region in Austria. The project will assist risk owners in assessing adaptation solutions' costs and benefits.

ICARIA is led by AQUATEC and several ClimEmpower project partners are also part of ICARIA consortium (including AIT). They also share similarities in methodology, modelling approach and technologies. Operative synergies between two projects at the level of algorithms, data, and technology still need to be assessed. See also section

KNOWING (Framework for defining climate mitigation pathways based on understanding and integrated assessment of climate impacts, adaptation strategies and societal transformation)

www.knowing-climate.eu

KNOWING project (HORIZON-CL5-2021-D1-01, Grant agreement No.1011056841) will develop a modelling framework to help understand and quantify the interactions between the

impacts and risks of climate change, mitigation pathways and adaptation strategies. Currently, there is a need for research that furthers our understanding of past, present, and expected changes in climate and their implications on ecosystems and society. There is also a lack of knowledge of the Earth system and the ability to predict and project its changes under different natural and socio-economic drivers. This is why a holistic, system-aware and behaviour-centred approach is needed to identify and implement realistic climate mitigation pathways.

KNOWING is also coordinated by AIT and the consortia share several other project partners. It follows a very different modelling approach to those used in ClimEmpower and ICARIA and concentrates on system level models and development pathways rather than on geographic data and decision support. Learning about this complementary approach could be of interest to ClimEmpower stakeholders / CoPs.

MAIA (Maximising the impact and accessibility of European climate research)

www.maia-project.eu

The MAIA project (European Union's Horizon Europe Research and Innovation programme, grant agreement No. 101056935) will act as an impact multiplier by providing social structures, technological and outreach activities to accompany, potentiate and help maximise the impact of climate research projects funded under Horizon Europe. MAIA constitutes the response from a group of coordinators and core partners from seven H2020 precursor projects in climate change research (BINGO, BRIGAD, CLARITY, Connecting Nature, DRIVER+, PLACARD and RESCUE). In these projects, driven by the EC's advice to identify synergies and spark collaboration, we liaised and detected a clear need for increased connectivity and a more robust approach to synergies management as means to unlock more meaningful and impact-oriented interactions. MAIA pivots around connectivity as a key enabling factor for an effective outreach. Therefore, we are envisioning specific actions for enhancing i) the connectivity of existing communities (consolidation and activation of a Pan-European community of problem owners, solution providers, and enablers); ii) the connectivity of knowledge and technological infrastructure (creation of the MAIA Portal); and iii) the connectivity of the EU climate research (coordinating an EU climate change research Cluster).

Both AIT and AQUATEC are part of the MAIA consortium, which simplifies the collaboration with this project, mainly on the topics related to ClimEmpower's impact and visibility.

VALORADA (Validated local risk actionable data for adaptation)

www.valorada-project.eu

The goal of the VALORADA project (Horizon Europe Framework Programme, grant agreement No 101112837) is to empower European regions and cities to steer the upcoming societal transformation towards sustainable and climate-resilient development. The VALORADA project is in line with the EU's Adaptation Mission aiming at supporting the transformation of 150 European regions to become sustainable and climate-resilient by 2030.

VALORADA aims to raise awareness regarding the untapped potential of existing data in effectively adapting to climate change. It achieves this by integrating both technical and governance perspectives, ensuring a comprehensive approach. It also facilitates the creation of interdependencies between various types of data, bridging the gap between in-situ data and Earth Observation/Climate data. VALORADA emphasizes the importance of ground data for climate analyses, observation, and tool validation.

ClimEmpower coordinator has recently been contacted by Valorada to evaluate potential synergies between two projects. Several opportunities for joint activities were identified and need to be further defined.

CLIMAAX (CLIMAt e risk and vulnerability Assessment framework and toolboX)

www.climaax.eu/project/

CLIMAAX is a 4-year Horizon Europe project that will provide financial, analytical, and practical support to improve regional climate and emergency risk management plans. CLIMAAX is designed to contribute to the harmonization and consolidation of the practice of climate risk assessment, leaving a legacy for upcoming European initiatives. The project started in January 2023 and runs until December 2026.

CLIMAAX Toolbox contains pan-european open data, projections and risk assessment algorithms (contained in so-called “risk workflows”) designed to support the compilation of regional climate multi-risk assessments. This Toolbox is realised as open-source software and provides a set of simple GUI elements that were realised as Jupyter notebooks. These notebooks have been recognised as potential candidates for early prototypes of the CLIMAAX WP3 services.

ECMWF serves as a bridge between two projects and the initial discussion with the project’s team has been very promising.

5 Monitoring and evaluation

This final iteration of the monitoring and evaluation section builds on the framework established in D5.2 and updated in D5.3. It assesses the performance of ClimEmpower communication and dissemination activities across the full project period (M1-M36), taking into account quantitative KPIs, implementation data and qualitative evidence collected through dissemination activities, stakeholder engagement, regional trials, follower-region mini-trials and the Final Conference.

Monitoring was used throughout the project to assess the reach and effectiveness of individual communication and dissemination channels and to identify where adjustments were needed. The final assessment shows that the communication strategy achieved strong visibility through the project website, regional and scientific events, dissemination materials and direct stakeholder engagement, while some quantitative targets were not fully reached in all categories. The final project period consequently placed stronger emphasis on communicating mature project outputs to relevant audiences and on generating meaningful interaction around the practical use, validation and replication of project results.

Progress and implementation overview

Monitoring of communication and dissemination activities covered the project website, social media channels, dissemination and communication materials, scientific dissemination, regional stakeholder activities, follower-region replication activities and the final project event.

The **project website developed into the main central repository for ClimEmpower information and results**. It recorded 2,589 visitors during the first reporting period and an additional 4,800 visitors between February 2025 and August 2026, resulting in **7,389 recorded visitors across the project period**. During the second half of the project, the website increasingly shifted from presenting general project information towards providing access to final outputs, regional results, policy-oriented materials and educational resources.

A significant development was the further improvement of the educational materials originally prepared during the first project period. These were reorganized into a **web-based Educational Library**, allowing users to explore resources through different entry points such as target groups, climate hazards, sectors and resilience dimensions. An AI-supported tool was integrated to assist users in navigating and adapting the available content. This change also altered the way the original visit/download KPI should be interpreted, as educational resources increasingly became directly accessible through the website rather than being distributed mainly as individual downloadable files.

Social media remained an important supporting communication channel throughout the project. Facebook, LinkedIn, X, Instagram and Quora were used to promote project events, regional activities, publications, educational resources and final results. Performance varied between platforms and reporting periods, and the project did not achieve the same level of engagement across every channel. In the final phase, communication increasingly focused on targeted promotion of mature project outputs and key project milestones rather than maintaining the same intensity across all platforms.

The communication material portfolio was substantially expanded during M19–M36. It included regional and project-level factsheets, infographics, policy-oriented materials, promotional

presentations, flyers, the *Did You Know?* series, educational resources, regional trial communication materials and content supporting the presentation of the final project results. Ten Policy Recommendation Letters were also prepared in a visually consistent format and made available for further use by regional and policy audiences.

Scientific dissemination remained an important component of the strategy. ClimEmpower partners participated in scientific and professional events throughout the project and communicated results through journal publications, conference papers, proceedings, presentations and other scientific outputs. The target related to participation in at least 20 scientific and professional events was reached. The publication portfolio also expanded during the second half of the project, although the original target for peer-reviewed journal publications was not fully achieved by the formal project end.

Regional communication and stakeholder engagement became increasingly important as project results matured. Communities of Practice, regional workshops, trials and follower-region mini-trials progressively moved from identifying regional needs and discussing indicators towards direct validation of the ClimEmpower platform, risk maps, resilience indicators, recommendations and educational resources. Based on the available records, at least **253 participant attendances** were documented across the regional workshop cycle during M1–M36.

The final regional validation phase was complemented by the **ClimEmpower Final Conference, “Turning Climate Science into Regional Action”**, held online on 24 July 2026 with **61 participants**. The event brought together the scientific, technical, regional and sustainability dimensions of the project and included sessions on scientific and engineering achievements, regional empowerment and future use of ClimEmpower results.

Adjustments implemented during M19-M36

The monitoring findings from the first reporting period informed several adjustments during the second half of the project.

Communication became more closely linked to the availability of mature project outputs. Rather than promoting general project information, increasing attention was given to regional results, risk and resilience methodologies, policy recommendations, educational resources, scientific publications and practical applications of the ClimEmpower tools.

The integration between communication channels was strengthened. New dissemination materials and major project developments were increasingly communicated through a combination of the project website, partner channels and social media, supporting greater consistency between central project communication and regional dissemination.

Partner-generated and region-specific communication continued to play an important role. Regional partners used their own communication channels, institutional networks and local events to present ClimEmpower in the context of locally relevant hazards, adaptation challenges and stakeholder needs. This helped complement central project communication with content that was easier to relate to regional circumstances.

The variety of communication formats was also broadened. In addition to conventional reports, news items and presentations, the project increasingly used infographics, visual factsheets,

educational materials, videos, policy-oriented materials and interactive formats. The Educational Library and AI-supported learning tools further expanded the range of formats available to users.

The final period also placed stronger emphasis on **interactive and direct engagement**. Regional trials, follower mini-trials, hands-on demonstrations, Mentimeter consultations, interviews and the Final Conference enabled audiences to react to and assess project results rather than receiving information through one-way communication alone.

Some measures originally envisaged in D5.3 were implemented more extensively than others. The strongest development was seen in the integration of mature results into the website, expansion of reusable communication and educational materials, regional storytelling and direct stakeholder interaction. Other approaches, such as broad paid promotion, were less central to the final communication mix, as project resources and attention were increasingly directed towards targeted dissemination, validation and exploitation-oriented activities.

5.1 Final assessment and key lessons learned

The monitoring results indicate that ClimEmpower communication and dissemination evolved considerably during the project. The early phase focused primarily on establishing visibility, introducing the project, building regional stakeholder networks and communicating the project objectives. As scientific, technical and regional outputs became available, communication shifted towards dissemination of concrete results and practical engagement with potential users.

This evolution also affected how communication performance should be interpreted. Some original quantitative targets were not fully reached in all activity categories. In several cases, the targets were established at an early stage when later project activities were expected to take the form of broader dissemination workshops. As implementation progressed, the final engagement activities developed into smaller and more targeted validation sessions involving stakeholders directly relevant to the assessment and potential uptake of ClimEmpower results.

The regional trials illustrate this change clearly. Their main purpose was not to maximize attendance but to enable relevant stakeholders to interact with project outputs, test their usability and provide detailed feedback on data quality, interpretation, interoperability, localization and institutional requirements. The follower-region mini-trials added a replication perspective by assessing project results with first-time users outside the original case-study regions.

Maintaining stakeholder participation throughout a three-year engagement process also proved challenging. Many stakeholders participated repeatedly in CoP meetings, surveys, bilateral discussions and trial-related activities. Institutional workloads, limited staff availability and the timing of several final activities during the summer period influenced attendance, especially among regional and local public authorities.

The organisation of the EU-level activities was also adapted to the final implementation schedule. Following the non-approval of the requested project extension, the remaining period for organizing three separate EU workshops became very compressed. Their planned themes were consolidated into a single Final Conference, allowing the consortium to present mature project results in one coherent event covering scientific and technical achievements, regional experience, educational resources, sustainability, exploitation and replication.

A key lesson is that **quantitative reach and quality of engagement should be monitored as complementary dimensions**. Participant numbers remain useful indicators for general dissemination and awareness-raising activities, but they do not fully describe the value of co-creation, testing and validation processes. Smaller groups of well-targeted stakeholders can generate more useful evidence for improving project outputs and understanding the conditions required for future uptake.

The project experience also confirmed the importance of linking communication closely to the practical relevance of project results. Engagement was stronger when stakeholders could see a direct connection between ClimEmpower outputs and their own regional challenges, planning responsibilities or professional needs. Practical demonstrations, locally relevant examples and opportunities to interact with tools generated more substantive feedback than general project presentations.

Another lesson concerns the timing of communication. Mature project results became available progressively, and several of the most relevant outputs emerged during the final project phase. Future projects could benefit from planning communication KPIs in a way that distinguishes early awareness raising from later results-oriented dissemination and allows sufficient time for communication after technical outputs have reached a stable level.

The monitoring process also showed that different channels serve different purposes. The project website became the principal long-term repository for outputs and educational resources, social media supported visibility and promotion of milestones, scientific events enabled engagement with specialized communities, and regional workshops provided the strongest environment for direct interaction with users. Using these channels as complementary tools proved more effective than relying on a single communication format.

For future projects, performance indicators could distinguish more clearly between **reach-oriented communication**, **scientific dissemination**, and **stakeholder validation and co-creation**. For validation-oriented activities, indicators such as representation of intended users, completion of testing activities, quality of feedback, evidence of transferability and concrete interest in future use may provide a more meaningful picture of effectiveness than participant numbers alone.

Despite uneven performance across individual quantitative indicators, the final communication and dissemination portfolio provided multiple pathways for project results to reach scientific, regional, policy and broader audiences. The combination of the website, educational resources, scientific dissemination, regional engagement, policy-oriented materials, follower replication activities and the Final Conference created a basis for continued access to and use of ClimEmpower results beyond the formal end of the project.

6 Risk mitigation strategy

Risk management related to dissemination and communication was integrated into the implementation of WP5 throughout the project. The approach built on the stakeholder analysis and communication framework established at the beginning of ClimEmpower and was adjusted as project activities, audiences and communication needs evolved.

At project start, stakeholder analysis was used to identify the main target groups, their communication needs, preferred channels and expected contribution to the project. This provided the basis for the dissemination and communication strategy defined in D5.2 and subsequently updated through D5.3 and this final version of the Plan. Clear objectives, target audiences, key messages, communication channels and responsibilities helped maintain a common approach across the consortium while allowing regional partners to adapt communication to their local context.

One of the main mitigation measures was the use of a **diversified communication mix**. The project combined the website, social media, newsletters, press releases, scientific publications, conferences, regional workshops, Communities of Practice, educational activities, trials, mini-trials and the Final Conference. This reduced dependence on any single communication channel and allowed communication to continue even when individual channels or formats generated lower-than-expected engagement.

The project also relied on **regional adaptation of communication activities**. The five case-study regions differed in climate risks, institutional structures, stakeholder profiles, languages and levels of technical expertise. Regional partners and Case Study Facilitators adapted terminology, examples, presentation formats and engagement methods to local circumstances. Where relevant, materials were translated or presented in local languages, while regional examples were used to make project results easier to understand and relate to existing planning and decision-making processes.

A further risk concerned the **availability and continued engagement of stakeholders over a three-year project period**. Regional authorities and other practitioners frequently faced competing institutional responsibilities and limited availability. Stakeholder engagement was consequently implemented through a flexible combination of face-to-face meetings, online sessions, bilateral consultations, surveys, interactive tools and structured workshops. Smaller and more focused activities were used when broad attendance was difficult to achieve, allowing the consortium to maintain dialogue with stakeholders directly relevant to the development and validation of project results.

This flexibility became especially important during the final project period. Several mature outputs became available relatively late in the implementation cycle, while regional trials, follower mini-trials and final dissemination activities had to be completed within a limited timeframe. Following the non-approval of the requested project extension, the three planned EU-level workshops could not be organized as separate events at meaningful intervals. Their planned themes were consolidated into the ClimEmpower Final Conference, allowing the scientific, technical, regional, educational, sustainability and exploitation dimensions of the project to be presented together in one coherent closing event.

The timing of final activities also created a risk of reduced participation, as several activities took place during the summer period and involved stakeholders from public authorities with

limited availability. This was mitigated through online and hybrid formats, direct invitations, targeted communication through partner networks and the use of smaller validation sessions where active participation was more important than broad attendance.

Another identified risk was the **uneven performance of communication channels and quantitative dissemination indicators**. Monitoring showed that website traffic, social media engagement and stakeholder participation developed differently across channels and periods. Rather than relying exclusively on numerical reach, communication activities in the final phase increasingly focused on mature and reusable project outputs, including educational resources, risk and resilience results, policy recommendations, regional validation findings and exploitation-oriented materials. Communication formats and channels were adjusted according to the type of content and intended audience.

The project website served as the central and stable source of project information and results, reducing the risk of fragmentation across communication channels. Major outputs and communication materials were progressively integrated into the website, including the Educational Library and other resources intended to remain accessible after the project. Social media and partner channels were used to direct audiences towards these resources and to promote project milestones, events and newly available results.

Consistency of project identity was maintained through the use of the ClimEmpower logo, visual identity and common templates across dissemination and communication materials. This supported recognizability of project outputs produced by different partners and regions. Communication responsibilities were coordinated within the consortium, while partners retained sufficient flexibility to communicate through their institutional and regional networks.

Data protection and privacy risks were addressed throughout stakeholder-engagement and communication activities. Personal data collected through registrations, surveys, questionnaires, interviews and other engagement mechanisms were handled in line with applicable GDPR requirements and project procedures. Consent mechanisms were used where required, and dissemination of stakeholder information was managed with attention to confidentiality and appropriate use of personal data.

Monitoring and feedback mechanisms provided an additional layer of risk mitigation. Website statistics, social media analytics, attendance records, surveys, interactive polling and qualitative stakeholder feedback were used to assess the effectiveness of activities and identify areas requiring adjustment. This enabled the consortium to modify formats, communication emphasis and engagement methods as implementation progressed.

The experience of the project showed that one of the main communication risks was not the absence of communication channels, but the need to align communication with the **maturity of project results and the availability of relevant audiences**. Early communication was well suited to project awareness and stakeholder mobilization, while later activities required more targeted interaction with potential users and adopters. Future projects could mitigate this risk by distinguishing from the outset between communication for visibility, dissemination of scientific and technical results, and stakeholder validation activities, with different indicators and expectations for each.

The mitigation measures applied throughout ClimEmpower enabled the consortium to respond to changing implementation conditions while maintaining communication with scientific, regional, policy and wider stakeholder audiences. Although some quantitative targets were not

fully reached, the combination of multiple communication channels, regional adaptation, flexible engagement formats, continuous monitoring and targeted final-stage dissemination supported the effective communication, validation and continued accessibility of the project results.

7 ClimEmpower Legacy Event - continuation of dissemination beyond the project

To support the **sustainability, continued dissemination, accessibility and long-term use of ClimEmpower results beyond the formal project implementation period**, the consortium is preparing a dedicated **ClimEmpower Legacy Event: “Practical Tools for Regional Climate Resilience”**, scheduled as an online webinar on **20 October 2026, from 10:00 to 12:00 CEST**.

The event is conceived as a focused post-project dissemination, sustainability and knowledge-transfer activity. Its purpose is to ensure that the methodologies, tools, educational resources, recommendations and other results developed during ClimEmpower remain visible, understandable and usable after the formal end of the project and can continue to support regional authorities, practitioners, researchers, educators and other potential users.

The Legacy Event also responds to the **limited time available for dissemination of mature project results during the final implementation period**. Several important outputs reached their final or most mature form only towards the end of the project, at the same time as regional trials, follower mini-trials and other final activities were being completed. Following the non-approval of the requested project extension, the remaining implementation period was too compressed to organize the three originally planned EU-level workshops as separate events at meaningful intervals. Their principal themes were consolidated into the ClimEmpower Final Conference held on 24 July 2026.

While the Legacy Event takes place after the formal project end and is not intended to retrospectively replace or be counted as the three planned EU-level workshops, it provides an **additional opportunity to continue and deepen the dissemination work that could not be fully developed within the available implementation period**. It allows the consortium to return to the main themes originally intended for broader EU-level dissemination once the complete set of project outputs is available and to focus more directly on their practical use, sustainability, replication and long-term accessibility.

The event has been deliberately designed as a **lightweight, practical and interactive webinar**, avoiding long technical presentations and the conventional format of a project closing conference. Short presentations will be combined with moderated discussions, Q&A sessions and interactive polling. The emphasis will be placed on tangible outputs, where they can be accessed, what needs they address, how they can be used after the project and which components offer potential for further uptake, adaptation or replication.

The programme is organized around three practical dimensions of regional climate resilience:

Table 7: ClimEmpower legacy event - focus areas

Thematic block		Main focus and ClimEmpower outputs
Understanding Climate Risks	Clim	ClimEmpower Resilience Framework and indicators; indicator factsheets and educational resources; risk-assessment methodologies; regional risk maps; links with complementary approaches and initiatives such as CLIMAAX.
Planning and Decision-Making	Deci-	Hazard-Sector Translation Framework; ClimEmpower DSS and reusable software components; adaptation and resilience recommendations; Policy Recommendation Letters; practical application of project results in regional planning and decision-making.
Capacity and Knowledge Transfer	Building Knowledge	Educational Library; Knowledge Bites and AI-assisted learning; courses, manuals and training materials; region-specific educational and awareness resources; possibilities for continued learning and reuse of project materials.

Understanding Climate Risks

The first block will focus on the knowledge and evidence required for regional climate-resilience planning. It will present the ClimEmpower Resilience Framework and indicators, explain how climate risks were assessed and introduce the regional risk maps developed within the project.

The session will go beyond presenting methodologies as scientific outputs. It will explain how the resulting indicators, factsheets, educational manuals, methodologies and risk maps can be accessed and interpreted by potential users and how they can support the identification and understanding of climate hazards, exposure, vulnerability and resilience at regional level.

The session will also connect ClimEmpower results with complementary European initiatives and methodological approaches where relevant, helping participants understand how the project outputs can be used within the broader climate-adaptation landscape rather than as isolated project results.

Planning and Decision-Making

The second block will focus on translating climate information into practical regional action. The **Hazard-Sector Translation Framework** will be presented as an operational method for connecting climate hazards with affected regional sectors and for supporting structured discussion of regional vulnerabilities and adaptation needs.

The session will also present the **ClimEmpower Decision Support System and selected reusable software components**. The focus will not be solely on demonstrating the existence of the platform, but on explaining the specific functionalities, data services, libraries and technical elements developed through the project, where they can be accessed and how they could be reused or further developed.

Adaptation and resilience recommendations and the **Policy Recommendation Letters** will demonstrate how complex scientific and regional findings can be translated into concise and accessible outputs for policy makers and public administrations. Together, these resources

illustrate the pathway from understanding climate risks to supporting planning, prioritization and evidence-based regional decision-making.

Capacity Building and Knowledge Transfer

The third block will focus on the continued transfer of knowledge after the project end. It will present the **ClimEmpower Educational Library, Knowledge Bites, AI-assisted learning functionalities, courses, manuals and training resources** developed throughout the project.

The session will explain both the available resources and the process through which scientific and technical project knowledge was transformed into formats suitable for different audiences. Regionally adapted resources will be used to demonstrate how ClimEmpower knowledge can be translated for professionals, public administrations, educators, children and the wider public.

Examples will include training and educational manuals developed around project methodologies, region-specific awareness materials and educational resources developed for different age groups and stakeholder profiles. The aim is to demonstrate that ClimEmpower's capacity-building legacy consists of a set of reusable resources that can continue to support learning and awareness raising independently of the project itself.

Interactive format and participant engagement

Each thematic block will combine **two to three short presentations with a moderated panel discussion or Q&A session**. This structure is intended to keep the event dynamic and focused on the practical relevance of the results rather than on lengthy technical presentations.

Interactive Mentimeter questions will be integrated throughout the webinar. At the beginning of the event, participants will be invited to indicate their professional background and level of familiarity with ClimEmpower. During the event, feedback will be collected on the anticipated socio-economic value of the project results, possible areas for future use, potential synergies and opportunities for follow-up activities. Final questions will address satisfaction with the presented results and the organisation and usefulness of the event.

The interaction will provide additional information on how project results are perceived once the full portfolio of ClimEmpower outputs is available and which results are considered most relevant for continued use, replication or further development.

Target audiences

The Legacy Event will target a broad range of potential post-project users, including **regional and local policy makers and public administrations, climate-resilience and adaptation practitioners, researchers, educators, national and European stakeholders, regional-development organizations and interested members of the wider public**.

Special attention will be given to audiences able to make practical use of the project results or contribute to their continuation. This includes stakeholders already engaged through the ClimEmpower Communities of Practice and regional trials, as well as new potential users who were not directly involved during project implementation.

Promotion and preparation

The event is promoted jointly by consortium partners through institutional and professional networks, regional stakeholder contacts, websites, social media and direct invitations. Regional partners will support outreach towards stakeholders involved in the case-study and follower regions, while broader communication will target potential users and organizations interested in climate-risk assessment, regional planning, adaptation, education and capacity building.

Preparatory coordination and rehearsal meetings are planned to ensure that presentations remain concise, complementary and focused on practical value. Contributors will be encouraged to avoid repeating material already presented during the Final Conference and instead concentrate on **what was produced, where it can be found, how it can be used and what could continue beyond the project**.

The webinar will be recorded. Participants will be informed in advance about the recording and privacy arrangements and will be able to participate through the chat and interactive polling without activating their camera or microphone.

Contribution to sustainability and long-term use of results

The ClimEmpower Legacy Event represents an important element of the project's **post-project sustainability approach**. While the Final Conference provided a consolidated presentation of project achievements and regional experiences, the Legacy Event is designed around a different central question:

What can stakeholders continue to use after ClimEmpower?

Its focus is consequently placed on project assets with continued value beyond the funded period: methodologies, resilience indicators, risk maps, software components, recommendations, policy materials, educational resources, training materials and knowledge-transfer tools.

Presenting these resources according to the practical functions they support — **understanding climate risks, supporting planning and decision-making, and building regional capacity** — is intended to make the results easier to navigate and reuse than if they were presented according to project work packages or deliverable structure.

The event also creates an opportunity to reinforce **replication and exploitation pathways** identified during the regional trials and follower mini-trials. Different users may adopt different parts of ClimEmpower according to their institutional needs and capacities. Some may primarily use risk information and indicators, others educational resources, recommendations or individual technical components. The Legacy Event will explicitly communicate this modular approach to continued use.

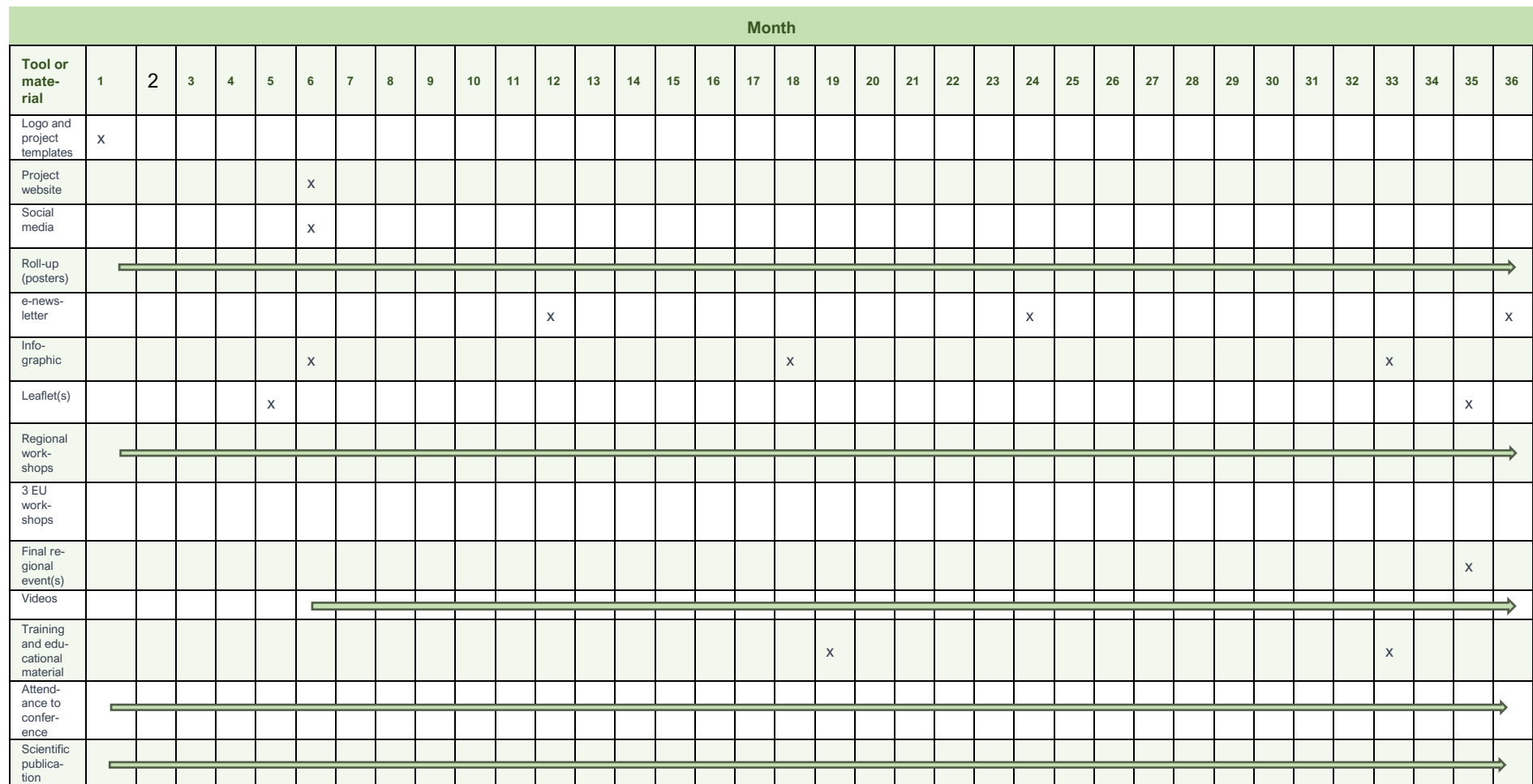
The organisation of a dedicated post-project activity also reflects an important lesson from the final monitoring and evaluation of dissemination activities: **mature project results require sufficient time for communication after they become available**. In ClimEmpower, several important outputs were completed during a highly concentrated final implementation period. Continuing dissemination after the formal project end provides additional space to communicate these mature results, reconnect with existing stakeholders, reach new potential users and identify opportunities for continued cooperation.

The Legacy Event cannot retrospectively change the implementation figures or KPIs achieved within the formal project duration. It does, however, demonstrate the consortium's commitment

to **sustainability, continued knowledge transfer and long-term exploitation of the project results** and extends the communication process beyond the contractual end of the project.

Through this activity, ClimEmpower aims to move from the communication of completed project results towards their **continued accessibility, practical application, replication and long-term use**, helping ensure that the knowledge and resources generated by the project remain useful to regional stakeholders after the funded activities have ended.

8 Timeline (Gantt chart)



9 Conclusion

The final implementation of the ClimEmpower dissemination and communication strategy shows a clear evolution from project visibility and stakeholder mobilisation towards the communication, validation and continued use of mature project results.

Throughout the project, communication activities were progressively adapted to the needs of different audiences and to the maturity of available outputs. The website, scientific dissemination, partner communication channels, Communities of Practice, regional workshops and educational resources served complementary purposes, while the final project phase placed stronger emphasis on practical validation, replication and knowledge transfer.

One of the main lessons from ClimEmpower is that communication effectiveness cannot be assessed through reach alone. Broad dissemination remains important for visibility, but co-creation, testing and replication require smaller and more targeted groups of stakeholders able to provide meaningful feedback and assess the practical relevance of project results. This distinction became especially visible through the regional trials and follower-region mini-trials.

The project also confirmed the importance of aligning communication activities with the maturity of project results. Several key outputs became available only during the final implementation period, limiting the time available for their wider dissemination before project completion. Future projects could benefit from distinguishing more clearly between early awareness-raising activities, results-oriented dissemination and final validation or exploitation activities when defining communication timelines and KPIs.

Although some quantitative targets were not fully achieved, ClimEmpower created a broad portfolio of reusable results and communication resources. These include climate-risk methodologies, resilience indicators, regional risk maps, decision-support tools, recommendations, policy-oriented materials, educational resources and training content that can continue to be accessed and used independently of the formal project structure.

The sustainability of communication and knowledge transfer therefore extends beyond the project end. The project website and Educational Library provide continued access to results, while the planned ClimEmpower Legacy Event will create an additional opportunity to present mature outputs, support their practical use and strengthen future replication and cooperation.

ClimEmpower's communication legacy lies in making project knowledge more accessible, usable and transferable. By combining scientific dissemination, regional validation, educational resources, policy-oriented communication and continued post-project outreach, the project has created a basis for its results to remain relevant and applicable beyond the funded implementation period.