



Climate-Resilient Development Pathways in Metropolitan Regions of Europe

Deliverable D7.2 Dissemination, Exploitation, and Communication Strategy – Version 2

July 2025

Grant Agreement Number 101137851

Deliverable No:	D7.2
Deliverable nature:	PDF document
Work Package and Task:	WP7 – Task 7.1
Dissemination level:	PU - Public
Authors:	Zofia Kunysz (SDSN) Hamza Kechiche (SDSN) Hannah York (SDSN) Tanya Baycheva-Merger (ICLEI) Latifa Yousef (WMO)
Reviewers	Aphrodite Bouikidis (NOA) Mihai Razvan Nita (UB) Mirabela Marin (INCDS) Cezar Ungurean (INCDS) Cristian Ioja (UB) Laurentiu Ciuhu (MeteoRo) Dana Micu (MeteoRo) Vladut Falcescu (MeteoRo) Cristina Plescan (MeteoRo) Sorin Cheval (MeteoRo) Panagiota Koltsida (ATHENA RC) Angela Cristina Plescan (MeteoRo) Emma Ferranti (UoBir) Guillem Canaleta (PCF) Megha Kaveri Puthucode Sreeram (WMO) Dimitra Palaiologou (NMA) Cristian Ioja (UB) Iuliana Pârvu (CNC) Arianna Acierno (CMCC) Elena Xoplaki (JLU) Letizia Cremonini (CNR) Federico Carotenuto (CNR)
Contractual submission date:	31 July 2025
Actual submission date:	31 July 2025

Technical References

Project title	Climate-Resilient Development Pathways in Metropolitan Regions of Europe
Project acronym	CARMINE
Grant agreement number	101137851
Instrument	HORIZON EUROPE-RIA
Call	HORIZON-CL5-2023-D1-01
Starting date of the project	1 st February 2024
Project duration	48 Months

Document history

Version	Date	Description
1.0	13 June 2025	First draft submitted for WP7 partners' review
1.1	12 July 2025	Second draft sent to reviewers
1.2	21 July 2025	Third draft sent to the consortium
1.3	25 July 2025	Fourth draft sent to the management team
1.4	30 July 2025	Fifth (Final) draft with layout review
1.5	24.02.2026	Revised version of the deliverable submitted, following the recommendation in the Project Review Report

Disclaimer

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or European Climate, Infrastructure and Environment Executive Agency (CINEA). Neither the European Union nor the granting authority can be held responsible for them.

UK participants in this project are co-funded by UK Research and Innovation (UKRI).

The work of the Meteomatics partner (Switzerland) has received funding from the Swiss State Secretariat for Education, Research and Innovation (SERI).

Table of Contents

1	Introduction.....	14
2	Maximising impact of the CARMINE Project – Overview.....	16
2.1.	Definition of Dissemination, Communication and Exploitation in CARMINE.....	16
2.2.	Vision and Objectives.....	16
2.3.	Situation Analysis	18
2.4.	Stakeholder Mapping and Target Audience Segmentation	22
3	Method and activities	30
3.1	Difference between Communication and Dissemination, and the Approach Taken in this Strategy	30
3.2	General Guidelines for Communication and Dissemination	30
3.2.1	Ethical and legal considerations	30
3.2.2	Accessible and inclusive communication and dissemination	31
3.3	External Communication and Dissemination	34
3.3.1	Channels, Methods and Tools.....	34
a.	EU funding acknowledgement	34
b.	Brand identity, style guide and logo	34
c.	Digital and social media presence	36
d.	Project website	37
e.	Partners’ websites and LinkedIn accounts.....	40
f.	Newsletters	42
g.	Events and workshops.....	42
h.	Stakeholder Community–HUB (SC-HUB).....	43
i.	Media outreach.....	44
j.	Targeted outreach	45
k.	Policy briefs (policy briefs, white papers, communiques)	45
3.3.2	Networking and operational links	45
3.3.3	Training and educational materials	49
3.3.4	Open Science Approach and Open Access implementation in CARMINE	49
3.4	Internal Communication	51
3.5	Exploitation and Sustainability	52
3.5.1	Introduction and purpose	52
3.5.2	Exploitation Roadmap	53
a.	Identification of Key Exploitable Results (KERs)	53
b.	Characterisation of KERs.....	55

c. Identification of exploitation routes	57
d. Examples of use models and exploitation routes	58
3.5.3 Dissemination	62
4 <i>Monitoring and Evaluation of Impact of DEC activities</i>.....	64
5 <i>Next Steps and Further Updates of the DEC Strategy</i>.....	69
6 <i>Annex</i>	70
6.1 CARMINE Visual Identity Development Survey	70
6.2 CARMINE Blog Post Guidelines	72
6.3 CARMINE Filming Guidelines	74
6.4 CARMINE Photography Guidelines	76

Abbreviations

Acronym	Full Wording
ANN Radar	A New Normal Radar
CAN	Climate Action Network
CC	Climate Change
CEN	European Committee for Standardisation
CINEA	European Climate, Infrastructure and Environment Executive Agency
Climate-ADAPT	European Climate Adaptation Platform
CROSSEU	Cross-sectoral Framework for Socio-Economic Resilience to Climate Change and Extreme Events in Europe
CSA	Case Study Area
DEC	Dissemination, Exploitation, and Communication Strategy
DestinE	Destination Earth
DT	Digital Twin
EADI	European Association of Development Research and Training Institutes
EAERE	European Association of Environmental and Resource Economists
ECRA	European Climate Research Alliance
EEA	European Environment Agency
EERA	European Educational Research Association
EESC	European Economic and Social Committee
EGU	European Geosciences Union
EIT Climate-KIC	European Institute of Innovation and Technology Knowledge and Innovation Community
EMS	European Meteorological Society
ENoLL	European Network of Living Labs
ESG	Environmental, Social, and Governance
ETSI	European Telecommunications Standards Institute
EUA	European Universities Alliance
GAW	Global Atmosphere Watch
GDPR	General Data Protection Regulation
GEO	Group on Earth Observations
GIS	Geographic Information System
G3IS	Global Greenhouse Gas Information System
ICARIA	Improving Climate Resilience of Critical Assets
ICSD	International Conference on Sustainable Development
IDSS	Impact-Based Decision Support System
IP	Intellectual Property
IUS	Integrated Urban Services
KER	Key Exploitable Result
KPI	Key Performance Indicator

LL	Living Lab
MACC	Mission on Adaptation to Climate Change
MIRACA	Multi-hazard Infrastructure Risk Assessment for Climate Adaptation
NbS	Nature-based solution
NGO	Non-governmental organisation
NMH	National Ministry of Health
ORE	Open Research Europe
PC	Project Coordinator
PM	Person-month
R&I	Research and Innovation
SC-HUB	Stakeholders Community Hub
SCM	Smart Cities Marketplace
SDG	Sustainable Development Goal
SDO	Standards Developing Organisation
SERI	Swiss State Secretariat for Education, Research, and Innovation
SIA	Systems Innovation Approach
SMART	Specific, Measurable, Achievable, Relevant, Time-bound
SWOT	Strengths, Weaknesses, Opportunities, Threats
TG	Target Group
UCCRN	Urban Climate Change Research Network
UKRI	United Kingdom Research and Innovation
UN	United Nations
UNFCCC	United Nations Framework Convention on Climate Change
UVP	Unique Value Proposition
WP	Work Package
WS1	Workshop 1

History of Changes

This deliverable D7.2 is a second version of the DEC strategy. Table below presents the main updates between Version 1 (D7.1) and Version 2 (D7.2).

Version	Section	Date	Description
1.0	Introduction	May 22, 2025	Added context for D7.2; added changes in D7.2 compared to D7.1
1.0	2.3	May 22, 2025	Added context for D7.2
1.0	2.3 SMART Table	May 22, 2025	Removed the mention to the annual survey on audience expectations (strategy is being adjusted according to engagement and interactions)
1.0	2.4	May 27, 2025	Term inconsistencies corrected (CS to CSA, etc.) and section added on WS1
1.0	4	May 27, 2025	Minor updates to monitoring activities and website tracking indicators
1.0	2.2	May – June 2025	Changes to the Table 2 SWOT analysis (added/removed items)
1.0	3.4	June 12, 2025	Changes to coordination and planning
1.0	3.5	June 12, 2025	Updates added to KERs
1.0	3.3.1 g	June 13, 2025	Updates to upcoming events
1.0		June 13, 2025	First draft submitted for WP7 partners' review
1.1	3.3.1 h	June 17, 2025	Added SC-HUB updates
1.1	3.2.1	June 19, 2025	Section added on Ethical and legal considerations
1.1	3.2.2	June 19, 2025	Update in section tone from prescriptive to descriptive
1.1	3.3.1 c	June 19, 2025	Minor updates to the strategy for digital and social media presence
1.1	2.3	June 19, 2025	Added Risk Assessment and Mitigation Matrix
1.1	3.3.1 d	June 23, 2025	Added updates to project website
1.1	3.3.2	June 25, 2025	Updates to networking and joint collaborations

1.1	Executive Summary	July 10, 2025	Added graphical abstract
1.1	3.3.1 k	July 11, 2025	Section added on policy briefs
1.1	3.3.3	July 11, 2025	Section added on training and educational materials
1.1	5	July 11, 2025	Updated next steps to reflect project evolution
1.1		July 12, 2025	Second draft sent to reviewers
1.2	2.3	July 16, 2025	Adjustments to Table 1 SMART to reflect project timeline; and other minor updates across the document
1.2		July 21, 2025	Third draft sent to all consortium partners
1.3	3.3.1 b	July 24, 2025	Survey results and brand identity images moved to Annex
1.3	Entire document	July 24, 2025	Added and adjusted figure names and numbers
1.3	2.4	July 25, 2025	Updates to Table 4 – additional stakeholders included for CSA Bologna.
1.3	4 e	July 25, 2025	Additional section on the feedback mechanism added
1.3		July 25, 2025	Fourth draft sent to the management team
1.4	Annex	July 29, 2025	CARMINE Blog Post Guidelines, Filming Guidelines and Photography Guidelines added to the Annex
1.4		July 30, 2025	Fifth (final) draft with the layout review sent to the management team
1.4		July 31, 2025	Final review of the document by the management team
1.5	2.2	February 2, 2026	Paragraph added about the alignment of the exploitation framework with the SMART objectives. An objective relevant to exploitation added to Table 1.
1.5	3.3.1 j	February 2, 2026	Mention regarding the KPIs added.
1.5	3.5	February 2, 2026	Section updated to provide more specific information regarding exploitation targets, means and KPIs. Table 10 “KPIs framework for monitoring exploitation of KERs” added.

1.5		February 20, 2026	Review of the changes by the management team.
-----	--	-------------------	---

List of figures

Figure 1 - Graphical abstract describing deliverable D7.2 - DEC Strategy Version 2.....	13
Figure 2 - Visual of funding acknowledgement used in CARMINE communications outputs	34
Figure 3 - CARMINE official logo	35
Figure 4 - CARMINE colour palette	36
Figure 5 - Screenshot of CARMINE website development survey results.....	38
Figure 6 - Screenshot of CARMINE website homepage.....	38
Figure 7 - Screenshot of the SC-HUB homepage.....	44
Figure 8 - Built-in social media analytics used for online presence monitoring and evaluation ..	66
Figure 9 - Social media posts engagement tracker	66
Figure 10 - Communication and Dissemination Tracker	68
Figure 11 - Screenshot from the CARMINE logo development survey	70
Figure 12 - Screenshot from the CARMINE logo development survey.....	70
Figure 13 - Screenshot from the CARMINE logo development survey results	71
Figure 14 - Screenshot from the CARMINE logo development survey results	71
Figure 15 - Final options for the CARMINE Project official logo. Option 4 was chosen by partners	72

List of tables

Table 1 - Setting CARMINE'S DEC objectives using SMART approach	17
Table 2 - SWOT analysis of CARMINE's dissemination, exploitation and communication activities	19
Table 3 - DEC Risk Assessment and Mitigation Matrix.....	20
Table 4 - Communication and dissemination objectives and channels pertinent to the TGs	22
Table 5 - Partners' websites and LinkedIn accounts	40
Table 6 - Events and workshops	42
Table 7 - Mapping operational links and networking opportunities	46
Table 8 - Team meetings.....	52
Table 9 - CARMINE's KERs and potential target groups	53
Table 10 - DEC instruments and KPIs	64

Executive Summary

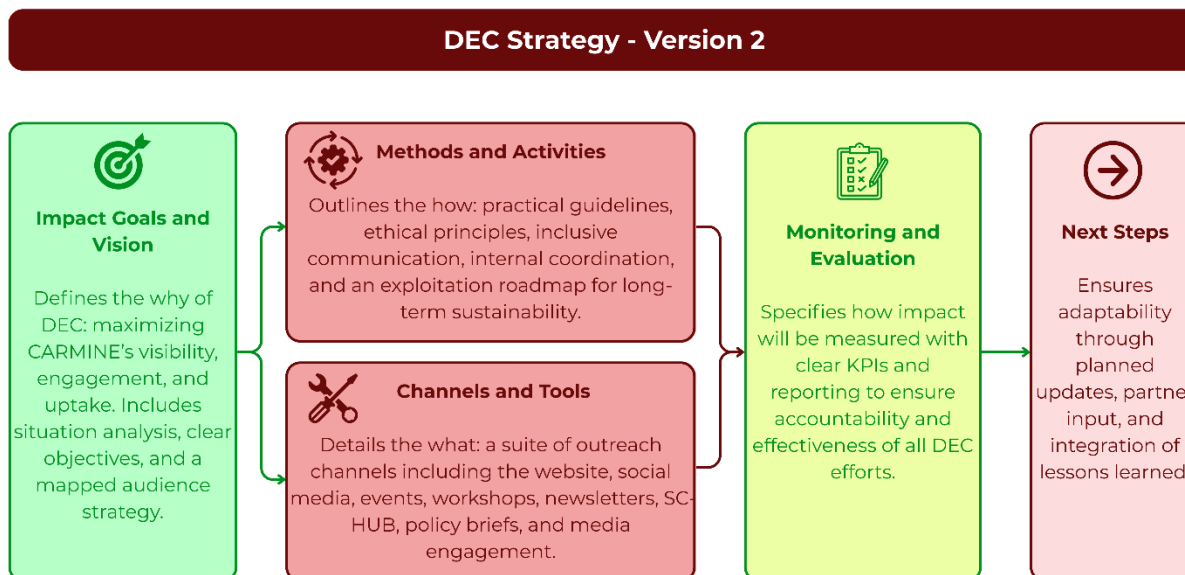


Figure 1 - Graphical abstract describing deliverable D7.2 - DEC Strategy Version 2

CARMINE's Dissemination, Exploitation and Communication (DEC) strategy presents a comprehensive approach to support the effectiveness in Communicating, Disseminating, and Exploiting the project's mission, objectives, and results. With a focus on enhancing stakeholder engagement, knowledge exchange, and impact amplification, the DEC strategy aims to maximise the use of available communication, dissemination, and exploitation tools, approaches, and platforms to ensure widespread awareness, understanding, and utilisation of CARMINE's outputs and outcomes.

The strategy recognises the diverse range of stakeholders involved, the vision of the project, and the importance of promoting a cohesive message that resonates with audiences and drives desired actions. By utilising a mix of traditional and digital channels such as websites, social media platforms, newsletters, media outreach, and events, the DEC strategy will leverage the strengths of each means to reach target audiences effectively and raise awareness of CARMINE.

Furthermore, the strategy emphasizes the relevance of continuous evaluation and monitoring mechanisms to assess the impact of the dissemination and communication efforts to identify areas of improvement and refine the strategy by prioritising well thought out changes.

1 Introduction

Climate change poses increasingly severe challenges, particularly in metropolitan regions, where the impacts of climate and weather extremes are amplified. The "*Climate Resilient Development Pathways in Metropolitan Regions of Europe (CARMINE)*" project addresses this urgent need for adaptation strategies at the local level. One of the objectives of WP7 is to co-create and execute a DEC strategy to ensure stakeholder awareness and long-term sustainability of project outputs. Task 7.1 sets up the DEC plan of activities to facilitate the connection between project results and implementation and contribute to enhancing project visibility. It outlines actions, target audiences, visual identity, KPIs, and scheduling of this plan. Led by SDSN, participating partners also include MeteoRo, UB, CNR, INCDS, CNC, ATH-RC, NOA, JLU, WMO, SDSN, UoBIR, CMCC, NMA, MoDG, CAAB.

CARMINE serves as a bridge between local and regional scales, offering impact-based decision support services and multi-level climate governance to support local adaptation efforts. The project's overarching goal is to enhance the climate resilience of metropolitan communities in Europe, aligning with the EU Mission on Adaptation to Climate Change by 2030.

Over the timeframe of 2030-2035 and with perspectives extending to 2050, CARMINE employs an interdisciplinary approach. This approach focuses on co-creating knowledge-based tools, strategies, and pathways for adaptation and mitigation actions, emphasizing 1) Co-Creation of Decision-Support Services, 2) Collaboration with stakeholders, and 3) Science-Based Governance.

The DEC Strategy (also called "Strategy" hereafter) of the CARMINE project is designed to maximize the impact of project outcomes and ensure widespread uptake of findings to advance climate resilience and adaptation efforts.

In this way, the DEC Strategy carries out a situation analysis to better lay out the vision and objectives of the communication, dissemination and exploitation activities and specifies the role of partners. It provides a deeper insight into internal and external communication and dissemination plans, including on channels and methods, and preliminary schemes for exploitation and sustainability.

The first version of the DEC Strategy (D7.1) was delivered in M3. This document provides an updated version, informed by the feedback, lessons learned, and experiences gathered during the first 18 months of the project. While the core objectives and principles of the Strategy remain unchanged, several elements have been revised or replaced to reflect more effective practices and evolving circumstances. As the project moves beyond its initial positioning phase within the EU research and innovation landscape, this update supports a shift toward more targeted dissemination, strategic networking, and the promotion of concrete outputs.

Key updates in Version 2 of the DEC Strategy

Key updates include the addition of a graphical abstract to enhance accessibility and summarise the Strategy's approach at a glance, as well as expanded context and explanation surrounding this deliverable (D7.2) in relation to the original version (D7.1). Several analytical components have been strengthened, including updates to the SWOT analysis (Table 1.2), the addition of a dedicated Risk Assessment and Mitigation Matrix, and new sections addressing ethical and legal considerations relevant to DEC activities.

Strategic updates have also been made across multiple areas: digital and social media presence, project website content, upcoming events, and updates to the Stakeholders Community Hub (SC-HUB). Additional emphasis has been placed on CARMINE's external engagement, with new sections dedicated to policy briefs, training and educational materials, and strengthened networking and collaboration efforts with other EU projects. Minor adjustments have been made to terminology consistency, coordination workflows, and the tracking of communication indicators. Finally, the section on next steps has been updated to reflect current planning and the next phase of the project's communication, dissemination, and exploitation efforts.

2 Maximising impact of the CARMINE Project – Overview

2.1. Definition of Dissemination, Communication and Exploitation in CARMINE

Communication: involves the strategic exchange of information, ideas, and messages to facilitate understanding, collaboration, and engagement among the CARMINE project stakeholders and the broader community. Effective communication ensures that project goals, activities, and outcomes are clearly communicated and understood, leading to increased awareness, participation, and impact.

Dissemination: involves maximizing the impact and value of project outcomes and results by sharing project outcomes, knowledge, and results with relevant stakeholders, including policymakers, researchers, practitioners, and the public. The goal of dissemination is to ensure that the valuable insights and findings generated by CARMINE's research reach a wide audience and contribute to informed decision-making and action in climate resilience.

Exploitation: involves maximizing the impact and value of project outcomes and results by translating research findings into tangible benefits for stakeholders and society. Exploitation activities focus on leveraging project outputs to inform policy and decision-making, drive innovation, and promote sustainability in climate resilience.

2.2. Vision and Objectives

The **vision** of the CARMINE DEC strategy is to maximise the project's impact while providing a dynamic ecosystem where stakeholders are equipped with transparent, inclusive, and impactful strategies and approaches. This will mean that:

- There's an increased understanding and recognition of the project's mission, which will lead to a deeper comprehension and motivation for taking proactive measures to mitigate and adapt to climate change;
- Inclusive and transparent participation will be facilitated to empower and enhance connectivity and collaboration with and between stakeholders;
- The project outcomes will create a positive effect by being widespread and creating a tangible impact.

To achieve this vision, the main **objectives** of the DEC strategy are:

- To raise awareness of the project and the project's insights, tools and proposals for climate adaptation and mitigation action by effectively informing of the work, expectations, results, and achievements
- To identify, reach, and grow targeted audiences and stakeholders by building visibility with an engaged community
- To coordinate, monitor, report, and upscale communication efforts
- To develop the CARMINE brand and increase brand awareness

- To support the exploitation of project results and increase the trust in science and innovation (including Nature-Based Solutions)

The SMART Objectives Approach (*SMART = Specific, Measurable, Achievable, Relevant, Time-bound*) detailed in Table 3 serves as a framework to ensure the objectives are clear, actionable, and aligned with the project's mission.

Beyond supporting communication and dissemination activities, the SMART framework provides the operational backbone for structuring the CARMINE's exploitation and sustainability plan. At this level, the SMART approach is used to translate the plan into a coherent, measurable, and time-bound exploitation strategy that guides the planning, coordination, and monitoring of exploitation-related activities across the project (see Table 1). The plan provides a roadmap for the development and implementation of individual exploitation plans for all the CARMINE's Key Exploitable Results (KERs- see Table 9). Subsequently, the SMART framework is applied within each individual exploitation plan to structure result-specific actions in a clear and consistent way. For example, the SMART objectives define the **specific aim** of each individual exploitation plan, clarifying the intended use of the result and the most appropriate exploitation or uptake pathway. The **measurable** dimension supports the identification of key performance indicators (KPIs) for each plan (See section 3.5.3). The **achievable** dimension ensures that selected exploitation pathways are realistic and aligned with the maturity of the KER, partner capacities, and available resources. The **relevant** dimension links each exploitation plan to CARMINE's overall impact objectives and stakeholder needs, while the **time-bound** dimension establishes clear milestones for planning, implementation, and follow-up of exploitation actions. The individual exploitation plans (all KERs) are to be finalised by the end of 2026, with their implementation and monitoring continuing until the end of 2027 and beyond.

Table 1 - Setting CARMINE'S DEC objectives using SMART approach

S Specific	M Measurable	A Achievable	R Relevant	T Time-bound
Raise awareness of the project by effectively informing of the work, expectations, results, and achievements.	Number of social media and website traffic, reach, and engagements.	Produce and issue targeted content through communication and dissemination tools and other relevant activities.	Contributes to drawing attention to CARMINE, facilitate collaboration and support in achieving the goals and sharing results.	Achieve significant improvement in public awareness within the next year of implementing the communications and dissemination strategy.

Identify, reach, and grow targeted audiences and stakeholders by building visibility with an engaged community.	Increase in the number of community members to be tracked through statistics or communication metrics, attendance to events, and engagement with the project.	Implement targeted outreach campaigns through communication and dissemination channels.	Build a strong, engaged community that will facilitate collaboration and support on the project goals.	Develop and execute targeted outreach for engagement within the first year, ensuring progress tracking and adjustments as needed.
Coordinate, monitor, report, and upscale communication efforts.	Implement a comprehensive strategy with defined goals and KPIs and bi-monthly progress reports.	Assign and organise tasks and responsibilities, utilise project management tools, and conduct regular evaluations to ensure efficiency.	Effective communication efforts will optimise the efficiency of the overall DEC strategy and enhance project outcomes.	Continue implementing the communications strategy of the project with regular monitoring (around the bi-monthly Project Progress Meetings, and the monthly WP7 meetings) .
Develop the CARMINE brand and increase brand awareness once it's established.	Establish a strong, recognizable brand presence and foster a positive perception and reputation by identifying inconsistencies and actively monitoring brand sentiment	Carry out branding strategies with consistent style, visual identity, correct logo usage, and presentation of the Project.	Enhance credibility, trustworthiness, and recognition of the project across audiences and stakeholders.	Achieve significant brand recognition within the 1 year of the project and to be reviewed on a yearly basis.
To maximise the uptake, use, and long-term sustainability of CARMINE's key exploitable results (KERs) beyond the project lifetime.	To identify CARMINE's KERs and to develop and implement individual exploitation plans for each KER	Apply structured methodologies, partner expertise, and Horizon Results Booster support to develop realistic and tailored exploitation plans for each KER.	Supports the uptake, sustainability, and long-term impact of CARMINE results beyond the project lifetime.	Individual exploitation plans for each Key Exploitable Result will be finalised by the end of 2026, with their implementation and monitoring continuing until the end of 2027 and beyond.

2.3. Situation Analysis

Designing effective DEC activities requires a solid understanding of both internal capacities and the evolving external context. Table 1 presents an updated analysis of the consortium's strengths, weaknesses, opportunities, and threats (SWOT) regarding DEC activities. The initial mapping of partners' individual expertise in delivering DEC actions, as proposed in the first version of this

Strategy, is being gradually implemented to better coordinate targeted efforts across the 32-partner consortium.

Since the delivery of the initial Strategy (D7.1), several internal and external developments have emerged that shape how DEC efforts can be planned and executed. Internally, the project has progressed beyond its early positioning phase and is now entering a stage where more tangible outputs, learnings from the Case Study Areas (CSAs), and co-created tools can be actively disseminated. While this allows for more targeted engagement, it also surfaces coordination challenges, especially in terms of aligning communication efforts across partners with varying levels of DEC experience and capacity as well as differing timelines and approaches in the implementation of their activities

Externally, geopolitical and macroeconomic shifts, such as the military conflicts and deprioritization of international climate cooperation, are influencing the broader ecosystem in which CARMINE operates. Combined with economic uncertainty and rising demands on public budgets, these dynamics risk lowering institutional focus on long-term resilience and sustainability agendas, including at the metropolitan level. In parallel, stakeholder fatigue and funding pressures complicate efforts to sustain engagement over time. As such, the DEC Strategy must remain adaptive, building on the consortium's strengths while proactively addressing emerging risks. A risk assessment and mitigation matrix has been added to version 2 of this Strategy (see Table 2). This matrix reflects internal considerations and anticipates potential risks that could impact DEC activities, along with the measures implemented or planned to prevent and/or address them.

Table 2 - SWOT analysis of CARMINE's dissemination, exploitation and communication activities

Strengths	Opportunities
• <i>Strong partnerships with numerous experienced partners in communication and dissemination. Access to vast professional, scientific and academic networks through project partners (such as SDSN, ICLEI, or WMO).</i> • <i>Access to diverse range of audiences through cooperation with local to regional communities (stakeholders and users), decision-, and policymakers (local, regional and national authorities).</i> • <i>Diversity of contexts and results to share for climate adaptation and mitigation actions implemented in eight selected CSAs.</i> • <i>Diverse consortium bringing complementary expertise (climate science, engineering, policy, communication).</i>	• <i>Rising awareness of climate and biodiversity crises, especially in metropolitan areas, is prompting governments at all levels to align with EU strategies on adaptation, nature restoration, and resilience.</i> • <i>Significant potential to develop and establish stronger links between traditional and Nature-Based Solutions.</i> • <i>Significant potential to establish stronger links for knowledge exchange between EU regions, countries, sectors, stakeholders, users and other projects.</i> • <i>Existing local and regional policies and funding to promote projects that address climate resilience at the metropolitan level.</i> • <i>Growing attention to risk management, resilience, and crisis preparedness in EU policy and funding agendas can be leveraged</i>

• <i>High experience of CARMINE partners in promoting different activities for dissemination, communication and exploitation.</i> • <i>Connections with ongoing projects interested in climate change adaptation.</i> • <i>Well-developed visual identity and branding tools for the project.</i> • <i>Capacity to leverage communication tools in multiple languages via local partners.</i>	<i>to frame CARMINE outputs in more strategic ways.</i> • <i>The fast-approaching 2030 deadline for the 2030 Agenda and the SDGs, the Sendai Framework, and the European Green Deal (Fit for 55), which is likely to draw increased attention from decision-makers and the media.</i> • <i>Implementation of several research projects on similar topics in the same metropolitan regions of CARMINE creating opportunities for synergies and collaboration.</i> • <i>Access to European climate and sustainability platforms for greater outreach (e.g., Climate-ADAPT, EEA).</i> • <i>Linking with local festivals, civic events, and science and research fairs to widen exposure.</i>
Weaknesses • <i>Challenging requirement to engage both professional and public audiences through the same project as they might have diverse interests and communication preferences.</i> • <i>Limited experience with collaborative work in some case study areas, and among certain partners and stakeholders unfamiliar with operating in large consortia</i> • <i>Uneven communication capacities and experience for few partners based in the CSAs on how to properly communicate about and disseminate research results.</i> • <i>Potential delays in content validation and approval within the consortium.</i> • <i>Low media visibility in the early stages of the project.</i>	Threats • <i>Competition for stakeholders from other projects working to similar agendas, if there is too much involvement asked from them.</i> • <i>Stakeholder fatigue and lack of capacity for engagement.</i> • <i>High number of partners which makes it difficult to implement the Strategy in a coherent way.</i> • <i>Competing priorities and vested interests at the city and regional level.</i> • <i>Information overload and difficulty capturing attention in a crowded climate project landscape.</i> • <i>Geopolitical shifts and economic uncertainty (e.g. wars, defense prioritization, constrained public budgets, and a focus on competitiveness and reindustrialization) reduce the political space and institutional appetite for climate action.</i> • <i>Increasing politicization and declining quality of some social media platforms (e.g. X) may limit the visibility of legitimate, informative content and hinder audience engagement.</i>

Table 3 - DEC Risk Assessment and Mitigation Matrix

Risk description	Potential Impact	Mitigation Measures
Dissemination		

Inadequate dissemination of scientific results to non-academic audiences	Medium	Simplify technical content through storytelling, visuals and use of plain language; produce tailored summaries and abstracts
Limited visibility in external media or policy channels	Low	Leverage existing media partnerships; invite journalists to site visits; publish op-eds; prepare media-ready policy briefs linked to major EU milestones (e.g., Green Deal)
Reputational risk due to incorrect or misinterpreted information in external communications	High	Apply a quality control process before publication; train all partners on external communication protocols
Exploitation		
Misalignment between project timescale and institutional strategies	High	Engage institutional stakeholders early to align roadmaps; promote integration of project outcomes into long-term strategic frameworks
Insufficient capacity to implement innovation in different sectors (e.g., Nature-based Solutions)	High	Provide targeted capacity-building and training; foster cross-sectoral dialogue and peer learning; adapt innovations to local contexts
Communication		
Low engagement of target audiences due to message overload or lack of interest	High	Define targeted personas; adapt messages to different audiences; use engaging formats (video, testimonials); prioritise co-creation methods
Inconsistent communication across the consortium	Medium	Create and enforce a DEC toolkit (style guide, templates, shooting guide...); appoint a DEC focal point in each partner organisation
Stakeholder fatigue or withdrawal due to over-consultation or unclear added value	High	Clarify engagement expectations early; use lightweight, value-added participation methods (e.g., short polls, feedback loops); apply insights from stakeholder engagement to communicate insights that are useful to them.
Delays in content production and approval	Medium	Streamline content approval workflows; send reminders and follow-ups; provide clear timelines and deadlines
Politicization and deteriorating quality of social media platforms (e.g. X) limiting audience reach	Medium	Diversify communication channels; invest in owned platforms (website, newsletter); monitor

		platform changes and adjust strategies accordingly
--	--	--

2.4. Stakeholder Mapping and Target Audience Segmentation

CARMINE activities target primarily 5 groups of stakeholders/target groups (TGs), identified during the project proposal stage. While the stakeholder engagement strategy is executed through WP1, this DEC strategy provides an initial take on the communication and dissemination objectives and channels directed towards respective TGs (Table 4). Keeping the number of channels limited and highly pertinent to the TGs is key for effective engagement. Table 4 has been updated since the submission of D7.1 DEC Strategy – Version 1 by adding stakeholders from Workshop 1 (WS1) and will continue to be updated throughout the project.

Table 4 - Communication and dissemination objectives and channels pertinent to the TGs

Stakeholders / Target Groups	Subgroups	Communication and dissemination objectives and channels
TG1. Regions (local, regional, municipal authorities, organisations)	During the lifetime of the project: Regional and municipal authorities (city, town, village, rural areas) in metropolitan regions: CZ (Prague City Council, IPR Praha [City Planning], National Public Health Institute [Státní zdravotní ústav]); DK (Funen Assembly, Odense Municipality); DE (Leipzig City Council -- Markkleeberg Department for City Planning and Development, City of Leipzig Department of Mobility, City of Leipzig Office for Urban Greenery and Waters, City of Leipzig Department of Environment Protection, Leipzig Water Utilities); EL (Athens Prefecture municipalities, Environmental Protection and Planning Agency of Athens, Athens Primary Education Directorate A. and Schools4Climate Network, New Metropolitan Attika S.A.); IT (Bologna City Council, AUSL, Bologna Missione Clima, Municipality of Bologna Ecological Transition and Climate office, Municipality of Bologna – International relationship, Municipality of Bologna city council, Emilia Romagna – Environment	Objectives: - Support regional and municipal authorities in strengthening climate resilience and adaptation strategies by demonstrating how science, research, and modelling data can inform and enhance strategic planning—while acknowledging existing awareness and addressing implementation challenges. - Provide updates on project progress, findings, and available tools for enhancing climate resilience. - Foster collaboration and engagement with regional and municipal authorities in co-developing cross-sectoral frameworks for adaptation and mitigation actions. Channels: - Policy briefs and reports tailored to the needs of regional and municipal authorities. - Dedicated workshops and webinars targeting local and regional decision-makers. - Meetings and sessions with policymakers to discuss project outcomes and recommendations and how they can be

	sustainability section, Emilia Romagna – Energy and green economy); RO (Brasov Municipality, Braşov City Hall, Râşnov City Hall, Ghimbav City Hall, Romania Water Company – Brasov Branch, Environmental Protection Agency, National Agency for Protected Areas, Kronstadt Forestry Company, National Agency for Land Improvements, Inspectorate for Emergency Situations, Department of Social Assurance Braşov, Water Company Braşov. Metropolitan Agency for Sustainable Development Braşov, County Departments of Statistics Braşov, Agency for Sustainable Development in Braşov County (ADDJB)); ES (Council of Barcelona, Barcelona Metropolitan Area, Catalan Wildfire Prevention Service, Catalan Forestry Service, Catalan Civil Protection, Sant Climent de Llobregat, Collserola Natural Park); UK (Birmingham Council, Birmingham City Council – Transport, West Midlands Combined Authority, Local Resilience Forum, Birmingham City Council – Public Health) Beyond the project: Regional and national authorities in CSA countries (scale up from local to regional and national authorities)	applied further in local climate planning and action. • Participation in relevant regional conferences and events. • Living Labs. • Stakeholders Community Hub. • Participation in the connected projects activities.
TG2. Communities (Local communities, citizen associations, “third sector” non-profits)	During the lifetime of the project: Functional urban communities (city, town), village communities, rural communities, knowledge-based communities, international (tourists, expats) communities; Young communities; Citizens and societal actors, NGOs; Vulnerable communities (from all CSA) From CSAs WS1: CSA Athens: SOS Children’s Villages, Youth Initiative (Protovoulia Neon), Organization Earth, Commonsense (consultancy company working with local communities), AUA and Urban Heat Watch research participatory project , Design Clips ; CSA Barcelona: Garraf Forest Owners Association; CSA Bologna: AUSER, AIAS – Fragile-Disables, Giovani nel tempo, Extinction rebellion, Legambiente, Consumerismo;	Objectives: • Engage local communities in climate resilience and adaptation efforts while fostering their active participation and contribution to producing relevant data using citizen science. • Provide accessible information about climate risks and adaptation measures to different community groups. • Empower community stakeholders to participate in decision-making processes related to climate resilience. Channels: • Community workshops and focus groups to gather input and feedback. • Social media platforms to share project updates and engage with community members. • Information events and open-air activities in targeted communities.

	Fondazione Yunus, Fondazione Sempre Insieme Onlus CSA Brasov: National Council of college students – Braşov, Agency for Energy Management and Environmental Protection, WWF, PROPARK; Young communities; older communities, residents associations. CSA Birmingham: Civic Square, ClimateEd – youth education charity, Birmingham TreePeople, Birmingham Voluntary Services Council, Birmingham and Black Country Wildlife Trust, City of Nature, Trees and Design Action Group Trust Beyond the project: Young communities; Citizens and societal actors; NGOs: Climate Action Network-CAN	• Collaboration with citizen associations and non-profits for outreach and engagement efforts. • Living Labs as participatory spaces for co-creation, testing, and validating solutions with local stakeholders.
TG3. Industry (large enterprises, industrial associations, SMEs, start-ups)	During the lifetime of the project: Industrial associations and companies (DK, IT, RO), SMEs (CZ, DK, EL, IT, RO, UK), entrepreneurs and start-ups (DK, IT, UK). In each CSA, CARMINE focuses on the following industries, as relevant, with relevance for Climate Change (CC) risks: manufacturing (incl. high tech engineering), electronics and machine-building, steel production, transportation equipment, chemicals, advanced materials, construction, agri-food, tourism. From CSAs WS1: CSA Prague: OICT – Operator ICT (Smart city and data management); CSA Leipzig: Markkleeberg's Department for Real Estate Management, Leipzig Mobility, Leipzig Water Utilities; CSA Barcelona: Ametller Origen Conservation, Collserola Natural Park; CSA Bologna: AESS Origen, Antonio Ruberto, COTABO, Mercato Ritrovato; CSA Brasov: Kronstadt Forestry Local Company, Brasov Water Company, Romanian Water Company; CSA Birmingham: Severn Trent Water, Kier, Environment Agency Beyond the project: Regional Chambers of Commerce and Industries	Objectives: • Raise awareness among industrial stakeholders about the potential impacts of climate change on their sectors. • Provide industry-specific guidance and tools for enhancing resilience and sustainability. • Encourage collaboration and knowledge-sharing among different industry players, as well as between industry and other sectors, to break down silos that hinder integrated approaches Channels: • Industry-focused policy briefs and technical reports (to be confirmed in the next iteration of the DEC strategy) • Workshops and webinars tailored to specific industry sectors. • Engagement with industry associations and business networks. • Participation in relevant trade fairs and conferences. • Involvement of industry actors in Living Labs and through the Stakeholder Community Hub platform to foster co-creation, knowledge exchange, and practical collaboration.
TG4. Re-Search & Academia ecosystem (a) Research	During the lifetime of the project:	Objectives: • Share research findings and innovations with the academic community.

organizations; (b) Research communities and associations; (c) Relevant EU projects and initiatives; (d) Regional, national, EU and international-wide research and development networks, clusters, platforms and partnerships	(a) Research organisations from all CSA countries (universities and research centres); (b) UN SDSN Europe, ICLEI Europe, Alliance of Excellence for Research and Innovation on Aephoria (AE4RIA); (c) JPI CLISWELN, EPSRC Fellowship, WM-Air, UIC Risk ADAPT, FPA, UFMP, PERUN, ARAMIS, BlueAp, UrbanProof, Rebus ER, SBAM (ANCI, ER, AESS), CMCC Risk analysis for Bologna (incl. health), Connecting Nature, LIFE-IP AdaptInGR, ARSINOE, IMPETUS, Urban ReLeaf, DG-ECHO EXTREMA, DIRECTED, ACCREU, MYRIAD-EU, AQUASOC, EVYTAR-D; (d) MACC (EU), ClimateADAPT, European Centre for Medium-Range Weather Forecasts (ECMWF) (EU), National Meteorological and Hydrological Services (NMHS) (The World Bank, World Meteorological Organization), UN SDSN, SDSN Youth, SDSN Western Balkans or SDSN Black Sea From CSAs WS1: CSA Prague: Univerzita Palackého v Olomouci (Katedra geografie), FŽP ČZU, Univerzita Karlova, Czech Academy of Sciences; CSA Leipzig: Ústav informatiky AV ČR, v. v. i. (ICS), University of Freiburg and Furtwangen University of Applied Sciences; CSA Athens: Harokopeio University, University of Thessaly, University of Dresden; CSA Barcelona: Barcelona Supercomputing Center, Ecological Research Center and Forestry Applications, Pompeu Fabra University; CSA Bologna: University of Bologna - Department of energy and information, University of Bologna - Department of quality of life, Accademia dei Georgofili, Cluster green tech; CSA Brasov: University of Bucharest, University Transilvania of Braşov (Faculty of Design and Environment, Faculty of Nouriture and Tourism, Faculty of Forestry), National Center for Cartography, National Institute for Research and Development in Forestry – ICAS, National Meteorological Administration;	• Foster collaboration and knowledge exchange among research organisations and institutions. • Highlight opportunities for further research and funding in climate resilience and adaptation. • Transfer knowledge and practices to society. Channels: • Publication of peer-reviewed articles in academic journals. • Participation in research conferences and seminars. • Collaboration with relevant research associations and networks. • Utilisation of online platforms for sharing open-access research outputs. • Use of the Stakeholder Community Hub to facilitate knowledge exchange, share research findings, and support collaboration across disciplines.
--	--	--

	CSA Birmingham: University of Birmingham - Birmingham Institute of Forest Research (BIFoR), Met Office University of Birmingham, University of Birmingham - Resilient Systems and Climate Action Research Group (RSCA), Centre of Urban Wellbeing Birmingham City University, University of Birmingham – West Midlands Net Zero Birmingham Institute Sustainability and Climate Action (BISCA) Beyond the project: a) European Educational Research Association (EERA), European Universities Alliance (EUA), European Association of Development Research and Training Institutes (EADI); (b) Science Europe, European Climate Research Alliance (ECRA), Urban CC Research Network (UCCRN); (c) EU EIT KIC Climate; (d) EU Partnership for European Environmental Research, EU JPI Climate "Connecting Climate Knowledge for Europe."	
TG5. Policymakers (a) European associations and working groups (b) Decision makers and national public authorities	During the lifetime of the project: (a) UNFCCC, ICLEI, Global Climate Hub, European Association of Environmental and Resource Economists (EAERE), European Economic and Social Committee, WMO, CMCC (b) Directorates of nature conservation and the environment in CSA countries, Ministries of Environment, Urbanization and CC in CSA countries. From the CSAs WS1: CSA Prague: Department of Environmental Protection (Odbor ochrany prostředí Magistrátu hl. m. Prahy); CSA Athens: Kifissia Municipality, Athens Municipality (did not attend WS1, but there is engagement related to WS1), Ministry of the Environment and Energy, UN Habitat and Arsht-Rock. CSA Athens also sent out a questionnaire to all municipalities in metro area to ask about heat resilience planning; CSA Bologna: ANCI (National Association of Municipalities); FIU CSA Brasov: Agency for Environmental Protection and Natural Protected Areas, Inspectorate for Emergency Situations.	Objectives: • Inform policymakers about the scientific evidence and best practices related to climate resilience and adaptation. • Provide policy-relevant recommendations and decision-support tools. • Facilitate dialogue and exchange between policymakers and project researchers. Channels: • Policy briefs and reports tailored to policymakers' needs and interests. • High-level meetings and workshops with policymakers at the national and EU levels. • Participation in policy forums and working groups related to climate change. • Engagement with relevant European associations and institutions working on climate policy. • Engagement of policymakers through the Living Labs and the Stakeholder Community Hub to support dialogue, co-design of solutions, and evidence-based decision-making

	CSA Birmingham: Urban Forest and Woodland Advisory Group, Natural England Beyond the project: (a) UNFCCC, ICLEI, Global Climate Hub, European Association of Environmental and Resource Economists (EAERE), European Economic and Social Committee, NMHs, WMO; (b) Directorates of nature conservation and the environment, Ministries of Environment, Urbanization and CC in 8 more countries.	
--	--	--

Further inputs to be expected in terms of stakeholder identification and involvement in the project.

WP1 Stakeholder mapping activity:

The stakeholder mapping by the case study CSA leaders, led by WP1 leaders (ATH-RC), is a process which began in April 2024 and was completed by the end of May 2024.

The first step was to identify the focus of each CSA which subsequently defined the stakeholder sectors. Within these sectors, key stakeholders needed to be identified. A template was completed by mid-April by CSA leaders to provide WP1 with these sectors. ATH-RC distributed a stakeholder mapping guideline and template. Following this preparatory step, ATH-RC facilitated a meeting towards the end of April 2024 with all CSA leaders to officially start the stakeholder mapping process.

All CSAs composed a long list of stakeholders: key stakeholders within each sector, under different categories (Quadruple Helix: Business/Industry, Government/Policy Makers, Research/Academia, Civil society). This long-list may be further extended based on input from stakeholders during the Living Labs workshops. By mid-May 2024, the CSA leaders submitted the long list of stakeholders to ATH-RC.

On September 10th and 11th, 2024, partners gathered in Athens for a two-day LL-facilitator training workshop. Organized by ATH-RC, the workshop welcomed representatives from seven CSAs involved in the project (namely, Prague, Leipzig, Athens, Barcelona, Bologna, Brasov and Birmingham). The training workshop presented the stakeholder engagement methodology, the Systems Innovation Approach (SIA) grounded in Systems Thinking, and discussed its application within the LLs.

The ATH-RC team subsequently organized individual meetings with each CSA in preparation for the organization of WS1 after the training in Athens in September 10-11. The first preparatory meeting was conducted within the month of October 2024 for 7 CSAs. Funen-Odense participated in the additional online training that took place on November 7th but did not attend any of the preparatory meetings. To ensure balanced sector representation, the MIRO board was revisited, and CSAs highlighted the SHs who had confirmed their participation, assessing whether all

sectors were adequately represented. Any identified imbalances were addressed to ensure that all perspectives, across a broad range of sectors, were included to foster comprehensive and diverse discussions.

A key point addressed during the preparatory meetings was the participation of people from populations vulnerable to climate hazard or from organizations working with these populations. Discussions focused on identifying the best ways to approach this participation to ensure that the priorities, concerns and perspectives of vulnerable populations were present in WS1. CSAs completed their WS1 by December 2024. The workshops were conducted on the following dates:

- CSA Prague: 20 November 2024
- CSA Leipzig: 9 December 2024
- CSA Odense: n/a¹
- CSA Barcelona: 3 December 2024
- CSA Athens: 5 December 2024
- CSA Bologna: 25 November 2024
- CSA Brasov: 28 November 2024
- Birmingham: 28 November 2024

Stakeholder engagement in the first CARMINE LL WS1 was generally deemed as successful by all CSAs. Although each CSA tailored its workshop to address the specific challenge(s), common patterns emerged regarding levels of participant engagement, the involvement of all target groups (TGs), the vulnerable communities' inclusion, the obstacles encountered in achieving full representation as well as the strategies to overcome them. While gaps in the representation of vulnerable communities, youth, and sectoral groups in some CSA remain, the workshops demonstrated flexibility and capacity to harness the necessary local knowledge to better address climate change challenges in urban context. Moreover, stakeholders shown enthusiasm in being involve in highly participatory activities.

ATH-RC held preparatory meetings with all CSAs (April 28, 30, 2025) and one-to-one meetings during the month of May 2025 to present the guidelines for LL WS2, to take place between June and October 2025. CSAs were given a Vulnerable Community Engagement Progress to fill in to ensure vulnerable communities will be included in LL WS2 and strategies were discussed on how to maintain Stakeholders engaged until LL WS2 (i.e. through surveys, emails and engagement on the Stakeholders Community Hub (more details in section 3.3 h). For more details on the stakeholder engagement activities, please consult WP1 deliverables (in particular: D1.1; D1.7; D1.9).

¹ Deliverable D1.9: "CSA Odense/Fünen informed the consortium that since there is a general election in all Danish municipality boards in November 2025, it was not appropriate to organize broad stakeholder meetings, which could light fire to local controversies." For further information on WS1, please visit Deliverable D1.9.

3 Method and activities

3.1 Difference between Communication and Dissemination, and the Approach Taken in this Strategy

As stated above, in the context of Horizon Europe, communication and dissemination are two distinct concepts, although they are closely related in terms of sharing information and research outcomes.

Communication refers to the process of conveying information, knowledge, and results to various stakeholders such as citizens, stakeholders, and the media. Effective communication ensures that the objectives, progress, and impact of research projects are clearly understood by relevant audiences. The goal of communication is to raise awareness, engage stakeholders, and foster collaboration and support for research and innovation.

Dissemination specifically focuses on the distribution and sharing of research findings, data, and outputs within the scientific community and beyond. It involves making research results accessible free of charge, understandable, and usable by other researchers, practitioners, policymakers, and the public.

In the implementation of the project, many activities may blur the lines between pure communication or pure dissemination. In practice, activities such as publishing research papers, organising conferences or workshops, maintaining project websites, and engaging with stakeholders through social media can serve both dissemination and communication purposes simultaneously. For instance, organising a workshop brings together stakeholders to discuss project findings and exchange knowledge (*communication*), while also disseminating research results to participants who may apply them in their work or decision-making processes. Similarly, maintaining a project website serves as a platform to share updates, resources, and outputs with a wider audience (*communication*), while also providing a repository for project documents and findings (*dissemination*).

Therefore, to acknowledge the interconnectedness of the two aspects, and to provide a comprehensive overview of how CARMINE intends to reach its target groups, share its results, and engage stakeholders effectively, this Strategy presents methods and channels for communication and dissemination in the same section. Where necessary, a distinction will be made.

3.2 General Guidelines for Communication and Dissemination

3.2.1 Ethical and legal considerations

CARMINE adheres to strict ethical principles in all its communication and dissemination activities, ensuring that they are carried out with integrity, transparency, and respect for individuals and communities. All communication efforts reflect the project's commitment to upholding human dignity, cultural sensitivity, and responsible science communication.

Data protection and GDPR compliance

All communication and dissemination activities comply with the General Data Protection Regulation (GDPR – Regulation (EU) 2016/679). Personal data collected through stakeholder engagement, surveys, mailing lists, or online platforms will be processed lawfully, fairly, and transparently. Individuals will be informed about how their data is used, and explicit consent will be obtained where required. Personal data will not be shared outside the project without permission and will be securely stored in accordance with data privacy and protection policies.

Respect for privacy and confidentiality

When sharing stories, testimonials, or visuals involving individuals, consent will be sought in advance. Confidential project documents or sensitive stakeholder insights will not be shared publicly without proper anonymisation or prior agreement. Special care will be taken in protecting the identity and interests of vulnerable groups.

High quality and credibility of materials

All communication materials produced will be of high professional and editorial standards, ensuring clarity, factual accuracy, and evidence-based content. Misinformation, unverified claims, or overstatements will be strictly avoided. A peer review process will be established for strategic publications, reports, and media content to maintain trust and credibility.

Respect for intellectual property (IP)

CARMINE will ensure that all intellectual property rights (IPR) linked to project outputs are respected. This includes proper attribution of authorship, use of licensed or original content, and adherence to copyright rules. Visuals, datasets, and third-party materials will be used in accordance with relevant licences and agreements. All partners will be acknowledged fairly in dissemination outputs.

Legal disclaimers and EU acknowledgement

All public-facing materials will include appropriate legal disclaimers and the required acknowledgement of EU funding, in compliance with Horizon Europe guidelines. Logos, disclaimers, and references will follow the visual identity guide and EC communication rules (more details in section 3.3.1).

3.2.2 Accessible and inclusive communication and dissemination

CARMINE is committed to ensuring that its communication and dissemination efforts are inclusive, accessible, and reflective of the diversity of its audiences across Europe and beyond.

Clear and consistent messaging

All messages will be aligned with the project's vision and goals. Technical terms will be explained in plain language, and summaries will be provided for non-specialist audiences. Messaging will be consistent across all channels to reinforce understanding and recognition.

Targeted approach

Communication will be tailored to the specific needs, interests, and channels preferred by different stakeholder groups—such as policymakers, practitioners, civil society, youth, and academia. This

segmented approach ensures that messages are relevant, resonant, and engaging for each group.

Engagement and participation

CARMINE prioritises two-way dialogue. Stakeholders will be actively involved through workshops, co-design sessions, surveys, and public consultations. Feedback loops will be integrated into the dissemination process to refine content and approaches. Inclusivity will be promoted by creating welcoming spaces for diverse voices to contribute.

Open access and transparency

All scientific results, reports, and key deliverables will be made available as open-access documents via the project website and recognised repositories. This promotes transparency, knowledge sharing, and widespread use of CARMINE outputs beyond the project consortium.

Validation and reuse of results

In line with FAIR data principles (Findable, Accessible, Interoperable, Reusable), CARMINE will provide well-documented datasets, clear methodological notes, and standardised protocols. This ensures that third parties can replicate, adapt, or build on project findings, increasing scientific and policy impact.

Gender-sensitive communication

The project will adopt gender-responsive communication practices, ensuring that content, visuals, language, and narratives reflect gender diversity and avoid stereotypes. Equal visibility will be given to the contributions of women and men involved in the project. Gender-sensitive language will be used across all publications and promotional materials.

Disability inclusion and accessibility

CARMINE is committed to making all communication tools and events accessible to persons with disabilities. Digital content will follow accessibility standards (e.g., WCAG 2.1), including alternative text for images, captioning of videos and use of high-contrast colour schemes and legible fonts. For physical events, venues will be selected with barrier-free access in mind, and reasonable accommodations will be provided where needed.

In addition to the principles outlined above, please refer to Deliverable D8.10 - Project Handbook for more detailed information on the ethical, legal, and inclusive measures CARMINE is implementing to ensure full compliance with EU standards in these areas.

Tips: How to communicate about CARMINE?

Utilise CARMINE branding and communications toolkit

When representing CARMINE at events or activities funded by the project, use the project logo, colour scheme, and graphic style provided in the Communication Toolkit (*delivered through Task 7.2*). When possible, use the visual materials developed in the project (flyer, poster, roll-up banner, etc.). This ensures consistency and reinforces project identity.

Feature CARMINE on your organisation's website

Add a dedicated page and/or blog posts about CARMINE to your organisation's website, summarising the project's objectives, benefits, and your organisation's role. Include a link to the CARMINE website for more information and encourage visitors to explore further.

Promote CARMINE through social media

Share news, updates, and milestones about CARMINE on your organisation's social media channels. Focus on highlighting your organisation's contributions and involvement in the project. Do not forget to tag CARMINE's official accounts and use relevant hashtags to increase visibility.

Capture and share experiences through multimedia

Document CARMINE activities with photos and videos to effectively communicate project experiences. Share these visuals on social media, contribute them to the project's image library, and collaborate with the WP7 team to create engaging multimedia content.

Integrate CARMINE into presentations and events

Incorporate mentions of CARMINE into presentations, workshops, and events related to climate resilience. Even a brief mention can help raise awareness and reach new audiences. A standard text about CARMINE, which can be used in different contexts, will be prepared by the WP7 team and included in all CARMINE materials.

Spread awareness within your organisation

Do not assume that everyone in your organisation knows about CARMINE (especially if your organisation is large). Take the initiative to inform colleagues and work partners about CARMINE and your organisation's involvement. Consider organising short presentations or informal discussions to share project updates and foster internal engagement.

3.3 External Communication and Dissemination

3.3.1 Channels, Methods and Tools

a. EU funding acknowledgement

It is mandatory that all communication outputs include the following emblem and disclaimer.

- The Horizon Europe program emblem is available to download in different qualities and sizes from the [European Commission website](#).
- The program disclaimer, with the UKRI and SERI logos in small:

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or European Climate, Infrastructure and Environment Executive Agency (CINEA). Neither the European Union nor the granting authority can be held responsible for them.

UK participants in this project are co-funded by UK Research and Innovation (UKRI).

The work of the Meteomatics partner (Switzerland) has received funding from the Swiss State Secretariat for Education, Research and Innovation (SERI).

Example:



Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or European Climate, Infrastructure and Environment Executive Agency (CINEA). Neither the European Union nor the granting authority can be held responsible for them.

UK participants in this project are co-funded by UK Research and Innovation (UKRI).
The work of the Meteomatics partner (Switzerland) has received funding from the Swiss State Secretariat for Education, Research and Innovation (SERI).

Figure 2 - Visual of funding acknowledgement used in CARMINE communications outputs

b. Brand identity, style guide and logo

As part of Task 7.2, SDSN prepared CARMINE logo, Style Guide and templates.

The initial versions of the CARMINE logo were presented by SDSN during the project's kick-off meeting in Bucharest on March 13, 2024. All partners were invited to share their feedback and preferences. Following several iterations—focusing on adjustments to the font, colour palette, and visual elements (e.g. leaves, buildings, etc.)—a final version of the logo was agreed upon and formally adopted by the consortium. The final logo is displayed below, with excerpts from the design development process provided in the Annex.

Final CARMINE logo



Figure 3 - CARMINE official logo

The **Style Guide**, which aims to provide clear and cohesive style guidelines for all CARMINE documents and materials to ensure brand consistency, best practices, and an easily recognisable project identity, has also been shared with all project partners. Here are the official colours selected for the CARMINE project. The full Style Guide, including use and misuse of the project's logo, typography style, EU emblem and disclaimer, can be found on CARMINE SharePoint.

Primary colours:

HEX: #AF1919
RGB: 175, 25, 25
CMYK: 0%, 86%, 86%, 31%

HEX: #A690A0A
RGB: 105, 10, 10
CMYK(0%, 90%, 90%, 65%)

Secondary colours:

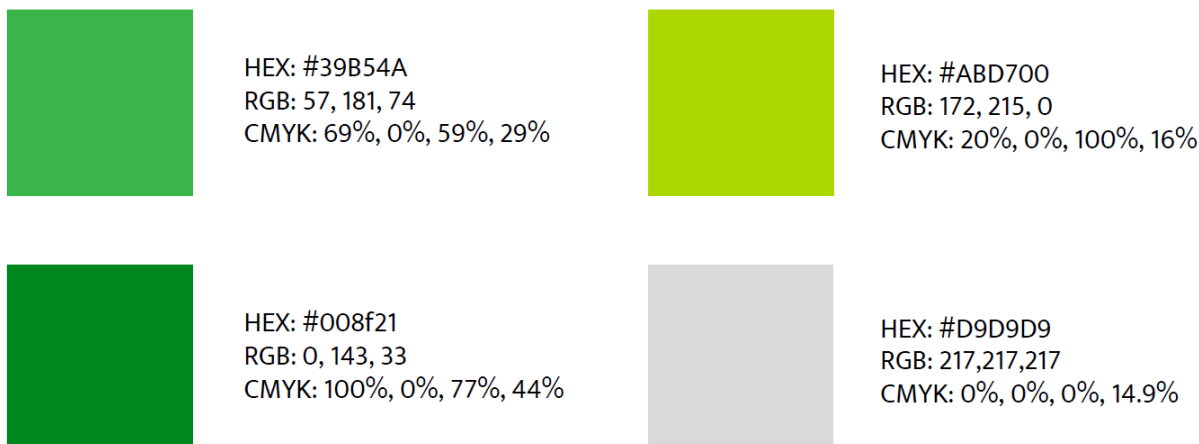


Figure 4 - CARMINE colour palette

c. Digital and social media presence

Social media channels identified at the proposal stage include LinkedIn, X and Instagram. As CARMINE will also produce at least 3-4 videos, YouTube will be used to disseminate them.

Considering recent developments on the X platform—including reduced content moderation, the spread of disinformation and hate speech, and the departure of numerous reputable media outlets, companies, and public figures (including from the scientific community)—the consortium has initiated internal discussions regarding a potential transition to an alternative platform. A transition to Bluesky—a similar platform increasingly embraced by the scientific community—has been decided during the General Assembly in Athens (M13), included in the justification section of the Grant Agreement amendment (pending approval), and will be implemented accordingly.

Link to the Instagram account [here](#). Link to the X account [here](#). Link to the LinkedIn account [here](#).

Activities:

- Maintain an active presence on social media platforms to share project updates, news, and success stories and testimonials.
- Publish regular posts, articles, and visual content highlighting key findings, events, and stakeholder engagement activities.
- Disseminate CARMINE newsletter and the main results of the projects.
- Engage with the audience by ensuring responsiveness to comments, messages, and inquiries.
- Utilise and optimise multimedia formats (videos, infographics, etc.) to communicate the progress of the project and its impact in an engaging and accessible manner.
- Collaborate with partners of the project and leverage their networks to amplify the reach, credibility, and visibility of the project. This includes interacting with content posted by institutional and individual accounts that reference or relate to CARMINE.
- Establish monitoring and reporting mechanisms to assess performance, identify gaps, and refine content strategies.

Strategy:

1. *Content development.* Develop consistent, cohesive, and appealing visual and text-based content that is aligned with the project's objectives, values, and mission.

Publishing approach: Develop a structured publishing plan that defines key dates, thematic focus areas, content formats, and a coordinated release schedule to ensure timely and consistent dissemination.

2. *Optimisation of social channels.* Optimise each profile with consistent branding, engaging visuals, and compelling messages to increase and maintain audience. Take advantage of platform-specific features (stories, retweets, mentions, etc.) to magnify reach and engagement. Leverage analytics and platform best practices to identify optimal posting times and maximise visibility.

3. *Community engagement.* Actively engage the community by promoting responsiveness through the platform specific features (replies, DMs, comments, etc.) in a timely and personalised manner. Foster a sense of belonging among the community by encouraging user-generated content.

4. *Evaluation and Assessment.* Evaluate and assess performance and audience sentiment quarterly by establishing KPIs to track and measure the success of the strategy. Develop improvement mechanisms to refine strategy based on the insights and feedback received.

d. Project website

The project website serves as a centralised platform for stakeholders, partners, and the public to access information about the project, its objectives, activities, and outcomes. It provides linkage with other forms of dissemination (e.g., social media accounts, videos, publications). The website also serves as a repository for project-related resources, including results, deliverables, methodologies and best practices. It can also serve as an alternative dialogue window for different interest groups through the contact function. The project website will link to the Impact Decision Support System (IDSS) as well as the SC-HUB. More technical details about the CARMINE website can be found in the Deliverable D7.16.

Website name selection: MeteoRo suggested two options for the website name through a survey shared with the consortium. The name “**carmine-project.eu**” has been chosen with 53.2% of votes.

Which of the following options
47 responses

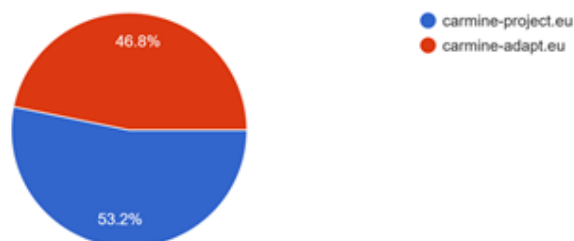


Figure 5 - Screenshot of CARMINE website development survey results

Website structure and content:

1) **Homepage:** introduces visitors to Project CARMINE, providing a summary of the project's aims and highlighting recent news.

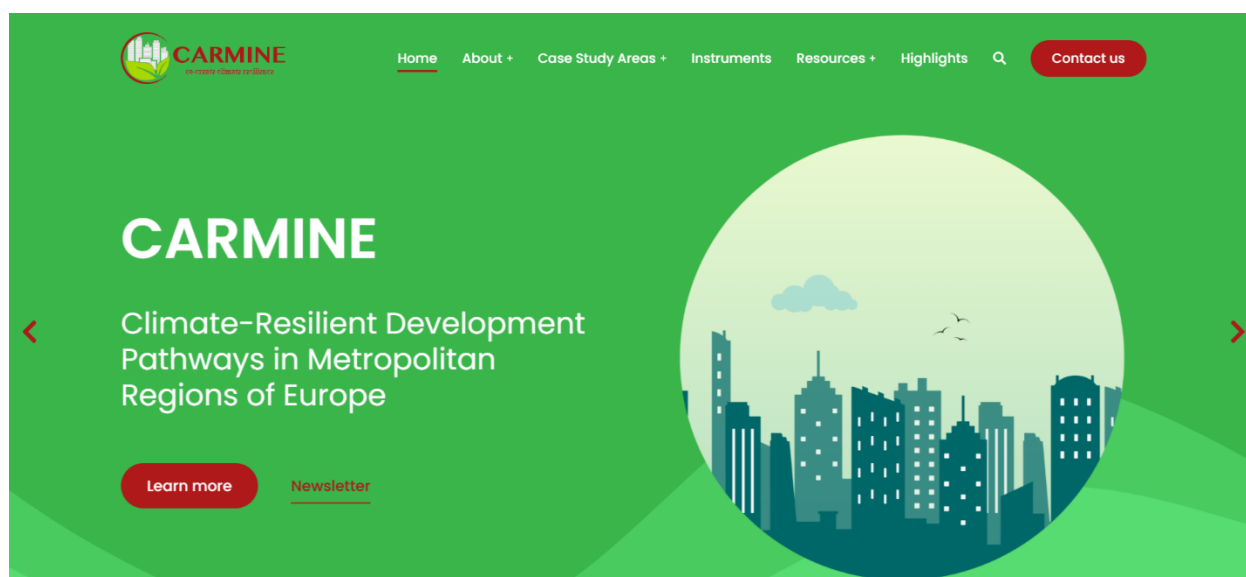


Figure 6 - Screenshot of CARMINE website homepage

2) **About:** this section offers comprehensive details about the project, including:

- Objectives - outlines the overall goal of the project and the specific objectives.
- Consortium - lists all project partners (text and interactive map) with descriptions, contact links and logos.
- CARMINE Structure - describes the organizational framework of the project, explaining roles and responsibilities within the consortium.
- Stakeholders - details the stakeholder engagement strategy and lists key stakeholders involved in the project.

3) **Case Study Areas:** provides an overview of the selected territories:

- General Description: This section outlines the approach used to select the CSAs, accompanied by a map illustrating their geographic distribution across Europe.

- Individual CSA Pages: Each CSA is presented on a dedicated page, providing key information about its location, the specific climate challenges it faces, the role of CARMINE in addressing these challenges, and the partners involved—among other relevant details.

4) **Instruments:** describes the tools and methods developed in the project:

- Living Labs - discusses the concept of Living Labs, the way they are used within CARMINE and how it will benefit the project.
- Stakeholder Community Hub - explains how this platform facilitates continuous dialogue and feedback among stakeholders.
- Atlas of Climate Resilience for Metropolitan Regions of Europe - presents one of the project's future major outputs, the interactive Atlas of Climate Resilience for Metropolitan Regions of Europe.
- Digital Twins of Metropolitan Regions of Europe - details the development and use of digital twins in studying and planning for climate resilience.
- Impact-based Decision Support Services - showcases how the project's findings are being transformed into actionable guidance for policymakers with the help of the future IDSS.

5) **Resources:** contains downloadable content and media related to the project:

- Deliverables and Publications - offers access to all project outputs, including research papers, reports and deliverables (forthcoming).
- CARMINE Newsletter - regular updates that keep the community informed of ongoing activities and results.
- Videos - multimedia content that explains project components and results in an engaging format.

6) **Highlights:** features updates and important events:

- News and Events - provides timely updates on project milestones, upcoming events, and other news.
- (Forthcoming) Policy Briefs - special reports that translate project findings into policy recommendations.

Special attention was paid for the following two sections, according with European legislation (especially GDPR):

Privacy & Policy: outlines the measures taken to protect the privacy and security of its users. It details the types of personal information collected, the purposes for which it is collected, and how it is used and protected. Additionally, it explains users' rights regarding their personal information and how they can access, correct, or delete their data (via the email address contact@carmine-project.eu). The policy also covers the use of cookies and other tracking technologies.

Terms of Use: sets out the rules and guidelines for using the CARMINE Project website. It includes important information on copyright and trademarks, the proper use of the site's content and resources, and limitations on liability. This section aims to inform users about their responsibilities while using the website and the conditions under which the content and tools are

provided. It also addresses intellectual property rights concerning the dissemination of project outputs and the conditions under which these can be used or referenced.

The website also includes a **feedback mechanism**, via email and social media.

e. Partners' websites and LinkedIn accounts

Each project partner in CARMINE plays an active role in amplifying the project's reach and impact. Beyond the centralised dissemination efforts, partners share project updates, research findings, and relevant content through their own communication channels, including websites and LinkedIn accounts. By leveraging their existing networks and platforms, partners enhance the visibility and accessibility of CARMINE's results, fostering collaboration, knowledge exchange, and engagement with stakeholders across diverse sectors and regions. Table 5 provides links to CARMINE partners' websites and LinkedIn accounts.

Table 5 - Partners' websites and LinkedIn accounts

Partner organisation	Website	LinkedIn
ADMINISTRATIA NATIONALA DE METEOROLOGIE R.A.	https://www.meteoromania.ro/	https://www.linkedin.com/company/administratia-nationala-de-meteorologie-ra/about/
MITIGA SOLUTIONS SL	https://www.mitigasolutions.com/	https://www.linkedin.com/company/mitigasolutions/
UNIVERSITATEA DIN BUCURESTI	https://unibuc.ro/ https://ccmesi.ro/?page_id=2578	https://www.linkedin.com/company/universitatea-din-bucuresti-2/
CONSIGLIO NAZIONALE DELLE RICERCHE	https://www.cnr.it/	https://www.linkedin.com/company/consiglio-nazionale-delle-ricerche/
USTAV INFORMATIKY AV CR	https://www.cs.cas.cz/	https://www.linkedin.com/company/institute-of-computer-science-academy-of-sciences-of-the-czech-republic/
INSTITUTUL NATIONAL DE CERCETARE DEZVOLTARE IN SILVICULTURA MARIN DRACEA	https://icas.ro/	
RUHR-UNIVERSITAET BOCHUM	http://www.ruhr-uni-bochum.de	https://www.linkedin.com/school/ruhrunibochum/
GOTTFRIED WILHELM LEIBNIZ UNIVERSITAET HANNOVER	https://www.uni-hannover.de/de/	https://www.linkedin.com/school/leibniz-universit-t-hannover-germany/
FUNDACIO PAU COSTA	https://www.paucostafoundation.org/en/	https://www.linkedin.com/company/pau-costa-foundation/
ALBERT-LUDWIGS-UNIVERSITAET FREIBURG	http://www.uni-freiburg.de/	https://www.linkedin.com/school/albert-ludwigs-universitaet-freiburg/
CENTRUL NATIONAL DE CARTOGRAFIE	https://cartografie.ro	https://www.linkedin.com/company/centrul-national-de-cartografie/
DANMARKS TEKNISKE UNIVERSITET	https://www.dtu.dk/english	https://www.linkedin.com/school/technical-university-of-denmark/

ATHINA-EREVNITIKO KENTRO KAINOTOMIAS STIS TECHNOLOGIES TIS PLIROFORIAS, TON EPIKOINONION KAI TIS GNOSIS	http://www.athenarc.gr	https://www.linkedin.com/company/-athena-research-and-innovation-center/
ETHNIKO ASTEROSKOPEIO ATHINON - NATIONAL OBSERVATORY OF ATHENS	http://www.noa.gr	https://www.linkedin.com/company/national-observatory-of-athens/
NEA MITROPOLITIKI ATTIKI AE ANAPTYXIAKOS ORGANISMOS TOPIKIS AUTODIOIKISIS (NMA) - NEW METROPOLITAN ATTICA SA	https://www.developattica.gr/en/home	https://www.linkedin.com/company/new-metropolitan-attica/
JUSTUS-LIEBIG-UNIVERSITAET GIESSEN	https://www.uni-giessen.de/	https://www.linkedin.com/school/jlugiessen/
WORLD METEOROLOGICAL ORGANIZATION	https://wmo.int	https://www.linkedin.com/company/world-meteorological-organization/
ACADEMY OF ATHENS	http://www.academyofathens.gr	https://www.linkedin.com/company/academyofathens/
SDSN ASSOCIATION PARIS	https://www.unsdsn.org	https://www.linkedin.com/company/unsdsn/
LNH WATER APS	http://LNHwater.dk	https://www.linkedin.com/company/lnhwater/
FONDAZIONE CENTRO EURO- MEDITERRANEO SUI CAMBIAMENTI CLIMATICI	http://www.cmcc.it	https://www.linkedin.com/company/cmccfoundation/
B-Kode	https://b-kode.be	https://www.linkedin.com/company/kode-be
ICLEI Europe	https://iclei-europe.org/	https://www.linkedin.com/company/iclei-europe/mycompany/
MUNICIPIUL BRASOV	https://www.brasovcity.ro	
STADTWERKE LEIPZIG GMBH	http://swl.de	https://www.linkedin.com/company/stadtwerke-leipzig-gmbh-störrufnummer/about/
Centro Agro Alimentare Bologna Scpa	http://www.caab.it	https://www.linkedin.com/company/caab-spa/
MET OFFICE	http://www.metoffice.gov.uk	https://www.linkedin.com/company/met-office/
THE UNIVERSITY OF BIRMINGHAM	http://www.birmingham.ac.uk/	https://www.linkedin.com/school/university-of-birmingham/ https://www.linkedin.com/company/school-of-engineering-university-of-birmingham-uk/
BIRMINGHAM CITY COUNCIL	http://www.birmingham.gov.uk/	https://www.linkedin.com/company/birmingham-city-council/

METEOMATICS AG	https://www.meteomatics.com/	https://www.linkedin.com/company/meteomatics/
----------------	---	---

f. Newsletters

Newsletters serve as a valuable communications tool to centralise content, activities, and events while engaging with the audience and stakeholders effectively and driving traffic and further engagement with the content.

Strategy:

- Produce newsletters on a biannual basis to provide stakeholders with updates on project progress, upcoming activities, results and opportunities for involvement.
- Include engaging content such as interviews, case studies, and infographics to enhance readability and relevance.
- Include dedicated sections for relevant news and updates related to CARMINE's areas of work to keep the audience informed on key developments and for upcoming events of interest, including those organised by CARMINE and its partners.

g. Events and workshops

Strategy:

- Organise stakeholder workshops, webinars, and information sessions to facilitate dialogue, gather feedback, and disseminate project findings.
- Participate in relevant conferences, seminars, and networking events to showcase CARMINE's research and engage with the wider community.
- Ensure that CARMINE deliverables, cases, and outputs are reflected in, and incorporated into the WMO Project and other periodic newsletters.

Table 6 enlists events and workshops in which CARMINE will be featured. It will be updated as opportunities arise. Please note that events identified in D7.1, which are now passed, have been removed. The table includes only events in the period covered by D7.2 (until the submission of D7.3 in M36).

Table 6 - Events and workshops

Event/workshop	Date/frequency	Description	Target groups
Side-event to the International Conference on Sustainable Development (ICSD) https://ic-sd.org/	September 2026 Annually	The ICSD is a forum for academia, government, civil society, UN agencies, and the private sector to come together to share practical solutions to achieve the SDGs.	Academia, government agencies, civil society, UN agencies
European Meteorological Society (EMS)	Ljubljana, Slovenia	The annual meeting of the European Meteorological Society. The 2025 edition will focus on the	Academia, national hydromet services, practitioners,

	Annually September 2025	role of artificial intelligence in climate prediction and meteorological research	international organisations
Italian Society for Climate Sciences Annual meeting	Salerno, Italy Annually October 2025	The Italian Society for Climate Sciences (SISC) is a non-profit and non-advocacy association, which aims at contributing to scientific progress and the innovation of climatic sciences in Italy by promoting the convergence of disciplines and multidisciplinary research. The annual meeting of 2025 will focus on innovation in climate research for societal transformation.	Academia, practitioners, national and regional climate services, regional/local authorities
WMO Region VI (Europe) Scientific Forum	Prague, Czechia November 2025	Annual scientific forum for WMO's Regional Office for Europe	Academia, national hydromet services, private sector
Launch of European Sustainable Development Report	December 2025	Annual event organized by SDSN launching the 2025 edition of the ESDR	Academia, government agencies, civil society
EGU	May 2026	Europe's largest geosciences academic conference providing a platform for scientists to share their research	Academia, specifically early career researchers
Joint event with CROSSEU and/or other similar Research and Innovation (R&I) projects	TBD	TBD	TBD

h. Stakeholder Community–HUB (SC-HUB)

CARMINE is introducing the innovative concept of SC-HUB. SC-HUB is promoting knowledge exchange, open innovation, and co-development, as it offers a digital representation of a Living Lab, aiming to increase its impact and the adoption of its outcomes. SC-HUB is a web application that facilitates and organises the participatory and co-development processes within the LLs, facilitates exchanges of information and supports active collaboration among LL participants.

The SC-HUB tool is already available through <https://schub.carmine-project.eu> and presents the digital representation of CARMINE's 8 LLs.

On 27/5/2025 the Stakeholders Community Hub (<https://schub.carmine-project.eu/>) has released a new version with the following enhancements:

- Added multilingual support.
- Provided translation in Greek.
- Added a new functional module that allows the Living Lab organisers to upload useful material (datasets, files or URLs) to the LL and make it available to the users.

- Redesigned the Living Lab view page to make all the information more visible.

Recognizing the importance of providing this tool in stakeholders' local languages, ATH-RC invited any CSA members or colleagues willing to support the translation process to contact the team via email and asked the CSAs who have not yet created their instance in the tool to proceed with this step.

SC-HUB is an important communication, dissemination and exploitation channel for CARMINE. In the coming months, WP7 will continue promoting the SC-HUB through communication channels and referring to it in the dissemination of project outcomes to broader audiences.

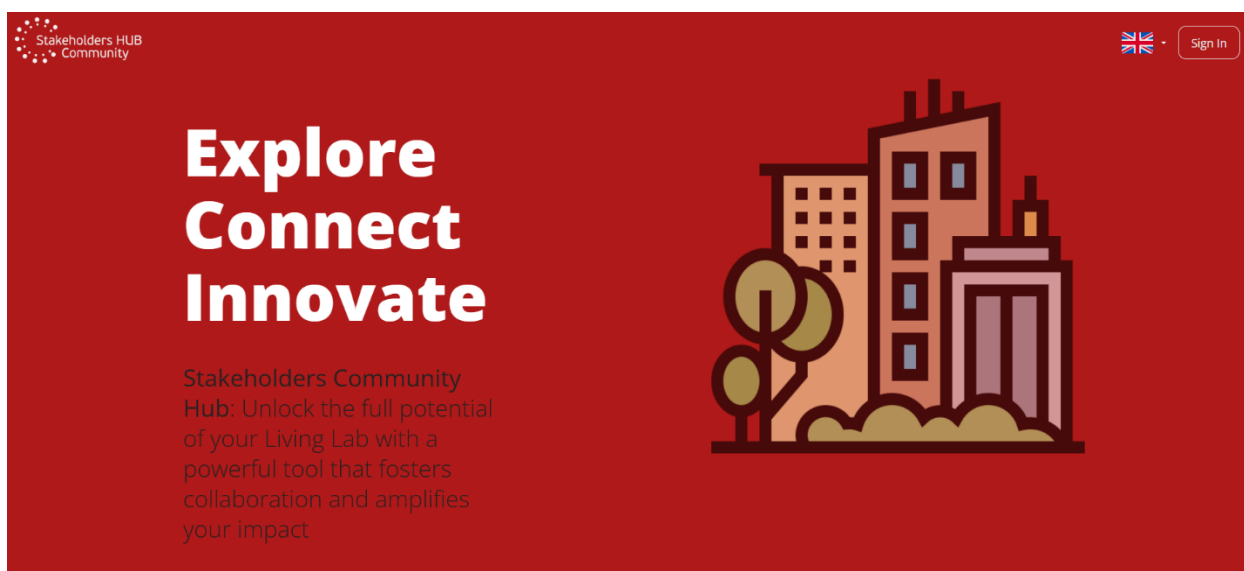


Figure 7 - Screenshot of the SC-HUB homepage

i. Media outreach

Media Outreach serves to increase media coverage and visibility of CARMINE and the impact of the project through strategic engagement with external stakeholders.

- Develop press releases and media kits to disseminate project announcements, research findings, and success stories to mainstream media outlets.
- Crafting personalised pitches to target specialised media outlets emphasising on the newsworthiness and relevance of the project.
- Identify and compile a list of relevant media outlets and writers that can highlight, and cover topics related to the project.
- Cultivate relationships with journalists and influencers to amplify project messaging and increase visibility.
- Provide media contacts a focal point to answer questions, provide additional information as needed, and highlight specific outcomes that need to be disseminated.
- Monitor media coverage through a tracker of mentions, articles, and features related to the project.

j. Targeted outreach

Targeted outreach will serve to engage specific audiences and stakeholder who are relevant to the project and specific key exploitable results (KERs) to increase relevance and maximize impact.

- Tailor communication materials and messages to specific stakeholder groups, such as policymakers, industry professionals, researchers, and community members.
- Engage with local media, community organisations, and advocacy groups to reach diverse audiences and promote inclusivity.
- Participate and engage in key opportunities to reach stakeholders, such as events, online forums, conferences, and workshops.

k. Policy briefs (policy briefs, white papers, communiques)

Although not officially assigned to a specific work package, task, or partner at the proposal stage, policy briefs were listed among CARMINE's key performance indicators (KPIs). To address this oversight and ensure their delivery, this updated version of the DEC Strategy integrates policy briefs as a dedicated dissemination tool.

During the M13 project meeting in Athens, a Policy Briefs Working Group was established, co-led by WP6 and WP7 leaders. The group comprises partners with policy engagement experience and an interest in contributing to the development of policy-oriented outputs. Its mandate is to coordinate the identification of policy-relevant results across WPs, define target audiences, and oversee the co-development of the briefs with input from relevant partners.

At the time of writing, the group is finalising a list of approximately 20 policy-relevant outputs, including:

- 8 policy briefs (1 per CSA), 2–4 pages each, targeting CSA stakeholders with adaptation/mitigation pathways and key findings
- 4 white papers or deliverable-based reports produced under WP6 (D6.1, D6.2, D6.4, D6.5)
- 1 policy brief on how Digital Twins can inform heat-health risk and resilience planning (Athens and Prague), with the possibility of similar outputs from other Digital Twin pilots
- 1 joint policy brief with sister projects (topic to be defined)
- 1 communique following a joint event with sister projects planned for Q4 2025

The group will ensure policy briefs are aligned with the project's overall communication objectives and targeted effectively toward relevant stakeholder communities.

3.3.2 Networking and operational links

Operational links and regular activities are established with ongoing similar R&I projects, platforms and initiatives to develop synergies and avoid duplication of work. CARMINE strives to harmonise initiatives to the benefit of regions and communities, ensuring that the targets of MACC are met.

Table 7 provides initial mapping of operational links and networking opportunities. Initial ideas for engagement are also outlined for selected projects and platforms.

Since the submission of D7.8 (Joint activities with other R&I projects – Version 1), meetings have been conducted with the following similar R&I projects – RI-Urbans and Minority Report. Meanwhile, possible synergies and operational links are also being explored with the Integrated Global Greenhouse Gas Information System (IG3IS), an initiative of the Global Atmosphere Watch (GAW) of the World Meteorological Organization (WMO), and Global Heat Resilience Service of the Group on Earth Observations (GEO).

Contact has been initiated with Climate-ADAPT and the discussion on how CARMINE can benefit from this connection is in its early stages.

Early links show promise, and this effort will continue in pursuit of these connections while exploring newer areas of collaborations with other projects. The detailed outcome of these efforts during 2025 will be laid out in D7.9 (Joint activities with other R&I projects – Version 2) Once activities are spearheaded, more networking opportunities and engagement plans will be added to the Table 7 and reported in D7.2 (DEC Strategy – Version 2)

Table 7 - Mapping operational links and networking opportunities

Identified networking opportunities		Engagement
Type	Examples	
Similar EU R&I projects	ICARIA MIRACA RISKADAPT CLIMAAX CROSSEU MedEWSa Adaptation AGORA Minority Report LIFE ASAP SCIENCEUS	- The consortium invites the projects to participate in joint workshops and provide feedback. - The project coordinators will be invited as members in the CARMINE's External Scientific Advisory Board. - The integration of EU Horizon projects is done via access to their open access / open data results, and via direct contact with partners from those consortia. - Opportunities for joint events will be explored, to maximise visibility and leverage on the network.
Global initiatives	WMO IUS	The WMO Study Group on Integrated Urban Services (IUS) worked between 2020 and 2022 to develop a guidance document, <i>Good Practices in High-resolution Modelling for IUS</i> . This document (WMO 1313), published in 2023, provides an overview of the possibilities for using models to support the provision of urban services to stakeholders and inhabitants. It will be used to inform the ongoing work of CARMINE, to facilitate connections, and to ensure no duplication of existing outputs.

	SDSN networks	- A panel about CARMINE and sister projects is organised at the International Conference for Sustainable Development (ICSD) - Event or side event. - Official or unofficial side event to the UN High Level Political Forum. - CARMINE is incorporated into events surrounding the launch of the annual Europe Sustainable Development Report, such as panels and workshops in collaboration with EU institutions (e.g., EESC).
EU platforms & initiatives	DestinE	WMO has had a core role in developing the DestinE science plan for 2025+, which is due to be published in mid 2024. There is a strong focus on human-centred, societal, and developmental roles for digital twins (DTs). WMO will continue to ensure the work of CARMINE and related activities feed into ongoing DestinE developments. A dedicated task, T4.5 is dedicated to the coordination of CARMINE activities with DestinE, led by NOA.
	EU MACC and C-A Platform	CARMINE is by its own nature closely intertwined with the EU Strategy and Mission on Adaptation to Climate Change. Specifically: - Preparing communities from 8 selected metropolitan regions in Europe to join the EU Charter of the EU Mission by 2027. - Establishing operational links with the Mission Adaptation to Climate Change Implementation Platform and Climate-ADAPT platform (Milestone 11).
	Mission Platform	The link to the climate-neutral and smart cities Mission might be developed as follows: - Through the stakeholders 1) Mission Cities in the case studies and 2) consortium partner involved in both CARMINE and the Mission (e.g. ICLEI Europe) - Through the contributions to the Mission Platform by sharing knowledge e.g. on the smart technology being deployed Contributions can include policy labs, knowledge repository or discussion groups. Projects will in future have the possibility to sign agreements with the NZC consortium - however the process is being defined at this stage.
	ENoLL	- Follow the ENoLL activities. - Participate in the Open Living Lab Days. - Identify relevant existing LLs at ENoLL to exchange knowledge and ideas. - Check the material and recommendations ENoLL may provide and adapt to the needs of CARMINE, if relevant. Athena RC is in the process of applying to become an ENoLL member. ENoLL is also a partner to Living-in EU.
	Smart City Marketplace and Scalable Cities	The Smart Cities Marketplace (SCM) and Scalable Cities are initiatives of the European Commission and play an important role in speeding up the just and green transition of cities in Europe. They provide different services. One SCM service of interest are e.g. discussions and focus groups. The focus groups collaborate to overcome common challenges related to the transition to smart cities. The participants meet and debate their ideas in an on-site and online discussion setting (e.g., webinar, workshop). A new SCM focus

		group is about to take shape on the topic of Geospatial data and AI. ICLEI Europe is supporting the SCM.
	ESA R3 Accelerator	The programme seeks to use space-based observations from ESA to support rapid and resilient crisis response across Europe. CARMINE will engage with the R3 programme, mediated by task 7.3 leader WMO (which has signed an MoU with the R3 programme) on an ongoing basis as ESA seek to embed space-based activities into the outputs of Horizon Europe projects.
	EU Civil Protection Forum	The forum focus is 'Shaping a disaster-resilient union: charting a path for the future of European civil protection' and is organised by DG-ECHO, in June 2024 (and biennially). CARMINE will be represented at the UCPM forum in person by WMO.
	Network Nature	NetworkNature, and its successor NetworkNature+, is a one-stop-resource for nature-based solutions, bridging science, policy and practices, and an expanding 'network of networks' working together to raise awareness, share knowledge and build capacity about nature-based solutions to accelerate their uptake in business, science, policy and practice along the policy priorities of the European Green Deal. ICLEI Europe coordinates the CSA. Possible entry points are the task forces • TF1 data and knowledge sharing • TF2 integrated assessment framework • TF3 business and finance models • TF4 NbS communicators • TF5 NbS education • TF6 Co-creation and co-governance
Standardisation initiatives	European Standardisation Strategy and standardisation initiatives	Current standardisation projects of interest: U4SSC as a global initiative that provides an international platform that supports cities on their digital transformation journey to meet their goals and targets in achieving the UN Sustainable Development Goals. CARMINE project partners may propose or contribute to working groups.
	Technical committees of standards developing organisations (SDOs) at international, European and national levels	 ISO International <i>ISO/TC 268</i> • Carbon-reduced/neutral cities • ESG indicators • Disaster Risk Finance • Interoperability • Adaptation to climate change  CEN CENELEC Europe <i>CEN/TC 465</i> <i>CEN-CENELEC-ETSI SF-SSCC</i> • Resilience • Nature-based Solutions • Climate Neutrality • Local digital twins  DIN Bundesrepublik Deutschland <i>DIN/DKE Smart City Standard Forum</i>

		Digital twins for cities and communities (DIN SPEC 91607)
Early Warnings for All (United Nations Initiative)	Various, ongoing to 2027	WMO is responsible for pillar 2 (observations and forecasting) of this UN Initiative; the WMO Congress in June 2023 endorsed substantial WMO effort through 2027 in support of delivering the Initiative. As the programme develops beyond initial LDCs and SIDS implementation countries, increasing focus will fall on Europe (WMO Region VI). The CARMINE use cases and studies will prove useful in this regard and there is substantial synergy between the expected work of WMO's Regional Office for Europe activities on EW4All and CARMINE.

Coordination of networking activities is done through Task 7.3 (lead by WMO), and reported in deliverables D7.8, D7.9, D7.10, D7.11 (Joint activities with other R&I projects).

3.3.3 Training and educational materials

Training and educational materials are an integral part of CARMINE dissemination strategy, supporting the broader goal of enhancing stakeholder understanding, uptake, and long-term use of project outputs. As outlined in T7.5, a range of targeted training activities and educational resources will be developed throughout the project, co-designed with partners and end users to ensure accessibility, inclusivity, and relevance.

These materials will serve as a means of knowledge transfer and skills development across the MRE stakeholder ecosystem and target groups (TGs). They aim to:

- Increase awareness and understanding of CARMINE methodologies, tools, and findings;
- Support the practical application of project outputs by stakeholders;
- Foster skills retention and long-term capacity-building across stakeholder groups.

The training programme will be developed in close collaboration with WP6, with a formal training plan to be finalised by M31. While the work is scheduled to begin from M19, the strategy foresees a combination of formats to reach diverse audiences, including:

- Spotlight videos profiling key project outputs, challenges, and solutions;
- Workshops and engagement sessions, held both online and in-person, with at least one per CSA;
- Collaborative sessions with sister projects or external initiatives, where relevant, to maximise co-creation and cross-project learning;
- Open-access distribution of relevant materials through platforms such as the SDG Academy (via edX) and WMO Regional Training Centres, enabling broad dissemination beyond the consortium.

3.3.4 Open Science Approach and Open Access implementation in CARMINE

CARMINE is committed to adopting Open Science principles throughout its lifecycle to facilitate the transparent sharing of research results and data, engage stakeholders, and maximise the

societal impact of its findings. Open Science practices contribute to the **dissemination** of project results by making research outputs openly accessible to wide audience, including other researchers, policymakers and the public. Open Science also facilitates the **exploitation** of project results by enabling further research, innovation and collaboration. By making data, methodologies and findings openly available, other researchers and stakeholders can build upon the project's outcomes, leading to new discoveries, applications and societal impact.

The DEC strategy includes the following procedures to operationalize Open Science practices:

1. **Early and Open Sharing of Research Results and Data:** CARMINE ensures the systematic sharing of research results and data with local communities, stakeholders, the scientific community, and the public. This includes the dissemination of at least 4 articles, and the aim to deliver 20, in Open Research Europe (ORE) to facilitate broad access and feedback.
2. **Research Output Management:** The project facilitates wide-scale feedback and user adoption by making research outputs available to dedicated target groups (TG1, TG3, TG4). Procedures for managing research outputs are outlined in the Data Management Plan (DMP) within the first 6 months of the project, ensuring compliance with FAIR principles (Findable, Accessible, Interoperable, Reusable).
3. **Measures for Reproducibility:** CARMINE develops and releases a comprehensive climate-risk assessment methodology and associated resources in all CSAs to ensure the reproducibility of research outputs.
4. **Open Access Publishing:** The consortium utilises the ORE scholarly publishing service for Horizon Europe projects to enable rapid publication and support open science practices. Dedicated funding is allocated to cover open-access publication fees, with a preference for Green or Gold Open Access depending on publication requirements.
5. **Participation in Open Peer Review:** CARMINE partners engage in open peer review of scientific publications through platforms like F1000Research, Copernicus publishing and PLOS ONE, fostering transparency and collaboration within the scientific community. Partners also facilitate the open peer-review of scientific conferences and workshops, using the platform OpenReview.
6. **Involvement of Stakeholders in Co-creation:** The project actively involves stakeholders, including citizens, civil society, and users, in the co-creation of research and innovation content and solutions throughout all project phases.
7. **Next Generation Metrics:** As part of its commitment to Open Science, CARMINE utilises alternative metrics to measure the broader societal impacts of scientific research, including metrics related to access, appraisal, and application.

By implementing these procedures, CARMINE ensures that its research outputs are widely accessible, transparent, and impactful, fostering collaboration and knowledge exchange within the scientific community and beyond.

3.4 Internal Communication

Internal communication refers to communication between CARMINE project partners. Internal, consortium-wide communication is led by MeteoRo as part of WP8 (Project management).

Internal communication process:

- **Monthly Progress Reporting:** while the first version of the DEC strategy proposed “Monthly briefings” as a tool to keep partners regularly informed about CARMINE activities, the Project Coordinator (MeteoRo) decided to replace this tool with an Excel sheet where all project partners are asked to report on their progress monthly. MeteoRo is sending regular reminders to the consortium to complete the reporting sheet.
- **Internal communication within WP7 (led by SDSN):** To streamline communication requests, CARMINE partners are asked to use the Communications Needs Request Form, managed by SDSN. The form allows any partner to request social media posts, help with promotion of events, creation of website content or other communications outputs. It enables the WP7 leads to manage requests efficiently and align content with the overall strategy. For regular reporting and activity, partners are also asked to update the Communication and Dissemination Tracker, and SDSN sends regular reminders to do so. The Tracker is described in section 4.d below. These internal communication mechanisms will continue to evolve as CARMINE enters its second phase, with a growing number of outputs requiring coordinated promotion and uptake.

Internal communication channels:

- **Microsoft SharePoint:** SharePoint serves as the central repository for project documentation, resources, and deliverables. It provides a structured environment where partners can store, organise, and access files, ensuring that everyone has easy and secure access to the latest project materials.
- **Microsoft Teams:** Teams serves as the primary communication hub for project partners, offering a suite of features for instant messaging, audio/video calls, and virtual meetings. Within Teams, dedicated channels are created for different project WPs. These channels provide a focused space for discussions, updates, and collaboration related to specific aspects of the project. Partners use Teams for day-to-day communication, quick exchanges of information, and ad-hoc discussion. All the meetings will be organised in the CARMINE Teams using the Channel Calendar.
- **Email:** Project partners use email for formal communications, such as distributing project announcements, sharing important documents, and disseminating meeting agendas and minutes.

- **Miro (optional):** Miro provides a virtual canvas where project partners can ideate, organise, and collaborate on various aspects of the project visually. It offers a range of tools and templates for creating diagrams, mind maps, flowcharts, and other visual representation.

Table 8 - Team meetings

Meeting	Time	Organizer	Participants	Location	Deliverables
Kick-off meeting	M2 (12/03-13/03/24)	PC	All project partners	Face-to-face meeting	Agenda Meeting presentations Minutes - Action Plan
WP progress meeting	Each month	WP Leaders	All project partners	Online meeting	Agenda Minutes - Action Plan
Bimonthly project meetings	Every 2 months	PC	All project partners	Online meeting	Agenda Minutes - Action Plan
General Assembly	At least every 12 months	PC	Members of the General Assembly	Face-to-Face meeting/online meeting	Agenda Minutes - Action Plan
Ad hoc meeting	Whenever needed	All project partners based on topic and need	Project partners based on topic and needs	Face-to-Face meeting/online meeting	Agenda Minutes - Action Plan
External Expert Advisory Board	At least every 12 months	PC	All project partners	Online meeting	Agenda Meeting presentations Minutes - Action Plan

2.5. Exploitation and Sustainability Plan

3.4.1 Introduction and purpose

Communication, dissemination and exploitation are an integral component of EU-funded Horizon projects, critical to determine their success and maximize the impact. While communication and dissemination focus on transferring knowledge and results by showing the generated impact and benefits, the objective of exploitation is to make effective use of project results, not only from a scientific perspective but also in the broader socio-economic and political context. More precisely, exploitation refers to *“the utilization of results in further research activities other than those covered by the action concerned, or in developing, creating and marketing a product or process, or in creating and providing a service, or in standardisation activities”* (European Commission

Research and Innovation, 2023). Exploitation can be commercial, societal, political, or aimed at improving public knowledge and action.

The Exploitation and Sustainability Plan of the CARMINE project (Task 7.4, D7.12 and D7.13) is a key strategic document designed to ensure that the project's results generate lasting impact beyond its duration. In line with Horizon Europe requirements, the plan provides a structured approach to how CARMINE's Key Exploitable Results (KERs) (outlined in section 3.2.3) will be exploited by relevant stakeholders during and after the project's lifetime. More specifically, the plan is set to outline an exploitation strategy, including the identification of KERs, and a roadmap for development and implementation of individual exploitation plans (for each KER). The individual exploitation plans include identifying specific target audiences, exploitation pathways, as well as dissemination activities and intellectual property rights management strategies to maximise the use and uptake of project outcomes. It also defines roles and responsibilities among partners for the exploitation of the and proposes mechanisms to ensure long-term sustainability of the project's tools, methodologies, and knowledge base.

3.4.2 Exploitation Strategy

a. Identification of Key Exploitable Results (KERs)

The central part of CARMINE's Exploitation and Sustainability Plan are the KERs. According to the Horizon 2020 and Horizon Europe text, a key exploitable result is defined as

"...an identified main interesting result (as defined above) which has been selected and prioritised due to its high potential to be "exploited" – meaning to make use and derive benefits-downstream the value chain of a product, process or solution, or act as an important input to policy, further research or education"

(Source: EC Horizon Results Platform, 2021).

There can be different types of KERs such as technologies, services, methodologies, software, policies, frameworks, standards, infrastructures, etc.

The CARMINE's KERs and potential target groups (serving as potential channels for exploitation) were identified by the consortium in the project proposal, whereas Digital Twin was added upon discussion at the kick-off meeting. Table 9 outlines the different types of the project's KERs, a description and the potential target groups serving as channels for exploitation. The specific target groups will be identified during the characterisation phase of exploitation.

Table 9 - CARMINE's KERs and potential target groups

KER	Type of KER	Description	Potential target groups
-----	-------------	-------------	-------------------------

Stakeholders Community Hub	Platform	A collaborative digital platform designed to engage, inform, and connect stakeholders involved in climate adaptation and resilience. It serves as a central space for knowledge exchange, co-creation, and outreach across sectors and governance levels	Regions, Communities, Industry, Research and academia, Policymakers
A&M pathways for increased resilience to CC	Methodology	Geo-designed A&M pathways at metropolitan scale. Adaptation and mitigation options are assessed in each CSA, and the synthesis is prepared to support the upscaling.	Regions, Communities, Industry, Research and academia, Policymakers
Atlas of NbS and adaptation options	Manual	A comprehensive and accessible collection of Nature-Based Solutions (NbS) and other adaptation measures, mapped and categorized by effectiveness, applicability, and co-benefits. The Atlas supports decision-making across different scales and regions	Regions, Communities, Industry, Research and academia, Policymakers
Living Labs Handbook	Manual	A Handbook for transformative adaptation planning and building community resilience in metropolitan regions. The handbook includes an overall synthesis and replicable methodology for building community resilience in the metropolitan regions of Europe.	Communities, Research and academia, Policymakers
IDSS architecture framework	Framework	The Integrated Decision Support System (IDSS) architecture defines the structure, components, and interoperability mechanisms of a digital system designed to support climate-related decision-making. It integrates datasets, models, and user interfaces tailored to end-user needs	Regions, Policymakers
R&I roadmaps for regional resilience	Methodology	R&I roadmaps co-developed with stakeholders to guide future investments and actions in climate resilience. These roadmaps are tailored to regional needs and timelines, ensuring policy relevance and practical applicability.	Regions, Communities, Industry, Research and academia, Policymakers
Atlas for Climate Resilience	Manual	An Atlas Climate Resilience, as a GIS-based open toolbox for flexible spatial and temporal analyses of cost-effective adaptation measures and risk transfer solutions is co-developed with CSA stakeholders, including spatial data on	Regions, Communities, Industry, Research and academia, Policymakers

		the technical, economic and social potential of the adaptation options. The Atlas considers the visualisation and interactive interrogations of the vulnerability profiles and SE risk models, to identify optimal NbS and cost-effective adaptation measures and risk transfer solutions.	
Multilevel policy recommendations	Policy	A set of actionable, evidence-based recommendations designed to support policymaking at local, regional, national, and EU levels. They aim to align policy frameworks with resilience objectives, promoting coherence and integration across governance levels	Regions, Communities, Policymakers
Digital Twins Platform	Software	A virtual representation of regional systems that simulates climate impacts, adaptation scenarios, and decision outcomes. The Digital Twin integrates real-time data, modeling, and analytics to support dynamic, scenario-based planning	Regions, Communities, Industry, Research and academia, Policymakers

b. Development and implementation of individual exploitation plans (for each KERs)

For each KER, an individual exploitation plan will be developed by the end of 2026 and implemented throughout 2027 and beyond the project's lifetime where feasible. For each individual exploitation plan, SMART objectives are progressively defined as the exploitation process advances and more detailed information on the KER's maturity, target users, and uptake potential becomes available. At this level, the SMART approach is used to translate strategic exploitation intentions into concrete, time-bound targets that are tailored to the characteristics and readiness of each KER. The **Specific** dimension defines the primary aim of the exploitation plan (e.g. preparation for policy uptake, support to piloting with early adopters, reuse in further research, or exploration through commercialisation). The **Measurable** dimension is addressed by setting key performance indicators for each exploitation plan (See section 3.5.3), while the **Achievable** dimension ensures that targets are proportionate to the KER's maturity, available resources, and partner capacities. The **Relevant** dimension ensures alignment with CARMINE's overall impact objectives and clearly identified stakeholder needs. The **Time-bound** dimension defines concrete milestones for the preparation, implementation, and follow-up of exploitation actions.

The development of these plans follows a structured and participatory approach based on the **Horizon Results Booster approach**, which provides the overarching framework, analytical steps, and standardised templates for exploitation planning. The project has engaged with the Horizon Results Booster in April 2025. Two bilateral meetings with the service mentors have been held (on 24.04. 2025 and 12.05.2025), during which the Booster services were explained and the

Service Roadmap for the CARMINE's Exploitation and Sustainability Plan was agreed. The Booster activities are scheduled to take place between September 2025 and July 2026. ICLEI Europe will play a central role in this process as the task leader responsible for developing the CARMINE Exploitation and Sustainability Plan. Within the framework of the Booster services, ICLEI Europe will act as the primary "beneficiary," engaging directly with the assigned experts throughout the support process.

During this period, tailored methodologies and templates will be co-developed to address the specific characteristics of CARMINE's KERs. As a first step, three priority KERs have been selected to serve as pilot cases for testing and refining the Booster's approach:

- The Stakeholder Community Hub (platform)
- Digital Twins (software)
- Policy Recommendations and the R&I Roadmaps for Regional Resilience (methodology/strategy)

These KERs were selected to ensure a balanced representation of result types, as the methodologies and exploitation strategies may differ depending on whether the output is a platform, software tool, or methodological framework. Partners responsible for these three KERs will be contacted and invited to participate in relevant Booster meetings, where they will contribute key information and insights related to their respective results. Beginning of February 2026, the Booster approach will be extended to cover all remaining KERs within the CARMINE project. The methodology and templates will be adapted to the specific characteristics, maturity levels, and intended uptake pathways of CARMINE's KERs.

The individual exploitation plans will be developed through a combination of structured workshops, bilateral and group meetings, and iterative partner consultations. These activities involve the partners responsible for the development and potential exploitation of each KER, as well as other relevant consortium members contributing technical, policy, or market expertise. Workshops are used to jointly characterise KERs, refine value propositions, identify target users, and explore suitable exploitation routes. Bilateral exchanges and follow-up meetings support the refinement of assumptions, clarification of roles and responsibilities, and completion of the exploitation templates.

In addition, partners contribute by providing detailed inputs through the completion and iterative updating of the adapted templates, sharing insights on stakeholder needs, intellectual asset considerations, dissemination channels, and sustainability options. This iterative, partner-driven process ensures that individual exploitation plans are both methodologically robust and firmly grounded in the practical knowledge and ownership of the consortium, supporting realistic implementation and meaningful uptake of CARMINE's results.

Characterisation of KERs

The characterisation of KERs represents a first step in the development of individual exploitation plans. This process initiates the systematic collection of relevant information on each KER, which

will be continuously reviewed, refined, and expanded throughout the duration of the project. The goal is to ensure that each KER is well understood, positioned for maximum impact, and ready for uptake by relevant stakeholders.

This characterisation will be carried out through a series of structured **UVP (Unique Value Proposition) workshops**, organised in collaboration with the partners responsible for each KER. These workshops are interactive sessions that serve as key milestones in the innovation and exploitation pipeline.

Key Activities During the UVP Workshops

- i. *Review of KERs:* A detailed examination of each KER to clearly define its nature, maturity, potential applications, and alignment with project objectives.
- ii. *Definition of the Unique Value Proposition (UVP):* For each KER, the UVP will be articulated to highlight the unique benefits offered to specific stakeholders. This includes identifying how the KER addresses needs, differentiates from existing solutions, and creates tangible value.
- iii. *Mapping of intellectual assets:* Assessment of background and foreground knowledge, including IP considerations. This includes determining ownership, protection strategies (e.g., patents, trade secrets), and plans for further development or licensing.
- iv. *Target groups and stakeholder analysis:* Review and validate the potential target groups, and identify specifically the early adopters, end-users, and other stakeholders. This also involves understanding their needs, preferences, and the contexts in which the KER could be implemented or commercialised.
- v. *Competitive landscape assessment:* Evaluation of competing solutions, products, or technologies. This step is crucial to assess the KER's potential for differentiation, market penetration, and scalability.

The characterisation is not a one-off task but an iterative and collaborative process. As the project evolves, new insights will emerge, technological readiness levels will increase, and market dynamics may shift. Therefore, each KER's profile needs to be continuously updated to reflect the latest developments.

Identification of exploitation routes

The identification of exploitation routes is a critical step in translating project results into real-world impact. This phase goes beyond simply listing potential applications of the KERs;. The aim is to support project partners in developing pathways for the exploitation of results by relevant stakeholders. Key activities include:

- i. Review the **KERs profiles** identified in the characterization stage

- ii.
- iii. Identify clear **roles and responsibilities for each KER** within the project. For example, assign specific tasks, ownership, and accountability to relevant partners or team members to ensure each KER is actively developed, monitored, and advanced toward its intended impact. This includes identifying who is responsible for leading the exploitation strategy of each KER, who contributes to its development, who supports implementation, and who oversees reporting and alignment with project goals. Clarifying these roles helps streamline coordination, avoid overlaps, and promote a sense of ownership across the consortium.
- iv. Outline clear use models (e.g. commercialisation, research and innovation, or policy and standardisation) and the specific **exploitation pathways as well as dissemination channels** tailored to each result's nature, target audience, and market or application environment. Examples of use models and related exploitation routes are presented in 2.2.2.4.
- v. Identify and engage **relevant stakeholders** throughout the exploitation value chain *who* play a role in the uptake, development, or commercialisation of the results. To effectively plan for exploitation, it is important to also consider *how* stakeholders will be engaged based on their interest and influence. For instance, stakeholders with a high level of interest or influence may require close collaboration and ongoing communication (**COLLABORATE**), whereas those with lower interest may only need periodic updates (**INFORM**). Stakeholders who fall between these two extremes can be engaged through intermediate approaches such as **INVOLVE** (active participation) or **CONSULT** (gathering input and feedback).
- vi. Perform a **risk analysis** related to the exploitation of the results (e.g. partnership risk factors, technological, market, financial/management, IPR/legal, or environmental risks)
- vii. Identify the funding needed for each KER, **along with potential funding opportunities to support its development and implementation**. Clearly outline the processes that need to be followed and specify the stakeholders or partners that should be involved at each stage.

Exploitation pathways and means

Commercialization

- **Focus:** Transforming results into marketable products, services, or IP assets.
- **Target groups:** Companies, startups, entrepreneurs, investors.
- **Exploitation route/pathway:**
 - Product development (e.g., Software as a Service)
 - Licensing models
 - Spin-offs/startups

Example 1: An example from the [THERMOS software](#): to ensure continuation after the project lifetime, the online tool evolved into a free limited version and a “premium” paid version that provided the funding needed to keep the software running. Software as Service (Saas)

Example 2: Action Fund 1.0 project [ANN RADAR](#): this project aimed at developing a method and prototype of a decision-support system to identify urban test beds for climate mitigation action. Their software was made available after the project lifetime designed as an innovation process (experimental governance) as a service.

Means of exploitation:

Commercialisation-oriented exploitation is supported through the identification and engagement of potential users or customers, pilot testing or demonstration activities, and the exploration of viable business or service models. Depending on the nature of the result, this may include defining minimum viable products, testing Software-as-a-Service (SaaS) or service-based models, exploring licensing or access conditions, and assessing market readiness and scalability in collaboration with relevant partners.

Research and innovation

- **Focus:** Advancing scientific knowledge, developing or improving technologies and methods.
- **Target groups:** Researchers, universities, innovation labs, R&D units, technical companies
- **Exploitation routes/pathways:**
 - Open Access publishing
 - Use in follow-up research/innovation projects
 - Collaborative development
 - Integration into academic networks, curricula, etc.
 - Make the results available to relevant stakeholders via different tools and channels and platforms (municipality website, EU platforms, other initiatives' websites)

Example 3: ICLEI Euorpe Action Fund 1.0 project [AIREAL](#): this project developed a mobile application called Naonair to provide live data on different air pollutants in Nantes. They were invited to take part in a research project after the project ended that would use the real-time data tool developed for AIREAL. Additionally, the city financed part of the maintenance and improvements of the app in the following years.

Means of exploitation:

Research-oriented exploitation is supported through open-access publication of results, methods, and datasets, and their dissemination via recognised EU, national, local and/or project networks (e.g. SDSN Europe, ICLEI, Global Climate Hub, European Association of Environmental and Resource Economists, AE4RIA), research platforms and repositories (E.g. CARMINE's Stakeholder Community Hub) Engagement with research communities is facilitated through conferences, workshops, and academic networks. Where relevant, results are reused or further developed through follow-up research and innovation projects, collaborative initiatives, or

integration into educational and training contexts. Examples of relevant EU research and innovation platforms include:

- **Climate- ADAPT:** the EU's official platform for climate change adaptation, providing access to knowledge, tools, and case studies to support adaptation planning and implementation across Europe.

CORDIS: the Community Research and Development Information Service (CORDIS) is the primary source of results from the projects funded by the EU's framework programmes, including Horizon Europe. It brings research results to professionals in the field, fostering innovation in products and services, as well as promoting open science.

- **Horizon Dashboard:** an interactive platform to facilitate data sharing, providing public access to the ongoing Horizon proposals, projects and participants.
- **Horizon Results Platform:** a platform designed to allow policy makers, investors, entrepreneurs, citizens to discover the results of EU-funded research results and reach out to creators.
- **Innovation Radar:** initiative launched to identify potential innovations and innovators in the EU-funded research and innovation projects, allowing citizens, public officials, professionals and business to discover the outputs of EU innovation funding.
- **Research and Innovation success stories:** a database of projects and success stories of EU-funded Research and Innovation.

Policy and Standardisation

- **Focus:** ideal when addressing local governments, public authorities or institutions, where the KERs could inform or be embedded in policy, regulation, public service delivery (e.g. mobility, energy, or digital infrastructure) or standards.
- **Target groups:** Municipalities, regional/national authorities, public utilities, EU institutions, standards bodies (ISO, CEN, ETSI)
- **Exploitation routes/pathways:**
 - Embedding into city's operations, toolkits, protocols
 - Policy briefs, white papers
 - Contribution to legislation or strategic plans and acts
 - Pilot-to-permanent implementation in public services
 - Technical documentation for standardisation processes
 - Participation in standardisation initiatives and committees

Example 4: ICLEI Europe Action Fund 1.0 project "Pop-Up Republic" successfully implemented temporary bike lanes in the streets of Berlin. This intervention was in line with the Berlin Mobility Act and served as a pilot to demonstrate the positive impact of these kinds of interventions for the city's consideration in the future.

Means of exploitation:

Policy and standardisation-oriented exploitation is supported through close collaboration with public authorities and policymakers, including targeted workshops, consultations, and co-development of policy-relevant outputs. Pilot applications and demonstrations are used to test results in real-world public-sector contexts, with the aim of supporting longer-term integration into policies or services. Where relevant, standardisation potential is assessed, technical documentation is prepared, and engagement with standardisation initiatives or bodies is pursued to explore alignment or contribution opportunities.

3.4.3 3.5.3 Monitoring exploitation of KERs

To monitor the progress of exploitation of CARMINE's KERs, a structured KPI framework is applied that reflects the different exploitation routes pursued within each individual exploitation plant. Given the diversity of KERs types and exploitation pathways, exploitation progress is monitored using pathway-specific indicators and indicative targets rather than a single uniform set of KPIs. The following table provides an overview of the exploitation routes and corresponding KPI categories (including indicative indicators and targets) that will be used to monitor the progress of exploitation.

Table 10 KPIs framework for monitoring exploitation of KERs

Exploitation route	Purpose (what do we monitor)	Targets (to be refined for each KER)	Indicative KPIs (selected per KER)
Research and innovation uptake	Monitor exploitation through scientific dissemination, reuse, and further research	- Open-access research outputs produced for the relevant KERs, with evidence of dissemination and early reuse (e.g. citations, downloads, or follow-up research activities). - Documented interest or uptake of KERs in subsequent research or innovation activities, including proposals, pilots, or collaborations initiated during or after the project.	- Number of peer-reviewed publications linked to a KER - Number of results, datasets, models, or methods published on recognised research platforms (e.g. Climate Adapt, CORDIS, Horizon Results Platform, Innovation Radar, etc) - Number of citations, downloads, or documented reuse cases - Number of follow-up research or innovation projects
Policy uptake and public sector use	Track integration of KERs into policy, planning, or public decision-making	- KERs are formally considered or referenced in at least one policy, planning, or decision-support process at local, regional, national, or EU level. - Engagement with relevant public authorities results in	- Number of policy briefs or recommendations produced - Number of references to KERs in policy or planning documents - Number of public authorities or policymakers engaged

		documented feedback, piloting, or exploratory use of KERs in policy or planning contexts.	
Commercialisation and service development	Monitor exploitation through market-oriented or service-based pathways	- Market and user relevance of selected KERs assessed through pilot, demonstrator, or test use with external organisations. - At least one credible exploitation pathway for the relevant KERs (e.g. service, licensing, integration into existing offers) defined and validated with potential users or partners.	- Number of pilot users or test customers - Number of organisations testing or using the solution - Number of business or service models explored - Number of expressions of interest or formal agreements for uptake
Standardisation	Monitor contributions to standards, protocols, or formal frameworks	- Relevance of standardisation for applicable KERs analysed and documented, including identification of relevant bodies or initiatives. - At least one concrete contribution or engagement (e.g. technical input, liaison, or alignment exercise) with a relevant standardisation activity.	- Number of standardisation-related documents produced - Number of contributions to standardisation bodies or initiatives (e.g. CEN, ISO, ETSI) - Number of KER elements aligned with standards

These KPIs will be monitored within WP7 and reported through regular project progress meetings and dedicated exploitation deliverables (D7.12 and D7.13)

3.4.4 Dissemination

The dissemination phase of the exploitation roadmap plays a strategic and enabling role. While exploitation focuses on the uptake and use of project results (e.g. whether commercial, research, or policy-oriented) dissemination ensures that the right audiences and stakeholders are aware of, understand, and are engaged with those results. A strong dissemination plan increases visibility, facilitates knowledge transfer, and builds the groundwork for exploitation opportunities. This phase is not limited to communication activities but is a targeted, impact-oriented process that aligns closely with the KERs, the intellectual assets, and stakeholder landscape. A dissemination plan for each KER should be developed, in line with the communication and dissemination strategy outlined in the sections above.

4 Monitoring and Evaluation of Impact of DEC activities

Monitoring and evaluating the impact of DEC activities will allow us to assess the effectiveness of the activities, track stakeholder engagement, collect feedback, gain insights into preferences and needs and refine our strategy accordingly. The activities involve:

- Implement a monitoring and evaluation framework to assess the effectiveness of communication activities and track stakeholder engagement.
- Provide feedback to the project management to enhance the project's impact.
- Establish systematic processes of data collection and regularly gather feedback from stakeholders through surveys, focus groups, and interviews to evaluate communication strategies and identify areas for improvement. This may be used as a warning system to point out malfunctions or issues in the project.
- Use key performance indicators (KPIs) to measure reach, engagement, and impact of communication efforts, and adjust strategies accordingly.
- Identify trends, successes, and areas of improvement, allowing us to refine and adapt our strategy to better align with the target audience and stakeholders.
- Improve user experience for stakeholders and audience to enhance loyalty, highlight the project's unique value and prioritize strategic changes.
- Provide support to partners to respond to the weaknesses identified (see Table 1). For training purposes, SDSN has already developed a series of practical guides to support partners in capturing and sharing their work effectively. These resources include clear, easy-to-follow guidance on writing engaging blog posts, taking high-quality photos, and filming impactful videos to showcase CARMINE activities and achievements. These guides can be found in the Annex.

Table 1011 - DEC instruments and KPIs

Instruments and KPIs	TGs
Publications: Peer-reviewed articles (≥ 20), open-access, high IF (>3), journals (>8)	4
Policy briefs: policy briefs, reports, white papers, communiques (>20 ; i.e., 5/year)	1,5
Newsletters: 1 every 6 months informing regarding the progress of the project, results, opportunities for participations (>1000 recipients each)	1-4
Conference participation: Participation in relevant conferences, workshops, info days, other events as specified in paragraph below this table where CARMINE will be presented (est. >40 events)	3,4
Meetings / sessions with policymakers: meetings with EC to support the implementation of Climate Action and other relevant policies, through 12 meetings with DG CLIMATE, GROW, ENV, CONNECT	1,5
Networking and joint events FP7/H2020/HEU projects/ initiatives: Networking activities, technical exchange and dissemination activities will be done with relevant research and innovation projects. 20 interactions out of 10 candidate projects, joint work on regulatory frameworks	All

*Focus groups / local regional stakeholder workshops: A series of focus groups in each pilot location will be done engaging with general public, addressing stakeholder and citizens perspectives and social acceptance. >5 focus groups/workshops per CSA	All
Information, awareness, open-air activities: one per CSA (>40 participants)	All
Digital/social media presence/networks: Posts on social media: 15 per month, >700 followers on LinkedIn, >1000 followers on X, and picture posts of CSA locations on Instagram	2
Website: A dedicated section of CARMINE website will be targeted to the research community, industry and public authorities, including content targeting schools/universities (up to 20,000 visitors)	All
Videos: 3-4 videos to disseminate CARMINE; >2500 viewers in total	2
Open Science KPIs: Early shared pre-prints/presentations/posters >4; open project repository: 1; Articles in ORE 4; Open research outputs: 4; Publications with Open Data:>2; Open data in the repository: >2; Articles in open peer review: 4; Researchers in open peer-review:4.	4

*Please note that this KPI is tracked by WP1 which manages all CSA activities

The monitoring and evaluation of the DEC activities are done through tracking mechanisms that are tailored for every platform and activity and developed based on tracking the relevant KPIs. The results are regularly uploaded to CARMINE's SharePoint under the "CARMINE KPI Tracking" document.

a. Website

Monitoring and evaluating website traffic serves to understand how visitors interact with the project's content, the different pages available, and which devices are mainly used to optimise the website's performance.

Relevant indicators to track:

- Unique website visitors
- Number of views
- Number of sessions
- Average time on page
- Bounce rate
- Top landing pages

b. Digital and social media presence

Monitoring and evaluating the project's digital and social media presence serves to stay informed about the brand's presence, measure the effectiveness of the content, and ensure progress and improvement of the strategy.

Relevant indicators to track:

- Number of followers
- Impressions
- Reactions

- Comments/replies
- Saves (when applicable)
- Link clicks (when applicable)
- Shares/retweets
- Total engagement (sum of all interactions)

Example of monitoring mechanisms:

Follower metrics ?

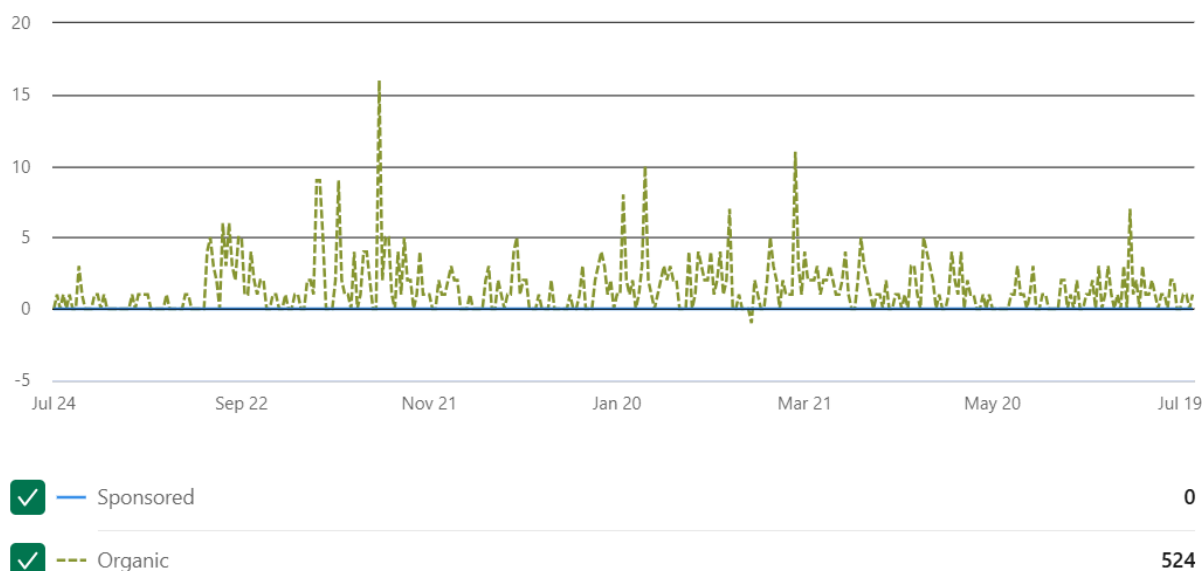


Figure 8 - Built-in social media analytics used for online presence monitoring and evaluation

Number of followers is tracked monthly using the respective platforms, and then for evaluation purposes, that information is added to the KPI tracking document to evaluate the growth.

DATE	PLATFORM	POST (main topic)	IMPRESSIONS	REACTIONS	COMMENTS/REPLIES	SAVES	LINK CLICKS	SHARES/RETWEETS	TOTAL ENGAGEMENT
1/1/2025	LinkedIn	New Year 2025	330	19	1	0	8	2	30
	X		30	4	0	0	0	2	6
	Instagram		15	1	0	0	0	0	1
1/7/2025	LinkedIn	Meet the Partners - MM	404	23	0	0	33	3	59
	X		51	2	0	0	0	1	3
	Instagram		19	3	0	0	0	0	3
1/13/2025	LinkedIn	Publication (Nature Communications)	301	15	0	0	16	3	34
	X		71	7	0	0	1	4	12
	Instagram		45	1	0	0	0	0	1
1/14/2025	LinkedIn	Meet the Partners - CNC	233	24	0	0	10	6	40
	X		34	5	0	0	2	1	8
	Instagram		8	2	0	0	0	0	2
1/15/2025	LinkedIn	Climate-ADAPT Database	88	9	0	0	0	1	10
	X		18	3	0	0	0	1	4
	Instagram		6	2	0	0	0	0	2

Figure 9 - Social media posts engagement tracker

Total engagements and impressions are tracked through the respective platforms and then added to a monitoring sheet (Figure 9) to evaluate the performance of each and have the information available to complete a social media report.

c. Newsletter

Monitoring and evaluating newsletter performance helps to identify the success of email campaigns, the content that is of greater interest, and areas for improvement and optimization.

Relevant indicators to track:

- Number of recipients
- Delivery rate
- Open rate
- Unsubscribe rate
- Click-through rate
- Bounce rate

These indicators are tracked through the respective platform where the newsletter is hosted and then added to a KPI Tracking document.

d. Partners activities

The success of CARMINE's dissemination, exploitation and communication activities depends on the combined and collaborative efforts of all project partners. Each partner is responsible for communicating their activities with the relevant audiences, using their own communication channels, and disseminating the project's results. All partners are also expected to identify and elaborate on their own exploitable results. Monitoring and evaluating partners' activities will serve to align goals with outcomes, assess the performance and identify areas of strengths and improvement, foster communication and collaboration efforts, and mitigate any potential risks associated.

To put this into practice and ensure comprehensive input from all partners, activities have been broken down into the following categories:

- External events
- CARMINE (co-)organised events
- Publications
- Social media activity
- CSA information activities
- Other communication and dissemination activities
- Networking

For each of these categories, specific indicators have been defined to capture essential data from partners. These range from audience size and engagement metrics to stakeholders involved,

dates and locations, repository links, and other relevant resources. This is only a brief overview of the detailed approach used to collect and track this information.

These items are tracked through the tracking sheet below, helping partners stay organised and informed of the activities and their performance.

SDSN sends a bimonthly reminder to all partners via Teams or email to fill in the tracking sheet, available on CARMINE's SharePoint.

Glimpse of the tracking sheet:

Date (dd/mm/yyyy)	Event Name	Participating partner(s)	Location	Organiser	Topic/Field	Website	Type of activity (presentation/p participation)	Title of the presentation	Estimated Audience size	Specify audience type(s): Scientific community (academia) Industry, Civil	Abstract (if available)
24/05/2024	The 25th Edition of the International Conference AFASES, 2024 Scientific Research and Education in the Air Force	P1 (MeteoRo)	Brasov (Romania)	Henri Coanda Air Force Academy, Brasov, Romania	Aeronautical and Atmospheric Sciences	https://www.afahc.ro/ro/afases/afases_ge_n_inf.html	Presentation		30	Scientific community	Web-Based Platforms Supporting the Climate Adaptation at Local Scale in Brasov Metropolitan Area
24/05/2024	The 25th Edition of the International Conference AFASES, 2024 Scientific Research and Education in the Air Force	P1 (MeteoRo); P6 (INCDS)	Brasov (Romania)	Henri Coanda Air Force Academy, Brasov, Romania	Aeronautical and Atmospheric Sciences	https://www.afahc.ro/ro/afases/afases_ge_n_inf.html	Presentation		30	Scientific community	Sustainable Management of the Water Resources Under Climate Change in Brasov Metropolitan Area
19/6/2024	2nd DestinE Platform Innovation Prize Awards	P15 (NOA) + P12	Online	ESA DestinE Platform	DestinE	https://destin.esa.int	Presentation	DT-HEAT+ Integrated Heat Resilience	100	Stakeholders	Winning proposal: DT-HEAT+ Integrated Heat Resilience
14/5/2024	Athens First Climatic Forum	P15 (NOA)	Serafio Centre	Mayor of Athens	Climate action for the City of Athens	https://www.a4c.gr	Presentation	Extreme Heat in the City of Athens	100	Stakeholders	Presentation about heat loc
17/9/2024	URBIS24 Urban Insights from Space	P15 (NOA)	ESA/ESRIN	ESA	EO for cities	https://urbis24.esa.int	Presentation	From Space to the City	200	EO researchers	URBIS24 - ConfTool Pro - Br
27/09/2024	Science Summit at the 79 UN General Assembly 8th Conference on Continental Climate and Environmental Dynamics: Climate change in Europe: Impact, risks and mitigation (CCE2024)	P1 (MeteoRo); P6 (INCDS)	Online	International Science Centre, Suceava University	The Crisis of Acute Climate Change in Europe: Impact, risks and mitigation	https://isc.nyas.ro	Panelist		estimated 100	Interested stahol	NA
12/10/2024	Building Climate Resilience: A holistic approach	P15 (NOA)	Athens Metro	Municipality of Kifissos	Climate resilience	https://pastglobal.org	Presentation		50	Scientific commu	Adaptation Frameworks for Climate Resilience
31/10/2024						https://www.kifissos.gr	Panelist		estimated 75	Stakeholders	Presentation about heat inn

Figure 10 - Communication and Dissemination Tracker

e. Feedback mechanism

To strengthen the effectiveness of Dissemination, Exploitation, and Communication (DEC) activities, CARMINE has put in place structured mechanisms to gather feedback and refine its approach. A key opportunity for this is the monthly WP7 meetings, where partners are encouraged to share reflections, raise concerns, and offer suggestions on ongoing and upcoming DEC initiatives. These exchanges help reinforce a shared commitment to the project's communication goals and ensure that efforts remain coordinated across the consortium.

At the same time, SDSN monitors and analyses engagement data using various tools—such as the Social Media Monitoring Document, the KPI Tracking Document as well as built-in analytics on platforms used for dissemination. These resources provide insights into key indicators like views, reactions, shares, and traffic, allowing the team to assess what content is performing well, and which areas may need adjustment.

By bringing together partner feedback and measurable data, the WP7 lead takes a flexible, insight-driven approach to managing DEC activities. Regular analysis helps refine messages, formats, and dissemination channels, ensuring that communications remain impactful, targeted, and in line with the project's evolving needs.

5 Next Steps and Further Updates of the DEC Strategy

This second version of the DEC Strategy outlines an updated approach to communication, dissemination, and exploitation, informed by feedback, lessons learned, and developments during the first 18 months of the project. The Strategy will remain a living document, continuously monitored and adapted to ensure relevance and effectiveness throughout the project lifecycle.

A third version of the DEC Strategy (D7.3), scheduled for delivery in M36, will reflect further refinements based on project progress, stakeholder engagement, and the maturing of project results. A final version (D7.4) will be submitted at M48, with a focus on consolidating the outcomes of the DEC activities, documenting lessons learned, and supporting the sustainability and legacy of CARMINE results.

Key areas that will continue to be monitored and updated in the next iterations include:

- Dissemination strategy and channels, as more concrete project results become available;
- Training and educational materials strategy, following the launch of Task 7.5 in M19;
- Exploitation strategy, as Task 7.4 begins in M25;
- Communication activities, which will continue to be adapted based on stakeholder engagement and feedback;
- Monitoring of KPIs, to identify areas requiring additional focus;
- Cross-work package collaboration on DEC efforts, to ensure coherence and increase impact;
- Planning of final outreach and stakeholder engagement activities in the last project phase;
- Preparatory steps for ensuring the sustainability and post-project visibility of key results.

6 Annex

6.1 CARMINE Visual Identity Development Survey

Question 1.

Which logo do you prefer?
See the options below

☐ Option 1 (with buildings)

☐ Option 2 (two leaves)

☐ Option 3 (three leaves)

Option 1 

Option 2 

Option 3 

Figure 11 - Screenshot from the CARMINE logo development survey

Question 2.

Which font do you prefer?
See font options below

☐ Option 1

☐ Option 2

☐ Option 3

1 

2 

3 

Figure 12 - Screenshot from the CARMINE logo development survey

Which logo do you prefer?

35 responses

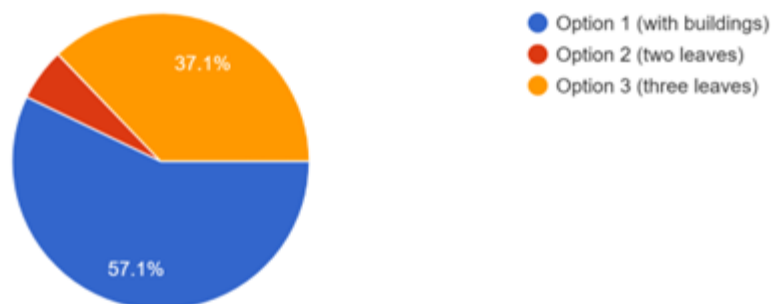


Figure 13 - Screenshot from the CARMINE logo development survey results

Which font do you prefer?

35 responses

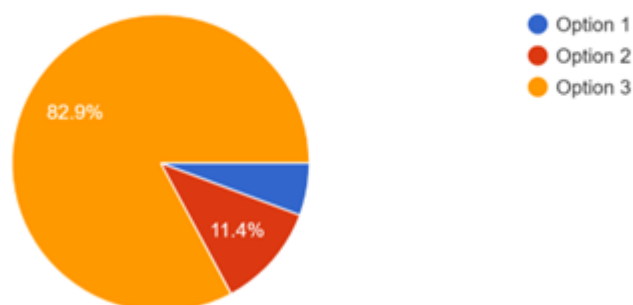


Figure 14 - Screenshot from the CARMINE logo development survey results

Most participants preferred the version with buildings, so that the metropolitan aspect is embedded in the logo. However, it was suggested that the WP7 team would propose alternative visuals for the buildings. Therefore, SDSN developed the following options:



Figure 15 - Final options for the CARMINE Project official logo. Option 4 was chosen by partners

6.2 CARMINE Blog Post Guidelines

These guidelines are designed to help you draft clear, accessible, and engaging blog posts that are consistent with our communication goals and style.

Editorial Process for CARMINE Blog Posts

- Review these guidelines before preparing your draft.
- Draft your post in a Word or Google document.
- Include any relevant photos as separate attachments (PNG or JPEG). Please do not embed them directly into the document.
- Share your draft with the communications team for feedback, fine-tuning and final approval.
- Specify if there's a preferred publication date (especially if time-sensitive).

1. Title Requirements

- Make sure your title is clear, descriptive, and engaging.
- Use title case (capitalise the first letter of major words).
- Prefer active voice over passive voice (e.g., Improving Urban Heat Resilience, not Urban Heat Resilience is Improved).

2. Image Requirements

- Include at least one high-quality photo (JPEG or PNG).
- Event photos or relevant visuals are preferred.

- If you don't have one, you can use free stock images (with attribution if required) from: [Pexels](#), [Pixabay](#), [Unsplash](#)...
- Provide captions for all images, explaining what they show and crediting the source.

3. Content Guidelines

When drafting your post, think about the classic 5 Ws to ensure you don't miss key information:

- Who: Who is involved? Individuals, institutions, partners.
- What: What happened? Event, result, publication, tool launch.
- When: When did it take place? Provide clear dates or timeframe.
- Where: Where did it happen? City, country, online platform.
- Why: Why is this important? Explain the context, goals, relevance.

Focus on newsworthy and relevant details:

- Project achievements
- Events or workshops
- Research publications
- New tools or platforms
- Other key activities, results and milestones

4. Writing Style and Best Practices

- Use plain language: Avoid jargon and complex sentences.
- Spell out acronyms the first time (e.g., Digital Twin (DT)).
- Front-load important info: Put the most crucial details in the opening paragraph.
- Use active voice: The team launched the platform (NOT The platform was launched by the team).
- Short paragraphs: Make the text easy to read.

5. Hyperlinks and Sources

- Hyperlink all references and resources in the text.
 - Links should clearly describe their destination.
- ✓ GOOD: Read the full report on urban heat adaptation.

✗ AVOID: Click here.

6. Suggested Structure for Your Blog Post

- ✓ Title (descriptive and active)
- ✓ Intro Paragraph: What's the news? Why does it matter?
- ✓ Body: What happened? Who was involved? When and where did it happen? Why is it important? How does it support CARMINE's goals?
- ✓ Conclusion: Next steps, implications, or calls to action.
- ✓ Images and Captions

7. Need Help?

If you have questions about the guidelines, the drafting process, or finding suitable images, don't hesitate to contact the communication team.

6.3 CARMINE Filming Guidelines

These filming guidelines are designed to help all CARMINE partners capture high-quality, consistent, and useful video material of your project activities, events, workshops, field work, and interviews.

Good video documentation is an essential part of the project's communication and dissemination strategy. It helps us share our collective work with a wider audience in a clear, engaging, and accessible way, supporting our mission of building awareness, inspiring stakeholders, and showcasing the impact of the CARMINE project.

1. General Filming Principles

- Plan your filming in advance. Know what you want to capture and who will be featured.
- Keep the footage simple and authentic, focusing on real activities, interactions, and settings.
- Be respectful of participants' privacy and secure any needed permissions for filming.

2. Technical Quality and Specifications

- Always aim to record in high definition (HD, 1920x1080). Check your device's settings before filming.
- Record in landscape (horizontal) mode unless the content is specifically intended for vertical formats such as Instagram Stories or Reels.

Keep the camera steady. Use a tripod or rest your phone on a stable surface to avoid shaking.

- Save and share your videos in standard formats such as MP4.

3. Framing and Composition

- Position the camera at eye level for interviews or speaking segments.
- Include a mix of shots:
 - Wide shots for context and setting.
 - Medium shots for people and activities.
 - Close-ups for details or expressions.
- Avoid extreme zooms. It is better to move closer physically when possible.
- Frame the subject so there is space above their head and they are centered or following the rule of thirds for visual balance.
- Consider including branding (project banners or logos) subtly in the background if appropriate.

4. Lighting

- Choose well-lit locations. Natural light is usually best.
- Position subjects so they are facing the light source, avoiding bright windows or lights directly behind them that cause silhouettes.
- Avoid harsh, direct light on faces, which can create unflattering shadows.
- If filming indoors, test the lighting in advance and adjust if necessary.

5. Sound Quality

- Choose quiet environments to reduce background noise.
- Avoid filming next to loud equipment, roads, or crowded spaces.
- If applicable, speak clearly at a moderate pace.
- Use an external microphone if available for better sound quality.
- Test the audio before recording to ensure voices are audible and clear.

6. Delivery and On-Camera Presence

- Encourage participants to speak naturally and confidently.
- Practice before recording to reduce filler words and hesitations.
- Look directly at the camera for interviews or messages.
- Keep delivery friendly, clear, and engaging.

7. Recommended Length

- For social media posts: short clips under 60 seconds work best.

- For project website or training materials: 2 to 5 minutes is recommended.
- For events: capture a mix of short clips (10–30 seconds each) to show different moments.

8. Types of Footage to Capture

- Event highlights: workshops, site visits, discussions.
- Interviews with partners, stakeholders, or community members.
- Demonstrations of tools, models, or methods.
- Hands-on activities or community engagement.
- Relevant locations or local context shots.
- Capture extra footage of the setting and participants interacting naturally to support storytelling.

9. Ethical and Privacy Considerations

- Always seek consent before filming identifiable people.
- Be especially careful with shots of minors.
- Avoid videos that could misrepresent or stereotype communities.

10. Sharing and Submitting Your Videos

- Save videos in MP4 format if possible.
- Name files clearly (e.g., Partner_Event_Date).
- Include captions or notes describing what the video shows, when and where it was filmed, and who appears in it.
- Share via cloud platforms (e.g., SharePoint, Google Drive, WeTransfer) with the communications team.

11. Support and Questions

If you have any questions about filming or want feedback on your plans, please don't hesitate to contact the communications team. We're happy to help you make the most of these opportunities to showcase your work.

6.4 CARMINE Photography Guidelines

Good-quality photos are essential for communicating CARMINE's work. They make our activities visible and relatable, help us engage partners and stakeholders, and strengthen the project's impact.

These guidelines will help you capture clear, compelling, and useful images of your events, workshops, community engagement, fieldwork, and other project activities—even if you're using a basic camera or smartphone.

Why Good Photos Matter

- Showcase CARMINE's achievements, collaborations, and local engagement.
- Make our website and social media posts more engaging.
- Support communication materials, newsletters, and reports.
- Help tell our story to funders, stakeholders, and the public.

1. General Principles

- Plan your photos in advance: Think about what story you want to tell.
- Focus on real, authentic moments—people participating, engaging, learning, and collaborating.
- Show context: include signs, maps, tools, banners, landscapes, and project settings.
- Get permission if photographing people, especially close-up portraits or minors.

2. Technical Quality

- Resolution: Use the highest resolution setting available on your camera or smartphone.
- Format: JPEG or PNG preferred.
- Avoid blurry images. Hold the camera steady or use a tripod.
- Landscape (horizontal) is preferred for most uses. Portrait (vertical) can work for social media stories and portraits.
- Check focus: Make sure your subject is clear and sharp.

3. Framing and Composition

- Center the main subject or use the “rule of thirds” for balanced composition.
- Leave space around your subject—don't crop too tightly.
- Choose a good angle. Avoid shooting from too high or too low. Aim for eye-level shots for people, and vary your angles to add interest while keeping the subject clear and recognisable.
- Keep photos straight. Avoid tilted or slanted horizons. Hold your camera level to ensure the shot looks professional and balanced.
- Include a mix of shots:
 - Wide shots for overall context (venue, landscape, group shots).
 - Medium shots of activities or small groups.
 - Close-ups of details, hands-on work, faces, and expressions.
- Capture branding when appropriate (banners, signs, logos in the background).
- Avoid cluttered or distracting backgrounds when possible.

4. Lighting

- Use natural light where possible.
- Avoid harsh backlighting (e.g., bright windows behind subjects).

- If indoors, position people facing the light source (e.g., window).
- Check that faces are well-lit and visible.
- Avoid direct flash that causes red-eye or harsh shadows.

5. People and Activities

- Include people wherever possible—it makes stories more relatable.
- Show engagement: people listening, speaking, working together, smiling, or using equipment.
- Capture candid moments—not just posed group photos.
- Take group shots with everyone looking at the camera.
- Avoid photos of people looking disengaged or with their backs to the camera (unless context requires it).

6. Diversity and Inclusion

- Aim to represent the diversity of participants, partners, and stakeholders.
- Ensure gender balance and inclusion in group shots.
- Be mindful and respectful of cultural contexts and sensitivities.

7. Types of Key Moments to Capture

- Events and Workshops
 - Opening/closing sessions.
 - Speakers and presenters.
 - Interactive discussions, Q&A sessions.
 - Participants listening, taking notes, collaborating.
 - Include room setup and branding elements (project banners, slides, posters).
 - Take wide shots of the venue to show scale and context.
- Fieldwork
 - Document location and environment clearly.
 - Show people interacting with equipment or natural features.
 - Include close-up details (e.g., tools, data collection, samples).
 - Capture the landscape or setting to give context.

8. File Sharing and Submission

- Use original, uncompressed images (avoid sending low-resolution screenshots).
- Provide captions or context if possible (who, what, when, where).
- Share images via email, SharePoint, Google Drive, or WeTransfer.
- If possible, send multiple photos so the communications team can choose the best.

9. Ethical and Privacy Considerations

- Always seek consent before photographing identifiable people.
- Be especially careful with images of minors.
- Avoid photos that could misrepresent or stereotype communities.

10. Need Help?

The communications team is here to support you. If you need advice, want feedback or have any questions, we can help!