



Climate-Resilient Development Pathways
in Metropolitan Regions of Europe

**Deliverable 7.1 Dissemination, Exploitation and
Communication Strategy – Version 1**

April 2024

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Disclaimer

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Executive Summary

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 emphasises 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.

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.

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 plans for adaptation and mitigation actions, emphasizing 1) Co-Creation of Decision-Support Services, 2) Collaboration with stakeholders, 3) Science-Based Governance.

The Dissemination, Exploitation, and Communication (DEC) Strategy (also called "Strategy" hereafter) of the CARMINE project is designed to maximise 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 and specifies the role of partners. It provides more insight into internal and external communication and dissemination plans, including on channels and methods, and preliminary schemes for exploitation and sustainability.

1 Maximizing impact of the CARMINE Project – Overview

1.1 Meaning 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.

1.2 Situation analysis

Designing effective DEC activities requires having a good understanding of partners' capacities. Table 1.2 is a first take on the consortium's strengths, weaknesses, opportunities and threats in terms of DEC activities. Mapping of partners' individual DEC expertise in realising dissemination, exploitation and communication has also been proposed and will be executed following the submission of the first version of this Strategy.

Table 1.2. 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 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 authorities).</i> • <i>Diversity of results to share for adaptation and mitigation actions implemented in eight selected Case Study Areas.</i>	• <i>Increasing awareness of the climate and biodiversity crises, and the need for resilience, especially in metropolitan regions.</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</i>

	<i>climate resilience at the metropolitan level.</i>
Weaknesses • <i>Challenging requirement to engage both professional and public audiences through the same project.</i> • <i>Challenging audiences that are highly diverse and have diverse communication preferences.</i> • <i>Limited experience in working in a collaborative way for a few case studies.</i> • <i>Limited knowledge for few case study partners on how to properly disseminate research results.</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>Competing priorities at the city level.</i>

1.3 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 combat 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 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 once it's established
- To support the exploitation of project results.

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

Table 1.3. 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, as well as an annual audience survey on the expectations and improvements.	Produce and issue targeted content through communication and dissemination tools and other relevant activities.	Will contribute to drawing attention to CARMINE, facilitate collaboration and support in achieving the goals and sharing results.	Achieve significant improvement in public awareness within the first 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.	Building 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 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.	Establish and implement the communications strategy in the first year of the project with quarterly or biannual monitoring reports.
Develop the CARMINE brand and increase brand awareness once it's established.	Achieve a recognisable brand presence and positive perception by reporting inconsistencies and 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.
Support the exploitation of project results.	Facilitate the information on project results and the adoption of outcomes with several external stakeholders.	Develop targeted content to engage in outreach activities for potential stakeholders that can take them forward or invest in them.	Maximise the project results for long-term success, to expand on the benefits or potential new adoptions of the project.	Secure targeted outreach of project results in the first years they are available.

1.4 Stakeholders and strategy

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 1.4). Keeping the number of channels limited and highly pertinent to the TGs is key for effective engagement. Table 1.4 will be updated throughout the project.

Table 1.4. Communication and dissemination objectives and channels pertinent to the TGs.

Stakeholders / Target Groups (TGs)	Subgroups	Communication and dissemination objectives and channels
TG1. Regions (local, regional, municipal authorities and organisations)	During the lifetime of the project: Regional and municipal authorities (city, town, village, rural areas) in metropolitan regions in CZ (Prague City Council), DK (Funen Assembly, Odense Municipality), DE (Leipzig City Council), EL (Athens Prefecture municipalities, Environmental Protection and Planning Agency of Athens), IT (Bologna City Council), RO (Brasov Municipality), ES (Council of Barcelona), UK (Birmingham Council) Beyond the project: Regional and national authorities in CSA countries (scale up from local to regional and national authorities)	Objectives: ● Raise awareness among regional and municipal authorities about the importance of climate resilience and adaptation strategies. ● 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. ● Participation in relevant regional conferences and events.
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;	Objectives: ● Engage local communities in climate resilience and adaptation efforts while fostering their active participation and contribution to producing relevant data using citizen science.

	Citizens and societal actors, NGOs; Vulnerable communities (from all CSA) Beyond the project: Young communities; Citizens and societal actors; NGOs: Climate Action Network-CAN	• 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. • Collaboration with citizen associations and non-profits for outreach and engagement efforts.
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, with relevance for CC risks: manufacturing (incl. high tech engineering), electronics and machine-building, steel production, transportation equipment, chemicals, advanced materials, construction, agri-food, tourism. 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. Channels: • Industry-focused policy briefs and technical reports. • Workshops and webinars tailored to specific industry sectors. • Engagement with industry associations and business networks. • Participation in relevant trade fairs and conferences.
TG4. Re-Search & Academia ecosystem (a) Research organizations; (b) Research communities and associations; (c) Relevant EU projects and initiatives;	During the lifetime of the project: (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, AECS), CMCC Risk	Objectives: • Share research findings and innovations with the academic community. • Foster collaboration and knowledge exchange among research organisations and institutions. • Highlight opportunities for further research and funding in climate resilience and adaptation.

(d) Regional, national, EU and international-wide research and development networks, clusters, platforms and partnerships	analysis for Bologna (incl. health), Connecting Nature, LIFE-IP AdaptInGR, ARSINOE, IMPETUS, Urban ReLeaf, DG-ECHO EXTREMA, DIRECTED, AC-CREU, 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. 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".	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.
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. 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.	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.

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 (CS) leaders, led by WP1 leaders (ATH-RC), is a process which begins in April 2024 and will be completed by the end of May.

The first step is to identify the focus of each case study area which will subsequently define the stakeholder sectors. Within these sectors, key stakeholders need to be identified. A template will be completed by mid-April by Case Study leaders (CS) to provide WP1 with these sectors. ATH-RC will distribute a stakeholder mapping guideline and template. Following this preparatory step, ATH-RC will facilitate a meeting towards the end of April with all CS leaders to officially start the stakeholder mapping process.

All CSs will compose 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, the CS leaders are expected to submit the long list of stakeholders to ATH-RC.

2. Method and activities

2.1. Internal communication

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

Internal communication process:

- **Monthly briefing:** To keep all partners regularly informed about CARMINE activities, an internal briefing is prepared every month by MeteoRo (Irina Ion), in collaboration with the project coordinator and WP leads. The internal briefing includes major updates from all Work Packages, such as the main achievements, upcoming events, milestones, deliverables, and important announcements. Inputs to the internal briefing are submitted via the Share Point of the project, by the 5th day of each month by WP leaders (*mandatory*) and other partners (*optional*).

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 representations.

Table 2.1. 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

2.2. External communication and dissemination

2.1.1 Difference between communication and dissemination, and the approach taken in this Strategy

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.

2.1.2. General guidelines for communication and dissemination in CARMINE

- ✓ **Clear and Consistent Messaging:** Ensure that all communication materials convey key project objectives, findings, and outcomes clearly and consistently. Use plain language and avoid jargon to enhance understanding among diverse audiences.
- ✓ **Targeted Approach:** Tailor communication strategies and messages to specific target groups, considering their interests, needs, and preferred communication channels. Adopt a segmented approach to effectively reach stakeholders across different sectors and levels of expertise.
- ✓ **Engagement and Participation:** Foster two-way communication by actively engaging stakeholders in dialogue and seeking their input throughout the project lifecycle. Encourage participation in workshops, webinars, and focus groups to gather feedback and co-create solutions. Respond promptly to inquiries and demonstrate a commitment to addressing stakeholder needs and interests.
- ✓ **Ethical Considerations:** Adhere to ethical principles and guidelines in all communication activities, respecting privacy, confidentiality, and intellectual property rights. Ensure that communication materials are accurate, reliable, and sensitive to cultural and social contexts.
- ✓ **Open Access:** Embrace open access principles by making project outputs, research findings, and data freely available to the public wherever possible. Publish peer-reviewed articles in open-access journals and provide access to reports and publications on project websites or repositories.
- ✓ **High quality of delivered materials:** Ensure that all materials produced by the project are of superior quality, adhering to the highest standards of accuracy, reliability, and professionalism.
- ✓ **Validation and reuse of the results:** Facilitate the validation and reuse of project results by providing clear documentation, methodologies, and data that allow other researchers and stakeholders to replicate, verify, and build upon the findings. This involves

transparently sharing research processes, methodologies, and data sources, as well as promoting collaboration and knowledge exchange within relevant communities.

- ✓ **Respect of intellectual property:** Ensure that all intellectual property rights associated with the project outputs are respected and protected. This includes acknowledging the contributions of all project partners and collaborators, as well as complying with relevant copyright laws and regulations.

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*). 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.

2.1.3 Channels and methods

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.

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Example:



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b. Brand identity, Style Guide and logo

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

First versions of CARMINE logo were presented by SDSN at the kick-off meeting in Bucharest on March 13, 2024, and all partners were invited to submit a form. The form had two questions with different versions of the logo, and one open question where partners were invited to share additional comments (*see below*).

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



Question 2.

Which font do you prefer?

See font options below

☐ Option 1

☐ Option 2

☐ Option 3

1



2



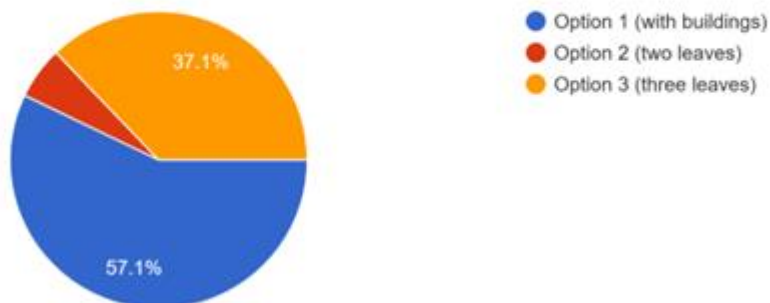
3



Results:

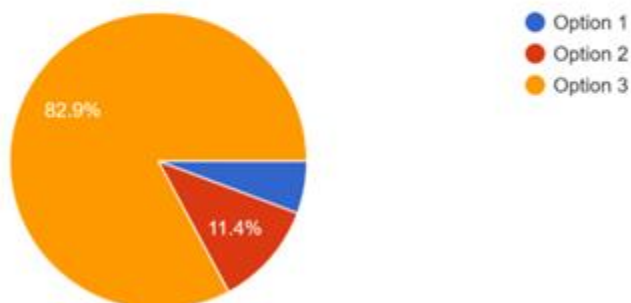
Which logo do you prefer?

35 responses



Which font do you prefer?

35 responses



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:



Option 4 was chosen by partners.

Final CARMINE 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, 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:



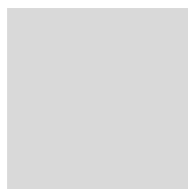
HEX: #39B54A
RGB: 57, 181, 74
CMYK: 69%, 0%, 59%, 29%



HEX: #ABD700
RGB: 172, 215, 0
CMYK: 20%, 0%, 100%, 16%



HEX: #008f21
RGB: 0, 143, 33
CMYK: 100%, 0%, 77%, 44%



HEX: #D9D9D9
RGB: 217, 217, 217
CMYK: 0%, 0%, 0%, 14.9%

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.

Link to the Instagram account [here](#). Link to the Twitter 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.
- 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. Create a content calendar that outlines the dates, topics, formats, and publishing schedule.
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.

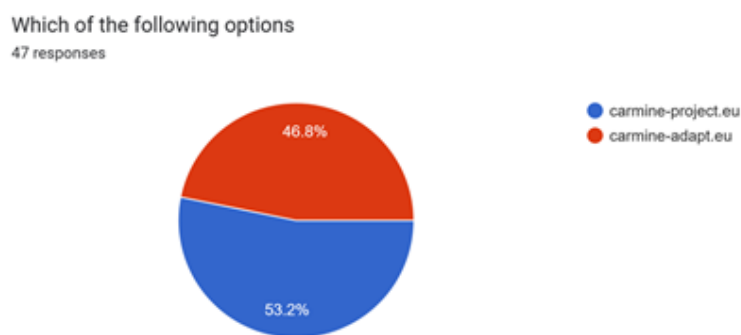
3. Community engagement. Actively engage the community by promoting responsiveness through the platform specific features (replies, DMs, comments, etc.) in a timely and personalised manner. Foster a sense belonging among the community by encouraging user-generated content.
4. Evaluation and Assessment.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

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). The website also serves 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). 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.

Figure 1. Website name selection – results



Website structure and content:

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

CARMINE

Climate-Resilient Development Pathways in
Metropolitan Regions of Europe

[Learn more](#)


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.
- Case Studies - describe the selected Case Study Areas and provide a map with their locations in Europe.
- 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) **Instruments:** describes the tools and methods developed in the project:

- Living Labs - discusses the use of Living Labs for real-world testing in each of the Case Study Areas.
- 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.

4) **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.
- 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.

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

- News and Events - provides timely updates on project milestones, upcoming events, and other news.
- 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 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 2.1. provides links to CARMINE partners' websites and LinkedIn accounts.

Table 2.1. 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://cngcft.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/
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/

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 events, and opportunities for involvement.
- Include engaging content such as interviews, case studies, and infographics to enhance readability and relevance.

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 Regional Office for Europe's.

Table 2.2 enlists events and workshops in which CARMINE will be featured. It will be updated as opportunities arise.

Table 2.2 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 2024 or 2025	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

ESA URBan Insights from Space URBIS24	ESA/ESRIN in Frascati, Italy, between September 16–18, 2024	URBIS24 will consist of presentations on key urban challenges and insights on latest results for urban problem-solving and monitoring. Priorities of urban experts and decision-makers. Through collaborative discussions, the goal is to map existing innovative methodologies and technological solutions while exploring new applications for further development.	Urban policymakers, Earth Observation researchers, service providers and various end-users.
Official or unofficial side event to the High-Level Political Forum (HLPF) https://hlpf.un.org/2024/other-events	2025, and annually	The HLPF side events are intended to provide opportunities to discuss the 2024 theme and the SDGs under review at the HLPF, deepen the discussion on Voluntary National Reviews (VNRs), identify new and emerging issues, and bring together stakeholders to help spread greater awareness and implementation of the 2030 Agenda and the SDGs.	Civil society, government agencies
Launch of the Europe Sustainable Development Report (ESDR)	December 2024	Annual event organised by SDSN	Academia, government agencies, civil society
Joint event with CROSSEU and/or other similar R&I projects	TBD	TBD	TBD
Sustainability Research + Innovation Congress 2024 https://sricongress.org/	Finland, 10-14 June 2024	The top sustainability science and innovation event of 2024 is a collaboration between the Sustainability Research and Innovation Congress (SRI), and Finland's Sustainability Science Days (SSD).	Academics, researchers, innovators, energy specialists
DG-ECHO UCPM	Brussels, June 2024	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	Civil protection, private sector, academia, national and regional governments and agencies, first responder organisations, NGOs
WMO Region Vi (Europe) Scientific Forum	October 2024, venue TBC	Annual scientific forum for WMO's Regional Office for Europe	Academia, national hydromet services, private sector
Columbia University expert workshop,	May 2024	<i>Socioeconomic Benefits of Better Weather and Climate Observations</i> – WMO will attend and speak at this event, which is of direct relevance to CARMINE, in partnership with WMO's socio-economic benefits team.	Academia, US government agencies, international orgs

EGU	Vienna, April 2024, and annually	CARMINE partners will attend widely at EGU and promote the project in sessions at Europe's largest geosciences academic conference	Academia
EMS	Barcelona, September 2024, and annually	CARMINE partners will attend and promote the project in sessions at Europe's Annual Meeting of the European Meteorological Society	Academia, national hydromet services, practitioners, international organisations
ICUC	Rotterdam, July 2025, and bi/three-annually	CARMINE partners will attend and promote the project in sessions at the largest international conference on Urban Climate, organised by the International Association for Urban Climate.	Academia, practitioners, international organisations
SURE International Conference	Istanbul, July 2025	The International Conference of the Society for Urban Ecology focus on different aspects related to urban ecology, including climate resilience. The project members are encouraged to organize a project session during this international conference	Academia, practitioners
EURESFO	11th edition 26-28 June 2024 Annual 12th edition in 2025	Pivotal European initiative since 2013. Organised by ICLEI Local Governments for Sustainability and the European Environment Agency (EEA), it has been acting as a unique exchange platform in the field of resilience.	City representatives, experts, NGOS and stakeholders from local and regional institutions

h. Stakeholder Community–HUB (SC-HUB)

SC-HUB is a web tool that will be developed within the CARMINE project for streamlining, monitoring and organising all activities related to the operation of the Living Labs in the eight metropolitan areas. Its main aim is to support the main participants of the Living Labs (LL) and facilitate the operation of the LL and the exchange of knowledge. By collecting, however, all LL activities and outcomes and by publicising and presenting them in a structured and organised way, it can also become an important tool in the dissemination of CARMINE LL results and communication with the broader public. It, thus, permits the dissemination material to reach wider audience on the long term.

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 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.

2.1.4 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 2.3 provides initial mapping of operational links and networking opportunities. Initial ideas for engagement are also outlined for selected projects and platforms.

Once activities are spearheaded, more networking opportunities and engagement plans will be added to the Table 2.3 and reported in D7.2 (DEC Strategy – Version 2).

Table 2.3 Mapping operational links and networking opportunities

Identified networking opportunities		Engagement
Type	Examples	
Similar EU R&I projects	ICARIA MIRACA RISKADAPT CLIMAAX CROSSEU	• 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.

	MedEWSa AGORA	• 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 Integrated Urban Services (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	 ISO/TC 268 - Carbon-reduced/neutral cities - ESG indicators - Disaster Risk Finance - Interoperability

	and national levels	 CEN CENELEC Europe CEN/TC 465 CEN-CENELEC-ETSI SF-SSCC • Resilience • Nature-based Solutions • Climate Neutrality • Local digital twins  DIN Bundesrepublik Deutschland DIN/DKE Smart City Standard Forum • 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 7.1 (lead by WMO), and reported in deliverables D7.8, D7.9, D7.10, D7.11 (Joint activities with other R&I projects).

2.1.5 Open Science 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 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 Case Study Areas (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.
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.

2.2 Exploitation and sustainability

This section aims to provide background information, upon which CARMINE's Exploitation and Sustainability Plan (T7.4; D7.12 & D7.13) will be established. Given the early submission of this Strategy in M3, this is a very initial mapping of the future exploitation-related activities.

As the project advances, we will further develop the exploitation pathways and report their achievement (referenced as D7.4), involving representatives from the identified target groups and project consortium. This will enhance the utilisation of CARMINE outcomes, pinpointing possibilities and concepts for scientific and commercial utilisation of CARMINE's results, services, and knowledge.

2.2.1 Key Exploitable Results (KERs) and target groups

The central part of CARMINE's Exploitation and Sustainability Plan will be the Key Exploitable Results (KERs). Most of the KERs were identified by the consortium in the project proposal, whereas Digital Twin was added upon discussion at the kick-off meeting. This is a preliminary list, which may be revised in the DEC strategy-Version 2 (D7.2).

Table 2.4 outlines the project's Key Exploitable Results (KERs) and the potential target groups serving as channels for exploitation to date.

Table 2.4. CARMINE's KERs and potential target groups serving as channels for exploitation

KERs	TG1 Regions	TG2 Communities	TG3 Industry	TG4 Research & Academia	TG5 Policymakers
Stakeholder Community Hub					
A&M pathways for increased resilience to CC					
<i>Atlas of NBS and adaptation options</i>					
Living Labs Handbook					
<i>IDSS architecture framework</i>					
<i>R&I roadmaps for regional resilience</i>					
<i>Atlas for Climate Resilience</i>					
<i>Multilevel policy recommenda tions</i>					
<i>Standardisati on strategy and standard products</i>					
<i>Digital Twin</i>					

Note: Green shading of the cell indicates that the target group serves as a potential channel for exploitation of the KER concerned.

2.2.2. Initial plan for exploitation activities

After the identification of the KERs, the next step for developing a comprehensive Exploitation and Sustainability plan is to collect the basic information about each KER. Žlender & Erjavec (2023) suggest different criteria for developing a structured approach to the research results exploitation.

Table 2.5 Initial planning of Exploitation Strategy (Žlender & Erjavec (2023), adapted)

	Activities	Actions
IDENTIFY	Identify the expected outcomes and deliverables	- Align partners' exploitation activities - Coordinate all levels and types of exploitation - Identify the project's knowledge transfer opportunities.
PROMOTE	Promote and raise awareness	- Establish interactions and networking of core stakeholders - Strengthen the visibility of the project results beyond the core target groups - Adapt and tailor the results to the target groups
EXPAND	Activate further utilisation pathways	- Provide training - Define additional interactions and networks aimed to address a wider group of stakeholders - Specify channels for exploitation;
TRANSFER	Build external agency	- Share and transfer exploitable project results through different channels to different targeted users - Ensure long-term availability for continuous use of project results - Enable further development e.g. imploring different licensing options

Key aspects of the Exploitation and Sustainability strategy include:

- **Market analysis and validation:** Market analysis and validation exercises will be conducted to assess the commercial viability and market demand for KERs in target sectors or industries. The process will include engagement with relevant stakeholders, including potential end-users, customers, investors, and industry experts, to gather feedback and insights that can inform the refinement of exploitation strategies.
- **Development of Exploitation pathways:** Exploitation pathways will outline the sequence of steps and activities required to translate research outputs into tangible socio-economic benefits. They may consider factors such as market readiness, technology maturity, regulatory requirements and competitive landscape. The template for defining exploitation pathways will be provided in DEC Strategy – Version 2 (D7.2).
- **Risk assessment:** Once exploitation pathways are identified, it will be crucial to identify risks for each KER. A KER's risk matrix, and a template for KER's risk assessment will be provided in DEC Strategy – Version 2 (D7.2).
- **Know-how and IP protection:** During the CA signing the partners confirmed their background IP and created an IP baseline related to the foreground knowledge of the consortium partners ensuring:
 - 1) Individual ownership of all developed expertise, knowledge and technologies acquired beforehand.
 - 2) Shared ownership of all developed expertise, knowledge and technologies acquired during the project's duration.

The CA outlines the Principles for IP policy and Principles for a knowledge transfer policy of the Code of Practice annexed to the EC Recommendation on the management of IP. IPR management will be described more thoroughly in the deliverable D8.10 Project Handbook – Version 1.

This cumulates in an **exploitation canvas** to be developed for each KER according to criteria derived from literature. The structure and criteria of the CARMINE exploitation canvas could be as follows but should not be limited to this suggestion, since the work will only start in M25 of the project:

- **Introduction:** Context / Added value / Motivation & objectives
- **Organizational Context:** Key partners / Resources / User segment / Market readiness / Implementation status / Exploitation pathways / Governance model / IPR and licensing options
- **Technical Context:** Technical requirements / Data & data sources / Interoperability / Technical and infrastructure characteristics

Evaluation and monitoring will provide and support evidence on the success of the dissemination and exploitation.

3. 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.
- Organise dissemination training events for partners to respond to the weaknesses identified (*see Table 1.2*). The date of the first training will be decided on following the finalisation of D7.1.

Table 3.1: 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 Twitter, 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

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

a. *Website*

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

Relevant indicators to track:

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

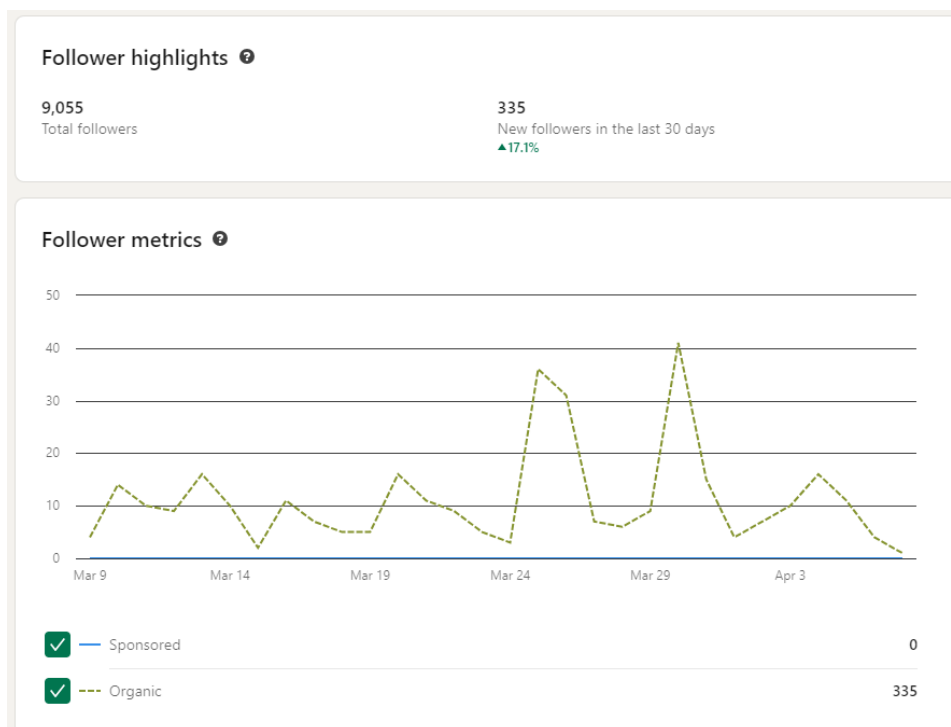
b. *Digital and social media presence*

Monitoring and evaluating the project's digital and social media presence will serve 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:



Number of followers can be tracked monthly or quarterly using the respective platforms and then for evaluating purposes adding that information in a social media report to evaluate the growth.

A	B	C	D	E	F	G	H	I	J
DATE	PLATFORM	POST (main topic)	IMPRESSIONS	REACTIONS	COMMENTS/REPLIES	SAVES	LINK CLICKS	SHARES/RETWEETS	TOTAL ENGAGEMENT
09/04/24	LinkedIn	DEC strategy example	559	65	1			4	74
	X	DEC strategy example	6778	150	40			4	107
	Instagram	DEC strategy example	766	50	0	3		3	56
	Facebook	DEC strategy example	890	45	5		5	3	58
09/05/24	LinkedIn	Carmine announcement	550	25	5			2	584
	X	New blog	803	37	6		5	3	854
	Facebook	New blog	1254	36	7		32	18	1347
09/08/24									

Total engagements and impressions can be tracked through the respective platforms and then be added to a monitoring sheet to evaluate the performance of each and have the information available to complete a social media report.

c. Newsletter

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

Relevant indicators to track:

- Open rate
- Number of subscribers
- Unsubscribe rate
- Click-through rate
- Bounce rate

These indicators can be tracked through the respective platform where the newsletter is hosted and then be added to a newsletter report on the performance evaluation.

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.

Relevant indicators to track:

- Number of attendees (when applicable)
- Engagement metrics
- Feedback and surveys (when applicable)
- Registration rate (when applicable)
- Audience demographic (when applicable)

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

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

Example of the tracking sheet:

INFORMATION				COMMUNICATION/DISEMINATION					MONITORING	
ACTIVITY	DATE	TITLE	PARTNERS INVOLVED	SOCIAL MEDIA	WEBSITE	NEWSLETTER	PRESS RELEASE	FLYER	ATTENDANCE	ENGAGEMENT METRICS

4. NEXT STEPS AND FURTHER UPDATES OF THE DEC STRATEGY

This first version of the DEC Strategy, due in M3, aims to outline CARMINE's initial strategy for dissemination, exploitation and communication activities. Based on the feedback from stakeholders, performance metrics, and evolving activities and needs in the project, the DEC Strategy will be regularly revisited and updated in M18 (D7.2).

Next steps in terms of dissemination, exploitation and communication (M4-M18) include:

- Further updates of the DEC Strategy (MS14; next versions of this deliverable)
- Set up of social media channels and further improvements of the website (T7.1; T7.2)
- Initiation of official communication and dissemination activities with participation of all project partners (with ongoing reporting on the progress) (T7.2)
- Preparation of communication materials: flyer, poster, videos, project- and case study-related press material, factsheets and articles (T7.2)
- Kick-start of networking and synergies with other similar projects and initiatives (through first meetings and planning of a first joint event in 2024) (T7.3)
- Monthly WP7 meetings to report on progress and plan next activities.

References

Žlender, V., & Erjavec, I. Š. (2023). Understanding the Exploitation Plan and Business Model in EU-funded Research Projects by Applying the Business Model Canvas Approach in Public Space. *Prostor*, 31(1 (65)), 84-95.