DELIVERABLE 1.5

Communication, dissemination and exploitation plan

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CircEUlar

Developing circular pathways for a EU low-carbon transition

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4	31.10.2025		Updated version M36	Updates and revisions after 36 months of project execution
5	30.10.2026		Updated version M48	Updates and considerations after 48 months of project execution

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Executive Summary

This document serves as a strategic and operational guide for all CircEUlar partners in communicating and disseminating project activities and results. Indeed, it intends to coordinate and guide the implementation of outreach activities and to plan a strategy for the use of planned results during and after the end of the project (exploitation). The mission is to transfer the new modelling approaches for analysing circularity and other know-how generated by CircEUlar project activities to researchers, policy makers, business leaders, educators and students, and the public in general to boost societal transformation towards net-zero emissions.

The strategy identifies the overall goal and the specific objectives of Communication, Dissemination and Exploitation activities, formulates some key messages that describe the project's aims and intentions, and defines the target groups to address with various tools. Timeline and responsibilities are also described in the document to help partners to effectively fulfil tasks and implement actions. The impacts of these activities are constantly monitored and evaluated using Key Performance Indicators (See Table 3).

The strategy has been developed following the plan within the Description of Action (DoA) of the CircEUlar Grant Agreement.

Keywords

Communication, Dissemination, Exploitation, Outreach

Abbreviations

CircEUlar	Developing circular pathways for a EU low-carbon transition
CIRCOMOD	Circular Economy Modelling for Climate Change Mitigation
CMCC	Fondazione Centro EuroMediterraneosui Cambiamenti Climatici
CO2NSTRUCT	Modelling the role of circular economy construction value chains for a carbon-neutral Europe
CORDIS	Community Research and Development Information Service in the European Commission
D	Deliverable
DoA	Description of the Action
EU	European Union
GHG	Greenhouse Gas
IAMC	Integrated Assessment Modeling Consortium
IIASA	International Institute for Applied Systems Analysis
IIASA PURE	Publications Repository of the International Institute for Applied Systems Analysis
KEO	Key Exploitable Output
KPIs	Key Performance Indicators
LI	LinkedIn
M	Month
MCC	Mercator Research Institute On Global Commons And Climate Change GGMBH
NGO	Non-governmental organisation
RRI	Responsible Research and Innovation
TUB	Technische Universitat Berlin
TW	Twitter
WP	Work Package

Communication, Dissemination and Exploitation Plan

1. Introduction

The CircEUlar project aims to advance scientific and policy understanding of circular economy measures and strategies in the context of climate change mitigation, ensuring societal impact. To achieve this goal, the project needs to engage a wide audience of stakeholders, implementing a successful communication, dissemination and exploitation strategy. Indeed, various communication channels will help to reach not only the immediate networks of partners, but also an audience that resides outside of the consortium.

The "Dissemination, Communication and Exploitation Plan" (D1.5) presents the communication, dissemination and exploitation strategy with all the promotion, information and dissemination activities to be carried out during the project. The document describes the project's overall goal and its specific communication, dissemination and exploitation objectives, defines the key messages, identifies the target groups and analyses the different communication tools and channels that will be used. In addition, this Deliverable establishes a timeline for the implementation of the various actions and sets up procedures for monitoring and reporting the activities.

The focus of this first version of the report is on communication and dissemination with a first overview of a strategy for the exploitation of project results. The latter aspect will be further defined in detail in upcoming versions of this document, which are due at the end of each reporting period, so in M20 and M38, as well as at the end of the project.

This document is part of the WP1 "Stakeholder Engagement and Outreach", Task 1.5 "Communication and dissemination activities" and it will be iteratively updated (see previous paragraph) in response to project results, and KPI monitoring. It is an extension of the communication, dissemination and exploitation measures identified in Sections 2.2 and 2.3 of the DoA. It has been developed analysing the questions collected through a questionnaire that was distributed to the project consortium. The survey aimed was at gathering ideas and information on the projects' communication activities from each partner in order to effectively promote CircEUlar, build up different communication channels and find out Key Exploitable Outputs.

The document is closely linked to other project deliverables, in particular: "Launch of CircEUlar project website" (D1.4)**,** "Report describing the terms of reference and composition of the Advisory Board" (D7.1), "Report describing the plans for coordination with the broader research community and projects working on related research question" (D7.2) and "Data Management Plan" (D7.3).

Update M20: This update focuses on further increasing the awareness and spreading the knowledge of CircEUlar, based on lesson learned during the first 20months of the project.

Update M36: Based on the monitoring of Key Performance Indicators (KPIs) and lessons learned in the previous period, this update aims to fine-tune and adapt the planned activities in the communication and dissemination strategy as the project enters its final impact phase. In addition, the Exploitation plan (Section 6) was further specified based on the advancements of planned Key Exploitable Results and the respective exploitation planning.

Update M48: This final update reflects the transition from communication and awareness-raising activities to the dissemination, exploitation and long-term sustainability of CircEUlar's results. Building on the experience gained throughout the project, the strategy now focuses on showcasing project achievements, while supporting their uptake by researchers, policymakers and other relevant stakeholders beyond the project's lifetime.

2. Overall goal and objectives of CircEUlar (*Why*)

From a communication and marketing point of view, goals and objectives identify the reason behind a communication, dissemination and exploitation plan.

A goal is the desirable result that a project wants to achieve, in a broad and long-term period. It is crucial to define the choice of an effective communication strategy, in terms of activities, key messages and tools to use. On the other hand, an objective is something that is more specific, measurable, and set-up on a short-term perspective to drive the communication strategy to reach the overall goal. Deeply, a single goal can have different objectives that help creating awareness, increasing interest and promoting actions or specific behaviours (Coleman, 2022).

2.1 Goal

The overall goal of the project communication, dissemination and exploitation is **to place the knowledge that CircEUlar generates in the hands of researchers, policy makers, business leaders, educators and students, and the public at large**.

According to the guidelines for Communicating EU Research and Innovation (REA, n.d.), the CircEUlar strategic plan needs to inform, promote and communicate the project activities and results to various target groups and stakeholders (*Communication*). By making these results public for others actors that can make good use of them (*Dissemination*), the project will then contribute to the advancement of the state of the art of circular economy measures and strategies in the context of climate change mitigation (*Exploitation*).

2.2 Specific Objectives

Following the main goal of the communication, which aims to reach an audience that not only belongs to the scientific and expert community, but also resides outside of the immediate networks, the strategy attempts to achieve specific objectives, ensuring a broad visibility and raising awareness about the CircEUlar project and its results:

- Objective 1 - Disseminate project results and insights within the research and scientific stakeholder community.
- Objective 2 - Inform and involve policy, industry and civil society stakeholders at local, national and European levels in participatory approaches for project activities, and with this to contribute to the public discourse about the contribution of circularity to addressing climate change.
- Objective 3 - Synthesise the project's main findings and translate them into actionable knowledge for policy makers, non-expert audiences and the general public.
- Objective 4 - Foster the creation of networking opportunities among scientific communities, policy makers and businesses, specifically active in the three focus areas of the projects, i.e. Mobility, Buildings and household services and Digitalisation.
- Objective 5 - Provide full open access to the datasets and tools, with teaching material on the use of these tools and the reuse of datasets to enable exploitation of project results by others.

Update M20: The implementation of the strategy consists of several actions that aim at reaching the overall goal and the objectives defined. So far, various results have been disseminated and the main target audiences have been informed about them. In addition, networking activities and collaboration started to be established.

Update M36: The communication and dissemination activities are ensuring a strong policy and societal impact of CircEUlar's results by engaging relevant private and public sector stakeholders to build consensus-based recommendations that influence current practices and regulations, while also giving high visibility to CircEUlar's modelling frameworks within the EU and global scientific communities.

Update M48: In the final phase of the project, communication and dissemination efforts focused on maximising the legacy of the project and ensuring continued access to its knowledge, models and recommendations beyond the project's lifetime.

3. Key messages of CircEUlar (*What*)

Key messages are the priority ideas and points of information we want the audience to understand and remember. They are brief summaries of what the project is, how it is different, and the value that brings to stakeholders. In order to make easily understandable the concept of the project, key messages try to describe the challenges CircEUlar aims to address, the mission and the results that can be further exploited. These messages can be used and customised within the different communication channels, by all partners that want to communicate the project.

3.1 Challenge

As the state-of-the-art in circular economy modelling is only weakly integrated with global climate change mitigation and policy analysis tools, the CircEUlar project uses three focus areas - Mobility, Buildings and Household Services, and Digitalisation - for gathering data, developing empirical analysis and creating new approaches that are able to maximise relevance for circular economy and climate change mitigation outcomes.

CircEUlar is among the first EU-wide modelling activities based on material flows adjusted for the benefits of digitalisation on buildings, mobility and provision of services. The project aims to find out how circularity contributes to the energy transition, combining renewable energy, circularity and behavioural change.

Avoiding the climate catastrophe requires transformative action across production and consumption. A comprehensive assessment of the behaviour and perspective of all actors - both from the supply and from the demand side - is needed to provide solutions towards a circular economy. This is what CircEUlar will achieve.

3.2 Mission

The CircEUlar interdisciplinary project team, supported by policy, industry partners and broad participation from other stakeholders, develops and applies new empirically-grounded modelling approaches to analysing material stocks and flows, and the interdependencies among energy, materials and greenhouse gas (GHG) emissions.

CircEUlar aims to provide new empirical and modelling insights in three areas of interest to the circular economy: mobility, buildings and household services, and digitalisation. In the mobility focus area, CircEUlar assesses both, the material embedded in vehicles, batteries and transport infrastructure, as well as total vehicle stocks required in novel circular economy paradigms, such as

shared urban mobility. In the buildings and household services focus area, CircEUlar examines circular practices in dwelling construction and renovation, including as a result investment decision, location choices, and supply chain availability. In the digitalisation focus area, the project explores the potential for digital applications to improve the speed, ease, efficiency, coverage, and transparency of provenance systems for tracking material flows through supply chains, and their applicability in the circular economy.

CircEUlar enables exciting interdisciplinary collaborations on decarbonisation and the circular economy, bringing together researchers working on social metabolism, business models, social practices, and climate change mitigation to develop novel analysis and modelling tools for assessing European and global transformation pathways.

3.3 Outcome

CircEUlar develops new insights on circular economy potentials and impacts to be integrated into EU and global modelling frameworks for analysing pathways to net-zero GHG emissions. Specifically, it considers physical, economic, behavioural, and infrastructural drivers and policy levers of the circular economy and GHG emissions to explicitly link material stocks and flows with real-world consumer and market behaviour.

CircEUlar provides insights into effective strategies and pathways to promote the circular economy, implementing an interdisciplinary approach and using a combination of empirical data and comprehensive/cross-cutting models.

Update M20: The key messages have been used in the project communication, by adapting them to the different communication tools and aims. They served as an inspiration for producing content and communicating project information.

Update M36: Key messages for communicating the project are tailored to different tools and objectives, and are an inspiration for producing content to communicate the project.

Update M48: The key messages have evolved shifting from introducing CircEUlar's vision to communicating concrete evidence and results, in terms of scientific and policy outputs. These messages have been adapted to different target audiences and channels to maximise impact.

4. Target groups of CircEUlar (*Who*)

Using different communication and marketing tools, CircEUlar intends to reach a diverse audience composed of organisations from the project consortium that make concrete use of the results, and groups outside the project that have interest in the potential use of the findings, such as the scientific community, industrial partners, policymakers, media and the general public.

4.1 Core target groups - Main beneficiaries of the project

These target groups will mainly derive some benefits from the implementation of CircEUlar, as they can be affected directly or indirectly by the communication, dissemination and exploitation of findings and knowledge related to the project.

- **Researchers involved in scientific assessments to support policy making** - To engage in contributing to the state-of-art for increasing awareness on the challenges and opportunities to achieve the joint goal of a circular, low-carbon economy and circular practices, in the context of mitigation pathways, to identify co-benefits as well as potential barriers and trade-offs.
- **Policy makers at national and European levels** - To engage in improving the integration of the circular economy into climate action, policies and their evidence base, including circular economy

monitoring frameworks and criteria. To inform and increase the practical usability of the knowledge base on climate change impacts.

- **Local and national decision makers** - To involve for support in the elaboration of new policies and incentives to foster circular economic practices, reflecting an increased understanding of implications of a circular economy driven transformation for different social groups. To disseminate insights to regulate and enhance current production cycles towards sustainable practices.
- **Business, Industry, Start-ups and emerging local circularity business** - To share knowledge and experience on new business models to grow circular economic practices, showcasing transparency, robustness, trustworthiness, practical usability of the knowledge base on climate change impacts and circularity and providing ad-hoc knowledge on (un)successful business models.
- **Industrial ecology, social sciences and integrated assessment modelling research communities** – To communicate about the importance of a systems perspective for circular economy strategies. To give a better understanding of the circular provision of goods and services to simultaneously achieve a low-carbon economy, decreasing the demand for material inputs, and promoting economic prosperity and a just distribution of economic benefits. To share new datasets and methods for uptake by researchers in these communities.

4.2 Wider target groups - Multipliers and secondary users

These target groups will be informed about project activities and results to prompt the spreading of knowledge, even if they are not experts in the field. Indeed, they can help to reach a broader impact of the project dissemination to less technical actors.

- **International organisations and local organisations** - To disseminate the understanding of circular economic practices on different social groups, (un)successful business models and the implications for a low-carbon economy. To raise awareness about the knowledge base on climate change impacts.
- **Journalist and Media** - To share information about the project major research outcomes in order to make them covered in the popular press and reach an audience that resides outside of our immediate networks. To increase the understanding of the transparency, robustness, trustworthiness and practical usability of the knowledge base on climate change impacts and the relation to circular economy practices for use by practitioners, other stakeholders and citizens.
- **General Public** - To raise awareness of circular economic practices to reduce material use and greenhouse gas emissions. To inform that the European Commission funds initiatives to implement the European Green Deal and the Climate Pact, pursuing the joint goal of a circular, low-carbon economy.
- **Related projects and initiatives** - In order to achieve the group audiences identified previously, a community interested in CircEUlar activities and results will be created via an open science approach with initiatives and projects that share similar or complementary objectives and commitment to exchange data, modelling methodologies and insights on the effectiveness of different Circular Economy strategies. Indeed, the communication and dissemination actions will address this group to inform about project activities and findings and identify complementary outcomes and synergies for a wide dissemination (e.g., through joint events) to common target users.

Update M20: These target groups have been further investigated in order to successfully reach them using the different communication channels (i.e. researchers by using scientific publications, policy and decision makers with stakeholders workshops, general public through social media). For example, informed by the stakeholder mapping, the core target groups have been refined as follows:

- Research (e.g. other universities, research institutes, research networks, think tanks)
- Policy (National & EU policy makers, Local & national policy makers, policy officers and assistants, city networks)
- Industry (domain experts, innovative start-ups/ best-practice business models & VC firms, established companies, business and service platforms, representative umbrella organizations/ associations, EU-level industry representative bodies, thought leadership networks)
- Civil society (consumer associations, NGOs, CSOs, thought leadership agents, interest groups)

An example of how this was put into practice can be taken from the first stakeholder workshop in Spring 2024. This ensured a broad breadth of participation with greater representation of industry, umbrella organizations for sectors and materials were targeted and attended. All CircEUlar partners are also encouraged in identifying and engaging the most relevant targets.

Update M36: Public entities and private stakeholders have been further investigated to ensure that results produced during the project are properly addressed to them and several activities for reaching them have been implemented. Moreover, the general interested public remains an important audience that will be considered for promotion of climate actions.

Update M48: Engagement activities throughout the project confirmed the relevance of the identified target groups while strengthening collaboration with researchers, policymakers, industry representatives and other Horizon Europe initiatives. In the final phase, particular

5. Communication and dissemination tools of CircEUlar (*Where*)

Visual Identity

For an effective communication strategy of the project, Task 1.5 of WP1 “Stakeholder Engagement and Outreach”, includes designing the CircEUlar’s visual identity, and producing promotion materials such as the project logo, presentation templates, and document templates, social media templates for communicating objectives, activities and results of CircEUlar. A Communication Kit is available in the shared working space of the consortium, containing all these materials.

Further information regarding the project brand identity is available in the Annex 3.

5.1 Scientific publications

The primary channel for disseminating project results and insights within the research community will be through scientific publications in peer-reviewed journals. Scientific publications in peer-reviewed journals are planned to complement work package deliverables of the CircEUlar project and will contribute to the visibility of the project within the scientific community. All project publications will be available Open Access for download and linked on the CircEUlar website.

In line with the Grant Agreement, all publications will explicitly acknowledge Horizon Europe funding. Publications will be made gold open-access where possible, and whenever open-access is not available as a choice, post-print versions of publications will be made available via established repositories, either subject-based, universal (e.g., Zenodo), or institutional repositories of the project partners (e.g., IIASA[1]).

CircEUlar will also work with popular scientific press, e.g., via developing press releases, to provide input to articles aimed at the scientifically oriented general audience (For more information about outreach activities, see chapter 5.4).

To complement journal articles and make their content more accessible, a set of Policy Briefs will also be published, including selected topics as well as a Summary for Policy Makers that synthesizes the project's main findings. (For more information about policy briefs, see chapter 5.6).

Update M36: The project has already surpassed its target of 20 scientific publications, with 38 peer-reviewed journal articles by the end of RP2. In addition, 8 datasets have been deposited on Zenodo, along with 4 software tools.

Update M48: By the end of the final reporting period, the project had further advanced its scientific output. In total, 63 peer-reviewed journal articles had been published, including 20 during RP3. In addition, 1 preprint had been made available, 3 manuscripts had been accepted for publication, and 3 were under review. The project's scientific publications substantially exceeded the initial target of 20. Furthermore, 9 datasets, including 1 added during RP3, and 6 scientific software tools, including 2 added during RP3, had been made available on Zenodo.

5.2 Scientific conferences

CircEUlar partners will disseminate detailed project results by presenting at international scientific conferences. In the first 18 month period, CircEUlar partners plan to disseminate project results by participating in the following events: EAERE (28th Annual Conference of the European Association of Environmental and Resource Economists, June 2023, Limassol, Cyprus), ICEP (International Conference on Environmental Psychology, Aarhus, Denmark, June 2023), ISIE 2023 (11th International Conference on Industrial Ecology, Leiden, Netherlands, July 2023), SCP23: SCORAI-ERSCP-WUR Conference (Wageningen, Netherlands, July 2023), and IAMC Sixteenth Annual Meeting 2023 (Venice, Italy, November 2023). At the 15th IAMC Annual Meeting (College Park, MD, November 2022), CircEUlar was represented and, together with researchers from the CIRCOMOD consortia have, for the first time, co-organized a parallel session on circular economy at the meeting.

Throughout the duration of the project, presentations of project results by consortium members at scientific conferences is highly encouraged.

Update M36: CircEUlar partners have consistently presented research outputs and engaged in scientific dialogue with the broader research community. By M36, the project achieved 68 presentations at scientific conferences and other related events, including strong representation at the Industrial Ecology (ISIE 2022, 2023, and 2025) and Integrated Assessment Modelling (IAMC Annual Meeting 2022, 2023, and 2024) conferences.

Update M48: CircEUlar partners continued to disseminate the project's research findings and contribute to scientific exchange and policy dialogue throughout the final reporting period. By the end of the project, partners had delivered a total of 107 presentations at scientific conferences and related events. This included a sustained presence at major international conferences, such as the Integrated Assessment Modelling Consortium (IAMC) Annual Meetings in 2022, 2023, 2024 and 2025, providing recurring opportunities to disseminate project findings and exchange knowledge.

[1] https://pure.iiasa.ac.at/

5.3 Open Access to data and tools

CircEUlar will promote and adopt a rigorous open access/open-source approach to data, modelling code, documentation, and deliverables/scientific reports. The consortium will ensure that all datasets, analysis and modelling tools developed through the project and associated codes are made available for reuse and exploitation by others through collaborative development frameworks such as GitHub. A first publication (Wagner et al. 2022) led by CircEUlar partners MCC and TUB illustrates this approach by utilizing publicly available datasets and making code available in a GitHub repository2.

Several of the tools employed by the consortium are already managed as open-source software (e.g., MESSAGEix[3], pyMRIO[4], EXIOfutures[5]). Repositories will cover model code, specific documentation and all relevant input-data, with API-based usage of input data prioritised, and sufficient documentation for handling proprietary data. Many of the datasets generated will be relevant for and hosted on the industrial ecology6 or IAMC7 Zenodo open data repositories and as a general rule, data will be made available via a CC-BY licence.

New empirical datasets from the online surveys of nationally representative household samples across countries (WP4 & WP5) will also be archived in public data repositories such as ReShare.

For some of the open datasets developed in CircEUlar, web-based tools for easier, user-friendly access will be provided. A database of available circular approaches in the provision of goods and services will be built using systematic literature review and WP1 stakeholder engagement by CMCC. The database will identify synergies with climate change mitigation and policies promoting circularity and will be openly access as an online tool. IIASA will host a central portal, the so-called Scenario Explorer infrastructure8, for all pathway related data products in CircEUlar. The Scenario Explorer infrastructure is currently the most widely used data hub for global integrated assessment modelling comparisons and the IPCC WG3 scenario assessment. It is also being applied in several projects with a global (e.g., Horizon2020 projects CD-LINKS, ENGAGE, NAVIGATE) and European focus (e.g., SET-Nav, ECEMF, ARIADNE and openENTRANCE). Thus, CircEUlar will develop tailor-made, open-access data and visualisation tools targeted at different user groups to respond to diverse user needs. Further details on the management, storage and availability of data are further described in the “Data Management Plan” (D7.3).

5.4 Outreach events for stakeholders and the general public

CircEUlar will be present at events to raise its profile with various target audiences throughout the whole project duration, and to contribute to the public discourse on circularity addressing climate change. Indeed, partners of the CircEUlar consortium are regularly invited to give talks and keynotes in different events and conferences, and this will create new opportunities to showcase the activities and disseminate the outputs and the knowledge generated by the project. First identified events are the annual European Green Week or the European Week of Regions and Cities, if topics of the event are in line with the project.

A final conference is planned in Brussels at the end of the project to inform and stimulate an exchange between researchers, European-level decision makers, business/industry stakeholders, and representatives of civil society.

[2] https://github.com/wagnerfe/xml4urbanformanalysis
[3] https://github.com/iiasa/message_ix
[4] https://github.com/konstantinstadler/pymrio
[5] https://github.com/kswiebe/FEMRIOv1_EXIOfuturesIEAETP
[6] https://zenodo.org/communities/indecol/
[7] https://zenodo.org/communities/iamconsortium/

An event database collecting a list of relevant conferences and events where partners may present projects results or organise dialogue sessions or workshops has been created and shared among the consortium, in order to plan strategic communication actions and support all the organisation in the participation to these events (e.g. realisation of social media posts, preparation of news for website, creation of leaflets, etc.). The database is shared with the two sister projects CIRCOMOD and CO2NSTRUCT in order to identify joint possibilities of presenting projects activities and results.

Update M20: Collaboration with the Vienna Climate Biennale for Art&Science has started, with several CircEUlar partners contributing to specific activities. The Biennale itself is scheduled to take place in Vienna from April-July 2024, with the Vienna Climate Summit set for 24-25 June 2024 at Kunsthaus Wien, being the event at which the results of the collaboration between CircEUlar and the Biennale will be shared. In preparation of the opening, on 25 January 2024, CircEUlar also held a joint networking event with the Vienna Climate Biennale, bringing together artists, policy makers, representatives of businesses and civil society and researchers from different disciplines tackling the climate crisis.

Update M36: A partner event as part of EU Green Week in collaboration with sister projects CIRCOMOD and CO2NSTRUCT titled “Building a Greener Future: Circular Economy Strategies for Climate Change Mitigation in the Built Environment”. 64 participants tuned in to the webinar which was a great opportunity to share preliminary findings. The online learning journey tool Circular ReBoundary planned to launch in autumn 2025 will also further extend the reach of CircEUlar. Together again with CIRCOMOD and CO2NSTRUCT, the organisation of the Final Conference in May 2026 in Brussels is planned.

Update M48: CircEUlar partners continued to raise awareness of the project’s objectives, findings and policy implications through outreach activities and events targeting policymakers, industry representatives, civil society and other relevant stakeholders. Notable activities included participation in the 2026 International Vienna Energy and Climate Forum (IVECF) and the side event held in conjunction with the 35th Meeting of the International Resource Panel (IRP). A key highlight was the project’s joint final event, *Modelling to Policy: Circular Economy Pathways Towards Net-Zero*, organised in Brussels on 28 May 2026 by CircEUlar, CIRCOMOD and CO2NSTRUCT. T6 Ecosystems co-organised, with Bruegel, a high-level closed-door workshop on the long-term implications of AI-driven data centre growth for climate action. The University of Oxford presented CircEUlar findings on long-term global and EU data centre energy demand projections, while IIASA presented PRISMA research on the implications for the low-carbon transition. The presentations informed a high-level discussion with representatives from DG CLIMA, DG CNECT and the European Data Centre Association (EUDCA), alongside experts from academia, industry and civil society, on policy and industry responses to rapidly growing data centre energy demand.

5.5 Stakeholder engagement and workshops

CircEUlar research work will benefit from the interaction with projects stakeholders (main groups are identified above in chapter 4.1 "Core target groups - Main beneficiaries of the project”) that will be engaged in different phases of the project and through dedicated activities. Indeed, stakeholders will inform project research, support its development by providing inputs, and validate project results. Stakeholders' engagement - from the public and the private sectors - will help build consensus recommendations to influence current practices and regulation, but also to contribute to policies on circular economy and GHG mitigation in governments, business and NGOs at both the local, national and European levels.

In order to start the engagement, a co-design team consisting of a network of stakeholders (policy, industry and civil society actors at local, national and European levels) will be set up and involved in participatory approaches such as backcasting (Task 1.2 “Policy dialogue events and community building”) and “Story and Simulation” (Task 1.3 “Co-production of circular economy driven net-zero

pathways"; "Report on pathway narratives and documentation of model parameterizations" (D6.1)) to inform the project about desirable outcomes for the circular economy. This engagement process will be aligned with RRI principles and will follow a non-extractive approach. Activities will be carefully planned to reduce stakeholder effort and fatigue (e.g., avoiding duplication of activities), assure smooth communication, and keep their motivation high in order to create a mutual benefit for the project results.

The stakeholder mapping activity - preliminary to the organisation of the stakeholder workshops - started during the kick-off meeting and, moving from the initial mapping of stakeholders provided in the DoA, will proceed to further refine the list of stakeholder typologies, the aim of their engagement with the project and the related timing. The mapping will be complemented with desk research and will be followed by a set of bilateral meetings with WP2-WP5 leaders for its finalisation (planned for M15).

Update M20: The stakeholder engagement methodology has been further developed and it can be accessed in D1.1. In terms of carried out activities, they can be summarised as follows. As part of the research involved in stakeholder mapping, 15 expert interviews were carried out. In addition to exploring key barriers, enablers and visions for circular business models, interviewees were invited to the workshop and were asked to suggest names of other organisations or contacts that they would recommend reaching out too. This snowballing technique proved very effective. The first stakeholder workshop took place in Brussels on March 14th 2024. It was deemed a success with 29 attendees -7 with interest in mobility, 13 in buildings and 9 in digitalisation. Out of the 29 attendees, 12 were male and 17 were female and 10 from policy/ research, 6 from civil society and 13 from industry either companies or umbrella organisations. The diverse range of interested stakeholders and the desire to remain involved was commented on by both participants and research partners. Building on the back of this workshop we are developing and have opened up a channel for a community of interest around the project, we are currently exploring different ways of keeping the momentum high (e.g. bilateral meeting/exchanges, extending the contact database, open webinars, validation of outputs). In order to ensure that stakeholder input into the narratives and the broader project parameters is widely accessible a briefing note was produced and shared with all research partners and attendees.

Update M36: The stakeholder methodology has continued to be successfully implemented, it carries on following the two-track approach. On the one hand, expanding the stakeholder contact database with over 830 entries and further extending a community of practice of approximately 180 interested quadruple helix stakeholders from across policy, industry, research and civil society spanning the three focus areas. The stakeholder engagement activities have continued to expand in collaboration with research partners. This has included:

- a workshop exploring circular practices for businesses and consumers in Groningen where 24 local actors attended,
- a series of online preliminary pathways sessions primarily with policy and research stakeholders to validate and check the assumptions, parameters and feasibility of the narrow-slowclose scenarios, attended by 42 stakeholders across four sessions (household appliances, buildings, mobility and digitalisation),
- two additional sessions on Extended Producer Responsibility attended by 11 participants,
- two parallel stakeholder events one on participatory backcasting for the built environment (housing and mobility) and one on the role of data and AI in low-carbon urban planning attended by 25 external stakeholders.

These larger engagement activities have been coupled with bilateral exchanges between researchers and external experts in research, policy and industry.

Update M48: On 28 May 2026, CircEUlar with sister projects CIRCOMOD and CO2NSTRUCT brought together more than 160 participants (90 online, 72 in person) from policymakers, researchers, industry representatives and civil society in Brussels for their final event: Modelling to Policy: Circular Economy Pathways Towards Net-Zero. Building on the event's original aim of connecting evidence-driven circular economy insights with policy priorities, the event created space for exchange across construction, mobility, housing, digitalisation, behaviour and rebound effects. Rather than simply presenting project results, the event invited participants to explore assumptions, question modelling choices and reflect on what circular economy pathways mean for real-world policy implementation. Three breakout discussion dedicated respectively to construction ecosystem looking at material value chains, built assets and infrastructure; service-focused measures linked to mobility and housing; and system-wide enablers exploring digitalisation, behaviour, economic impacts and rebound effects were organise. Each breakout focused on the main key insights and policy recommendations linked to those topics. Discussions highlighted the importance of data availability, policy sequencing, governance arrangements, skills development for professionals working in a more circular society and the interaction between circular economy and climate policies. The sessions also highlighted the complementary insights generated by different modelling approaches and the value of bringing together multiple analytical perspectives when assessing circular economy transitions.

5.6 Policy briefs

Major outlets of CircEUlar research aimed at the non-scientific audience will include Policy Briefs on selected topics at the local, national and European level and a Summary for Policy Makers that synthesizes the project's main findings and translates them into actionable knowledge for policy formation. These documents will be widely distributed to policy makers, the business community, NGOs and think-tanks, and implementation agencies through the extensive and far-reaching networks of the CircEUlar partners in Europe and beyond (see also chapter 5.7).

The dissemination will be based, not only on dedicated online and face-to-face activities but will also rely on a network of policy makers that will be engaged in the co-design of the policy. We call this process policy dialogue, and it assures that project recommendations are not only based on scientific results but also aligned with current policies and trends as they are envisioned by policy officers and experts. This network of people will be an important channel for the dissemination of policy briefs among their peers.

Update M20: Concrete steps have yet to be taken on the delivery of policy briefs, the stakeholder mapping has taken into account the need to further build up the policy makers' stakeholder cohort. This has started by the invitation and attendance of some key policy contacts at the first stakeholder workshop. Furthermore, participants stressed the importance of ensuring that scientific evidence and policy demands are aligned, this will be factored in when beginning to plan for and further develop the policy dialogues and the policy briefs.

Update M36: An internal policy group was set up in September 2024. This has since been extended, the main partners involved are CMCC, IIASA, LMU, PIK, UOXF, INEGI and T6. A policy dialogue approach has been developed and agreed. This includes consultation with policy stakeholders to sensecheck, improve and validate results - not just at the end but throughout the research process. For this reason, policy stakeholders attended the first stakeholder meeting in March 2024, the joint-event with EEA and CIRCOMOD in September 2024 and a series of online workshops to test the preliminary pathways in Spring 2025. The types of policy stakeholders involved are EEA, DG ENV, DG CLIMA, DG AGRI, ITF, JRC, DG EMPL, ICLEI, ITU, WRAP, etc. The policy dialogue also involved local policy actors in the stakeholder event held in Groningen in September 2024 and Berlin in September 2025.

These included representatives from national ministries (Economic Affairs, Infrastructure and Water Management, Spatial Development), national environment agencies, and housing, waste and urban/spatial planning departments of municipalities. At the most recent Consortium (September 2025) we brainstormed content for the policy briefs. We agreed that we would collaborate and issue at least one joint policy brief on pathway frameworks (narrow-slow-close) with our sister projects CO2NSTRUCT and CIRCOMOD. In the upcoming months we will be agreeing and refining both the content and structure of the other policy briefs. It is likely that we will deliver more than the three stated in the GA. We will ensure that both the development and finalisation of these policy briefs are a collective effort. They will be presented and discussed at our final event in May 2026 in Brussels. We plan to ensure that the policy briefs are contextualised in the current policy backdrop to ensure relevance and impact.

Update M48: The policy dialogue strand consisted of three interconnected components: ongoing policy exchanges with stakeholders through the Community of Interest, workshops, webinars, bilateral discussions and partnership activities; dedicated policy-focused events, including the final conference and breakout discussions; and the development of policy briefs and recommendations designed to translate research findings into policy-relevant outputs. Following the September 2025 Consortium meeting, the policy group's progress became a regular agenda item at the general assembly meetings which occurred at least every two months, individual policy brief working groups were established and they met more regularly to co-develop the content and text of the brief. T6 provided the groups with a mapping of the relevant, current policy landscape in a MIRO board to ensure that the topics of each brief were framed in the most appropriate EU policies.

The collaboratively agreed, co-designed and co-developed policy briefs and their topics were:

1. **Circular economy modelling for EU decision-making** - examining how CircEUlar's modelling framework can connect with existing EU modelling tools and identifying critical data gaps that influence circular economy policymaking.
2. **Pathways to climate neutrality:** Prioritising circular economy strategies for net-zero greenhouse gas emissions - exploring how circular economy strategies can support net-zero transitions through resource efficiency, lifetime extension, reuse and recycling measures.
3. **Circular consumption: Enablers and barriers to demand-side circularity** - identifying the policy, business and behavioural factors that support or constrain the uptake of circular economy practices across supply and demand.
4. **Circular Without Rebounds:** Mitigating rebound effects in corporate circular practices through EU policy - examining how the EU can help mitigate rebound effects arising from companies' circular practices
5. **Urban planning and data-driven approaches enable low-carbon cities -** Evidence from Berlin and Porto integrated spatial studies highlighting how urban form, buildings, mobility systems and digital infrastructure can support circular and low-carbon transitions at the city scale through the case study of Berlin and Porto.

Though a brief was not done jointly with the sister projects due to different reporting timelines, a joint final conference with a policy event was co-designed, co-planned and co-delivered. The policy briefs all take into account the discussions and exchanges at the policy event both in terms of content, framing and narrative.

5.7 Networking and collaboration with the wider research community and the two "sister" projects

The CircEUlar consortium has a far-reaching network within the scientific community, but also it is connected to policy makers at different levels as well as smaller and large companies that are particularly active in the three Focus Areas. Indeed, via a rigorous open science, CircEUlar will make

its own research results and policy-relevant insights available to follow-up activities and the wider international community.

Specifically, joint activities will be conducted with projects on complementary topics, including potential sister projects funded under the same call, and partner institutions outside of Europe to link to the highly relevant international dimension of climate change mitigation and circular economy themes. The description of the plans for coordination with the broader research community and projects funded under the same call HORIZON-CL5-2021-D1-01-02 – CIRCOMOD and CO2NSTRUCT – are available in the "Report describing the plans for coordination with the broader research community and projects working on related research questions"(D7.2).

As for further research collaboration, cooperation is envisioned with the Energy Demand changes Induced by Technological and Social innovations (EDITS) initiative. EDITS is a global knowledge exchange and networking activity on low energy demand futures supported by the Japanese Ministry for Trade and Industry (METI), coordinated by the Japanese Research Institute of Innovative Technology for the Earth (RITE) and IIASA. The EDITS network offers the opportunity to coordinate with the wider research community, including non-EU institutions, on the research agenda relevant for CircEUlar.

Additionally, activities with the Integrated Assessment Modelling Consortium (IAMC), a relevant research community focused on integrated assessment modelling, is also envisioned and will be an important venue for presenting results of CircEUlar, in particular those related to developing climate change mitigation pathways with a circular economy focus.

CircEUlar looks also for collaborations with research groups in non-EU countries. In China there is mutual interest in collaboration with Tsinghua University's Institute for Circular Economy to exchange data, modelling methodologies and insights on the effectiveness of different Circular Economy strategies beyond Europe. In the US, the Mobility and Energy Transitions Analysis (META) Group at Oak Ridge National Laboratories, USA, indicated interest in collaborating with the CircEUlar consortium.

Finally, CircEUlar will be well represented in the International Society for Industrial Ecology (ISIE), which constitutes a crucial intellectual origin of and resource for circular economy research. This happens especially via WP2 "Stocks and Flows of Materials, Energy and Emissions in a European Circular Economy" lead by BOKU, whose representative is a highly active member of the Industrial Ecology Society who together with international colleagues recently (12/2022) founded a new section on a "Sustainable Circular Economy" in that society. Some activities – such as the organization of numerous special session proposals for the ISIE conference in Leiden in July 2023 have already been set in motion. Further opportunities via this scientific society will be utilized to promote CircEUlar and create synergies with other initiatives and projects (e.g., networking, outreach, special issues in the society's journal, etc.)

Update M20: Besides the ongoing exchanges with the sister projects mentioned in the DoA, the collaboration with the PRISMA project has been established. In particular, to support the organisation of the fist stakeholder workshop: indeed, joining forces helped in reaching a wider audience, reduce the event-related costs and exchanging ideas and know-how.

Update M36: CircEUlar is cooperating with the EDITS initiative, with concrete outputs including two review papers (Mastrucci et al., 2023; Wiedenhofer et al., 2024) that assess model scopes and scenarios regarding buildings and industry futures. A number of activities were jointly conducted with the sister projects CircoMod and CO2NSTRUCT. CircoMod and CircEUlar held their respective second project meetings back-to-back in Venice in April 2023. Representatives from the CircoMod project participated in CircEUlar's stakeholder workshop in Groningen in September 2024, which focused on business and consumer perspectives on the role of circularity to achieve a net-zero emission Europe. In the same month, during CircoMod's midterm event in Brussels, CircEUlar, CircoMod, and EEA organised a joint Event on Circular Economy Strategies to Support Carbon Neutrality. Furthermore, the three sister projects CircEUlar, CircoMod, and CO2NSTRUCT jointly organised a partner event in the form of a webinar entitled Building a Greener Future: Circular Economy Strategies for Climate Change Mitigation in the Built Environment during EU Green Week in June 2025. An extended research visit of the PI to Kyoto University in June/July 2025 offered the opportunity for more concerted outreach and collaboration with research organizations, industry and policy stakeholders in Japan. This included a presentation at the International Energy Workshop 2025 in Nara, the AIM International Workshop 2025 at the National Institute for Environmental Studies (NIES) in Tsukuba and seminars at Kyoto University and Osaka University on the potential of circular economy strategies in the built environment to reduce GHG emissions. Moreover, a seminar at Toyota Research & Development Labs in Nagoya allowed for an exchange with industry stakeholders, gathering feedback on CircEUlar pathway analysis. In addition, CircEUlar is collaboration with the emerging fields project REMASS, led by BOKU.

Update M48: During the third reporting period, the CircEUlar consortium has further expanded collaboration and joint stakeholder and outreach activities with the sister projects CIRCOMOD and CO2NSTRUCT. The three projects jointly organized the final conference in Brussels on 29 May 2026, contributed to a side event of UNEP's International Resource Panel workshop on 8 June 2026**.** Furthermore, a joint online session "Circular economy potentials for GHG mitigation at national to global scales" at the International Industrial Ecology Day 2026 on 30 November is planned. CircEUlar also collaborated with the PRISMA project to conduct a multi-model study on the energy demand and emissions of data centres and data network infrastructures which led to organizing a joint webinar with industry representatives and policy makers on 23 April 2026. Finally, in total more than 25 presentations at scientific conferences and workshops were delivered during the third reporting period and beyond, including at the 11th International Conference on Low Carbon Asia (ICLCA) in Kuching, Malaysia in October 2025**,** the 18th IAMC Annual Meeting near Rio de Janeiro in Brazil in November 2025**,** the Circular Economy Modelling Workshop in In Lisbon, Portugal in June 2026 to just name a few. Further presentations at conferences are planned after the end of the project, including at the European Climate and Energy Modelling Platform 2026 conference on October 2026 and the EDITS Annual Meeting in December 2026. An internal C6 Lunch Seminar on "Circular economy modelling for EU decision-making: Linking models and data to support evidence-based circular economy and climate policy" at the Joint Research Centre (JRC) in Seville is planned for 12 November which draws on one of CircEUlar's Policy Briefs and investigates where the CircEUlar models can complement or even connect to the EU's modelling toolbox. In addition to the sister projects, CircEUlar was also in contact with other Horizon Europe-funded projects: e.g. the CASRI project invited CircEUlar to present findings in an upcoming webinar "CASRI – Shaping together the collaborative action for resilient circular production systems**",** taking place on 30 October 2026 as part of the Circular Week 2026.

Storytelling in motion

The basic idea behind the online communication and dissemination activities of the project is to implement a “storytelling in motion” strategy, using activities and narrations aimed at city, regional and business stakeholders across Europe. The aim is not to wait for the first exploitable results of the project to be available, but to spread important messages from the start of the project. Much valuable content will be already existing since the beginning of the project and can be shared.

For example, a project video for dissemination of project activities with engagement purpose will be realised and also quick fire-interviews with project partners focusing on CircEUlar tools and methods, or with stakeholder partners talking about their experiences and motivations. Then, these videos will be published on the website and on social media. Indeed, consistency and synergy are two important principles to consider when implementing a strategy, as the power of integration among communication channels reinforces the effects of each tool, and allows effectively achieving the goal and addressing the audiences.

5.8 Website www.circeular.org

A CircEUlar project website was released at the project’s start in September 2022. The website facilitates dissemination of information about the project to numerous audiences, including policy makers, members of the media and general public, and members of the external and internal research communities and the private sector.

The website contains information about the project’s objectives and planned activities, as well as a list of partner institutions (with links to partner institutional websites), news and events, and project contact information. Planned additions to the website include information on project results and products, a media webpage with related press-releases, news coverage, and dissemination material. All public results produced by CircEUlar will be posted on the project website. A further description of the website is found in the ”Launch of CircEUlar project website” (D1.4).

Update M20: The website was launched in M1 of the project, and it has been improved to include expanded content and additional information about CircEUlar's exploitable results, news, and events. In particular, there are two dynamic sections, which are regularly updated: the “Tools and Resources” section, which collects project reports and publications, and the “News and Events” sections designed to provide updates on ongoing project activities, partner actions and initiatives, as well as upcoming events where CircEUlar will be involved.

Update M36: A new section on the website “Science & Art” dedicate to collect materials to display the linkage between Science and Art created within the framework of the Klima Biennale Wien, where CircEUlar’s research findings have been highlighted through the lens of artists. Moreover, updates are still posted on the “News and Events”, as well as the deliverable and publication are published. A legacy version of the website will be evaluated to prominently display all the main findings of the project in the last months of the project.

Update M48: The project website became the central repository for CircEUlar outputs, providing long-term accessibility to the main results, e.g. publications, deliverables, tools, etc. and supporting their continued dissemination. By the end of the project, the website had been updated to create a legacy version containing all the main CircEUlar outputs in an easily visible and accessible way.

5.9 Social Media

In order to give to CircEUlar the visibility needed to reach an extremely wide and targeted audience, inform about the project findings and promote the engagement of stakeholders, a social media strategy was setup, both for communication and dissemination. Indeed, the CircEUlar social media strategy aims at disseminating project news, results and events, and increasing the general awareness of the project. Additionally, social media allow to build an active and interested community, involving people to share contents and create conversations.

CircEUlar actively maintains its online presence using LinkedIn (LI), Twitter (TW) and OpenAIRE. The first one consists of a networking platform for professionals, useful to engage the scientific and policy making communities, other projects as well as international organisations and local organisations. Twitter is the most effective tool to share short and relevant content, engaging researchers, decision and policy makers, journalists and the general public. Instead, OpenAIRE is a comprehensive aggregation platform consisting of an open dataset of research information dedicated to scientific knowledge that can easily be shared and downloaded by different organizations and communities.

5.9.1 X - https://twitter.com/circEUlar_model

Twitter is the main channel to interact with researchers, policy and decision makers, journalists and the general public. It will be used to disseminate project news, results and content related to events. The CircEUlar TW account will also try to generate conversation and interaction among stakeholders, around the topic of circular economy.

As TW allows to write messages of maximum 280 characters, including links, (a URL is always altered to 23 characters), the post should be short, clear and catchy, and always accompanied by a visual image, hashtag and tagging relevant handles. Emojis can also be used to make reading easier.

Project handle: @circEUlar_model

Project hashtag: *#CircularEconomy #NetZero #NetZeroEmission #ClimateChange #Circularity #Transition #Defossilisation #CircularProduction #CircularConsumption #CircularTransformation #Digitalisation #Mobility #Climate #Energy #Mitigation #EnergyTransition #Decarbonisation #SustainableEconomy #Sustainability #Recycle #Recycling #OpenScience #HorizonProject #HorizonEU*

5.9.2 LinkedIn (LI) - https://www.linkedin.com/company/circeular/

LinkedIn is a more networking and business-oriented channel, which can help to increase the project visibility among policy and decision-makers, other European projects, as well as international and local organisations. This channel will be used to share news, project findings, reports and interesting information related to circular economy and global climate change mitigation practices.

The LinkedIn post character limit is 3k, and the ideal length is between 1900 and 2000 words with consistent and reliable content. It is always suggested to accompany the posts with visual aids, such as photo, video, or document and a link to the main source of the news. In the text box, emojis can also be used. To increase outreach, it is important to use a hashtag to make the keyword or phrase in the post searchable, as well as to tag other accounts with the aim of encouraging interaction.

Project handle: @circeular

Project hashtag: *#CircularEconomy #NetZero #NetZeroEmission #ClimateChange #Circularity #Transition #Defossilisation #CircularProduction #CircularConsumption #CircularTransformation #Digitalisation #Mobility #CLimate #Energy #Mitigation #EnergyTransition #Decarbonisation #SustainableEconomy #Sustainability #Recycle #Recycling #OpenScience #HorizonProject #HorizonEU*

Update M20: Social media channels primarily serve to disseminate project-related content, including partner written news on a rotational basis. Additionally, these channels serve as platforms for sharing content from other projects or interesting resources, as well as for documenting participation in events. A specific template, aligned with the project's visual guidelines, has been developed to strength the CircEUlar identity. The KPI target of reaching 1,000 followers on platform X may seem ambitious, but the utilization of LinkedIn is also proving instrumental in fostering the collection of new followers and disseminating project outputs. In addition, post engagement metrics will be considered as an indicator to evaluate the effectiveness of social media activity, ensuring a comprehensive assessment of CircEUlar's online presence. However, partners will be further encouraged to share posts through their personal or institutional profiles, as well as to be more proactive in inviting their networks to follow CircEUlar channels.

Update M36: At the beginning of 2025, the consortium decided to leave X and open a BlueSky account to continue sharing project outcomes. However, this resulted in the loss of the existing community, and the original target of 1,000 followers (set specifically for X at the project launch) now seems unfeasible. Nevertheless, the use of LinkedIn and BlueSky, both showing a good level of engagement (15%), ensures a solid assessment of CircEUlar's online presence.

Update M48: Social media channels were regularly used to disseminate project news, publications, events and results. They contributed to increasing the visibility of CircEUlar and directing audiences towards the project's key outputs. At the project conclusion the channels will remain as a repository of content published so fare, with a message addressing users to visit the website for further information.

5.9.3 OpenAIRE

OpenAIRE works by aggregating, indexing, and providing access to a large repository of research articles, data, and other scientific outputs from European projects. It does this by working with research institutions, repositories, and publishers to gather information about research outputs and make it available through a centralized portal.

The portal provides an interface for discovering and accessing research outputs, and offers various features such as search, browse, and filter options. OpenAIRE also provides various APIs and services for integrating its repository with other systems, such as research information management systems, bibliographic databases, and institutional repositories.

By collecting and providing access to research outputs, OpenAIRE supports the open access movement, promotes the sharing and reuse of research outputs, and complements the reporting features of CORDIS.

Benefits include:

- increased visibility and impact of research by providing access to a large number of European research articles and data,
- improved discovery and access relevant research articles and data, improving their research productivity,
- compliance with open access policies

- interoperability: uses common standards and protocols to ensure interoperability between different systems and services, making it easier to access and reuse research data.

Relevant entries in IIASA's institutional repository, PURE, that have received funding from the EC are being entered and tagged accordingly so that the interoperable format is used by aggregation services like OpenAIRE to harvest and include all relevant publications and link them to specific EC funded projects. While PURE does this at an institutional level, the information is then used by these services to collect research outputs by all partner organizations participating in a specific project.

5.10 Media outreach and press work

Via a balanced suite of different communication and marketing actions and activities, CircEUlar intends to reach an audience that resides outside the immediate networks (e.g., beyond our stakeholders and those they regularly interact with) and to transfer the knowledge the project generates.

Drawing upon the expertise of the press offices of the partner institutions, some press releases will be realised at key moments in the project to attract the attention of journalists so that major research outcomes are covered in the popular press. The press release, that will be shared with all the partners, asking for publishing it or distributing it to their press contacts, will be written in a way that they can be easily personalised in regard to single needs, e.g., by adding a quote from the representative of the partner, the possibility to add the institution's logo, translating it, etc. in order to increase their impact.

The project will also try to use tools that the European Commission offers, e.g., to disseminate information about a public event or an important result. First of all, the Project Officer will be informed and some tools might be available through his intervention, and then several freely accessible tools are at disposal and will be chosen for sharing content (See Annex 2).

Update M36: Online press releases were written and shared at a project milestones. Additional releases will be prepared in the coming months to reach a wider audience, announcing the main project outcomes and findings, as well as major events. These press releases are distributed not only to project partners, with a request to share them through their own contacts and networks, but also among sister projects, relevant stakeholders, platforms and networks) as indicated in the Annex 2) that can be leveraged to increase visibility. They are also featured in the CircEUlar Digest News.

Update M48: Online news focused on communicating major project achievements and activities contributing to the visibility of CircEUlar. Some of them have been shared within different platform e.g. CircEUlar Stakeholder Platform.

5.11 Additional communication materials

Promotional material - printed or digital - will be the main instrument when participating in events or spreading important news with the aim of widening the audience. Upon a common decision among partners, CircEUlar will therefore have a leaflet or a roll-up aimed at providing general information on the project, its approach and expected impacts, and a slide deck to support the consortium when presenting the project during important meetings and occasions.

Update M20: For the project promotion, in particular during specific events or conferences, some communication and supportive materials has been prepared and shared with all the project partners: Slidedeck, PowerPoint, PowerPoint template, Roll-up.

Update M48: Specific communication materials were prepared throughout the project to support dissemination activities at conferences, stakeholder workshops and for the final event. A project video was also realised to support the policy briefs dissemination.

6. Exploitation and Sustainability plan

This chapter describes the exploitation and sustainability plan of CircEUlar's Key Exploitable Outputs (KEOs). It is the result of the consortium's effort in determining the most suitable actions to be undertaken to ensure their exploitation and sustainability, during and after the end of the project. The identification of Key Exploitable Outputs started on the basis of the CircEUlar's outcomes and impact pathways identified in the DoA and were integrated with additional ones in the first version of D1.5 in M6 and further verified and completed in the updates of D1.5 in M20 and in M36. For this final version of the plan, the exploitation and sustainability plan was consolidated on the basis of a dedicated round of bilateral interviews carried out by T6 with the consortium partners between June and July 2026. Each interview reviewed the status of the KEOs relevant to the partner, the concrete sustainability measures foreseen, the exploitation routes being pursued, the main obstacles encountered and the collaborations activated during the project. On this basis, some new KEOs were included and respective information added. All exploitation and sustainability plans were discussed and agreed among the respectively involved partners.

The following sections summarise the results of this analysis, organised by output and, in the final subsections, by cross-cutting themes.

In this context, ***sustainability*** refers to the measures and mechanisms that consortium partners have put in place, at the time of writing, to ensure that the outputs continue to deliver scientific, societal and economic impact beyond the project's lifetime by remaining accessible, functional and relevant. Concretely, sustainability means that a KEO remains available through stable channels, preserves its technical quality and interoperability and, where partners have this interest, benefits from the resources and partnerships required for its long-term maintenance and further development.

Exploitation concerns the use of project results for scientific, social, political or economic purposes during and after the project. The exploitation routes discussed in CircEUlar were: (i) follow-up research; (ii) consultancy and services to public authorities and businesses; (iii) influencing policy; (iv) uptake within professional or community networks; and (v) capacity building and higher education. As a general rule, all tools and results are being uploaded to the EU Innovation Platform, public deliverables are published on the CircEUlar CORDIS page, and data is findable through the Zenodo CircEUlar community.

6.1 CircEUlar Key Exploitable Outputs

In this chapter, the Key Exploitable Outputs (KEOs) and their related plans for sustainability and exploitation are described. Each KEO is a concrete result of CircEUlar's research - a model, dataset, tool, methodology or set of recommendations - with a clear potential for use beyond the project itself, by the consortium or by third parties. While the main exploitable outputs are presented with a dedicated sustainability and exploitation strategy, given their scale and their relevance for use and reuse beyond the project's lifetime, there are some outputs described who have a smaller scope, generally resulting from specific research activities or individual partner contributions. Given their more limited scale, sustainability and exploitation are presented together in a single paragraph rather than as separate sections.

- **Open-access dataset of model-based scenarios/pathways (CircEUlar Scenario Explorer)**

The CircEUlar Scenario Explorer[8] is an open-access dataset of model-based pathways, built on Integrated Assessment Modeling Consortium (IAMC) reporting standards and hosted via IIASA's Scenario Explorer infrastructure which is the leading data hub for global, regional and national integrated assessment modelling comparisons - adopted by the IPCC WG3 for AR5 and AR6

[8] https://circeular.apps.ece.iiasa.ac.at/

scenario assessments and used across Horizon 2020 and European projects (CD-LINKS, ENGAGE, NAVIGATE, SET-Nav, ECEMF, ARIADNE, openENTRANCE). All pathway data is provided using the IAMC tabular time-series reporting format, extended with variable definitions for material flows and stocks relevant to Circular Economy strategies - a core feature of the CircEUlar pathways - developed in collaboration with the PRISMA project[9] and intended for eventual integration into the IAMC common-definitions repository. The infrastructure combines an intuitive web interface for visualizing and comparing scenarios with automated validation and efficient data retrieval, serving as a shared destination for modellers across countries and modelling groups. Pathway data snapshots are additionally deposited on Zenodo[10] with full licensing, versioning and publication metadata; updated versions receive new DOIs linked to prior releases, with deprecated versions redirecting users to the current data.

Sustainability: The Scenario Explorer, led by *IIASA*, is hosted on IIASA's infrastructure and its datasets are archived in the Zenodo CircEUlar community, ensuring continued availability beyond the project. *IIASA* confirmed that the public instance will be populated by the end of the reporting period and beyond the project. Additional scenarios, including the EU building-sector scenarios, will be added in autumn 2026 as the related publications are finalised. Long-term sustainability is reinforced by feeding the circular pathways into the community-driven Scenario Compass initiative[11], co-coordinated by *IIASA*, which acts as a meta-repository keeping the material broadly visible and allowing reassessment by others. Scenario Compass provides a curated ensemble of science-based scenarios vetted for consistency with recent global trends and presented in a consistent, accessible format, thereby offering a venue to integrate CircEUlar pathways with relevant pathways from the wider research community, including also those developing by the sister projects CIRCOMOD and CO2NSTRUCT.

Exploitation: The datasets are intended for both scientific and policy users, with interest reported from bodies such as the EU Climate Advisory Board, and are indirectly relevant to business sectors reached through networks such as the Network for Greening the Financial System. The main exploitation route is scientific: as mentioned above, the pathways feed into the Scenario Compass initiative for broader visibility and reassessment. There is also a clear spillover into the PRISMA project, where the ICT-sector scenarios developed in CircEUlar are being integrated into a dedicated PRISMA scenario explorer instance. In addition, *IIASA* is exploring data sharing with CIRCOMOD through an open data repository targeting the industrial ecology community (via Zenodo links/DOIs), a good venue for specific datasets such as the RASMI dataset[12]. The modelling innovations are also picked up in capacity-building workshops and educational activities, while the municipal solid waste scenarios were developed using the GAINS model[13]. Given GAINS' role in European policy analysis, this creates a possible link to relevant policy applications. Additionally, municipal solid-waste scenarios are currently being linked to selected outputs from the FutuRaM project[14] to assess the potential recovery and use of materials from municipal solid waste incineration ashes. JRC confirmed it will use the Scenario Explorer in its own work.

- **Empirical data on circular consumption and circular citizenship (CCS)**

This KEO, coordinated by *LMU*, with support of *RUG* and *CMCC*, provides open-access empirical data, including survey data with full documentation and descriptive analysis, on the acceptance and adoption of circular consumption practices and on the determinants and prevalence of circular citizenship behaviours such as protesting, signing petitions, and discussing the circular economy with friends and family. It draws on the Circular Consumption Survey (CCS), implemented by LMU,

[9] https://www.net0prisma.eu/
[10] https://doi.org/10.5281/zenodo.21035421
[11] https://scenariocompass.org/
[12] https://doi.org/10.5281/zenodo.10124951
[13] https://iiasa.ac.at/models-tools-data/gains
[14] https://futuram.eu/

whose interim report and dataset, accompanied by a full questionnaire, codebook, and statistical summaries, are already available to the consortium via a dedicated Zenodo community[15]. The data offers a scientific contribution to identifying which circular consumption activities are more or less compatible within current systems and how they might be better integrated into future patterns of daily offering insights into potential ways to reduce the gap between demand and supply in the circular provision of goods. It is aimed at institutions and businesses supporting the promotion, planning, and reorganisation of circular consumption practices, as well as researchers, research networks, policy makers, NGOs, and domain experts.

Sustainability: The Circular Consumption Survey dataset[16], coordinated by *LMU*, is publicly available on Zenodo, together with an explanatory document and a codebook that ensure its accessibility and reuse. *LMU* noted that the survey was intentionally designed around 13-14 standardised household variables drawn from European social-science surveys, prioritising transferability and utility for matching, micro-simulation and agent-based modelling. While there is no formal long-term maintenance plan for the dataset, partners highlighted the enduring access and reuse potential of the survey instrument itself for other researchers and topics such as housing or mobility, and the possibility of refining future iterations to focus on the areas that proved most valuable. Complementary datasets held by RUG (from the Netherlands and from an employee sample)[17] and the employee-awareness survey data collected by RUG[18] are also available on Zenodo.

Exploitation: The empirical data supports several exploitation routes. *LMU* identified strong interest from the private sector in mobility-related practice data, and in lending-and-borrowing data for second-hand platforms and is leveraging the SCORAI Europe steering-committee network to share findings with researchers and practitioners. It also sees an opportunity to support local policy in Munich by sharing the dataset and the survey results with city representatives and has concrete plans to reach out to them. In education, *LMU* will integrate the dataset into its MSc programme in Human Geography and Sustainability, using it to train early-career researchers in quantitative methods and offering it for master's theses. Partners are producing scientific publications from the data - *LMU* aims for at least three publications, one currently in revision - and a rebound-effects paper is being written jointly by *RUG and CMCC*. *CMCC* is also advancing work on employee awareness of rebound effects. *JRC* consulted the CCS team on how survey results could be translated into model inputs, to complement the vehicle material data (NTNU) and the MESSAGEix framework (IIASA) already feeding into its JRC-GEM-E3 model[19] (see Material inventories for the transport rolling stock).

- **Online tool "Circular ReBoundary" with data, information, and evidence of business models for the circular provision of goods and services**

Circular ReBoundary[20] is an online tool containing information on available circular approaches in the provision of goods and services, rebound effects and corresponding mitigation strategies, and survey insights on consumer and employee circular behaviour. Developed by CMCC and supported by T6, it showcases real-world insights from consumers and businesses as well as signposting of resources for the building, mobility and manufacturing sectors.

Sustainability: CMCC confirmed its commitment to maintain and host the Circular ReBoundary tool for at least five years as part of the set of tools and models hosted at its SEME division, with sustainability now underpinned by a newly secured Horizon grant that will fund the tool's continued maintenance and evolution. CMCC plans to use this funding to enrich the tool with an empirical

[15] https://zenodo.org/records/17305194
[16] https://zenodo.org/records/15267507
[17] https://doi.org/10.5281/zenodo.15853669
[18] https://zenodo.org/records/16909830
[19] https://joint-research-centre.ec.europa.eu/what-we-do/scientific-tools-and-databases/general-equilibrium-model-economy-energy-environment_en
[20] https://circular-reboundary.com/

basis, conducting a survey with enterprises on their potential and implemented strategies regarding rebound effects, so as to ground the tool's existing suggestions in real-world evidence. The tool remains freely available online and on the CircEUlar website and will be promoted through the EU circular stakeholder platform and multiple communication channels. A webinar presenting the tool's functionalities was held on3 December 2025.

Exploitation: Beyond its continued development under the new Horizon grant, the tool is exploited as a pedagogical resource and referenced in external outputs, including the project's policy briefs. The tool and the related deliverable D3.1 were presented at a policy session of the 30th Annual Conference of the European Association of Environmental and Resource Economists (EAERE 2025) in Bergen, Norway. However, CMCC reported that the policy event in Bergen was affected by technical difficulties that limited the presentation and discussion of the tool - a lesson learned for future dissemination.

- **Open-source provision of models and tools (model code, documentation, and relevant input-data)**

This KEO delivers open-source models, tools, model code, documentation, and relevant input data covering the materials-energy-GHG nexus for EU27+3 countries, material stock accounts for buildings and mobility, an integrated urban-level model of energy and material-demand dynamics, and long-term data-centre energy projections, realised by *BOKU*, *TUB*, *IIASA*, *INEGI*, and *UOX*. Related deliverables are: Report on circularity and the materials-energy-GHG nexus for EU27+3 countries (D2.1 - BOKU); Report on material stock accounts for buildings and mobility (D2.3 - TUB); Open access to code base for model linkage (D6.3 - IIASA); Integrated urban-level model (D8.1/D8.2 - INEGI); long-term data-centre energy projections, comprising input data and Python scripts, developed jointly through CircEUlar and PRISMA (UOX). The KEO provides mainly researchers and academics as well as policy analysts, with open access model code and results data to support further research and application. Datasets and code, including the MESSAGEix-Materials model[21], are hosted on the Zenodo CircEUlar Community maintained by IIASA, alongside a dedicated homepage for BOKU's MISO2+ model and database, open GitHub repositories for the EUBUCCO and AI4UP models with accompanying tutorials[22], and the SSP extension explorer, hosted by IIASA.

Sustainability: The open-source models and tools, led by *BOKU*, *TUB* and *IIASA*, are permanently shared via the Zenodo CircEUlar community and GitHub, with online documentation and database links. *BOKU* highlighted a licensing constraint: the underlying database incorporates third-party data with varying licenses, so only aggregated data can be released to avoid violations, while the full high-resolution data cannot be published. Long-term maintenance generally depends on securing new funding; for the MISO model and data, continuity is ensured for the next five years through the

Austrian-funded REMASS project (worth approximately €5 million and involving multiple partners, among them *IIASA*), complemented by an FWF ASTRA grant secured at BOKU (worth approximately €1 million). *IIASA* similarly ensures the sustainability of its modelling tools (including the MESSAGEix-Buildings framework and the GLANCE model) through their continued operationalisation, notably within the EDITS project, which is confirmed to run until 2029 and provides a three-year window beyond CircEUlar for applying new analysis and modelling capabilities. *INEGI* developed an integrated urban-level model (D8.1/D8.2) that remains valid with limited effort, given the relative stability of the urban built environment. Applies versions to the cities of Porto and Berlin have already been published on Zenodo; expanding the model to additional cities is considered the main avenue for growth, conditional on dedicated funding. *UOX's* data-centre energy projections, developed jointly with PRISMA, are intended for public release once the associated research paper is published.

[21] https://doi.org/10.5281/zenodo.13121819
[22] https://github.com/ai4up/

Exploitation: The primary exploitation route is scientific: *BOKU* estimated that ~20 papers will eventually acknowledge CircEUlar (around ten published and five under review at the time of the interview), and it performs specific model couplings for particular studies, such as combining the MESSAGE framework with an infrastructure-focused version of the MISO model for a mobility scenario exercise. *BOKU* is also active at the science-public interface, with a consulting contract for the European Environment Agency and a collaboration with the NGO producing the Circularity Gap reports to update their methodology, and it is developing a simplified spin-off of the model to facilitate integration into university teaching. *IIASA's* tools, including the SSP extension explorer — currently undergoing an iteration process with the wider modelling community — are frequently used in capacity-building workshops and educational activities and are being picked up by external groups. *INEGI* integrates insights on energy and material-demand drivers into courses at the University of Porto and the Florence School of Energy Regulation, and intends to use its urban model as an assessment tool for consultancy work helping local institutions and municipalities diagnose current conditions and evaluate circularity strategies; it has two academic papers in the pipeline (a methodological paper under revision in *Energies,* and a conceptual paper to be developed with other partners) and has applied, with IIASA, to a Horizon Europe Cluster 5 call to build on the results, with further applications also potentially pursued through PhD research. *UOX* reported three papers published, two under review and two in progress, including a commentary derived from the Energy Transition Week panel in Norway and a contribution to the Oxford Energy Forum. Beyond academic publication, *UOX* engaged non-academic stakeholders including Amazon, local UK councils, venture capitalists, the ODI Global think tank and UNDP, and delivered a lecture at the Cambridge Sustainability Leaders Institute, though these engagements rarely translated into public documentation or operational change, given the mismatch between the research's 2050 time horizon and stakeholders' short-term decision-making frames. *UOX* has submitted a Canadian-led proposal on the sustainability of data centres integrating findings from CircEUlar stakeholder meetings, intends to continue researching digitalisation and sustainability given its growing relevance for AI, and is developing a further research proposal with *IIASA*.

- **Policy recommendations for policy making**

This KEO consists of five policy briefs translating CircEUlar's integrated modelling and research into targeted, evidence-based recommendations for circular economy and climate policymaking (D1.3). Designed and coordinated by T6 and developed collaboratively across the consortium with *IIASA, PIK, INEGI, CMCC, LMU, RUG, UOXF* and *JRC*, the briefs address circular economy modelling approaches to inform climate policy, pathways to climate neutrality, circular consumption, rebound effects, and data-driven urban planning for low-carbon cities. Exceeding the three briefs originally envisaged, the consortium delivered five, reflecting both the breadth of the research and an iterative policy dialogue conducted through interviews, bilateral exchanges, workshops, online pathway development and validation sessions, and the final policy event. This process engaged a wide range of representatives from EU institutions, international organisations, sector associations, industry and civil society, with particular attention to DG CLIMA, DG ENV, DG EMPL, JRC, ITF and OECD. Consortium partners also capitalised on their own policy networks to inform national policymaking.

Sustainability: The policy recommendations developed through CircEUlar will remain publicly available through the five policy briefs and related project deliverables (D1.3), ensuring continued access for policymakers, researchers, civil society and industry. The briefs are hosted on the CircEUlar project website, which will remain active for four years after the project's completion, and archived on the EU Innovation Platform and Zenodo[23] to ensure their long-term accessibility. A tailored dissemination strategy has been developed and is under implementation at the time of writing. Such strategy foreseen a dedicated approach for each policy brief individually to ensure it reaches its intended audiences and maximises its impact. Dissemination activities will target the stakeholder groups most relevant to each topic from our stakeholder database, community of

[23] https://doi.org/10.5281/zenodo.22936208

interest, attendees and invitees to previous stakeholder engagement activities, and other contacts. For example, the policy brief on data-driven urban planning for low-carbon cities will be shared with planning professionals including urban/city/transport planners, architects, housing officers and local and regional authorities, in addition to established contacts within the European Commission, including DG CLIMA, DG ENV and DG REGIO. All policy briefs will be disseminated through the CircEUlar newsletter to the project's Community of Interest (made of more than 200 contacts), consortium partners' professional networks and social media channels. Beyond the project, this sustainability will be underpinned by the durable policy networks established throughout CircEUlar (e.g. the European Circular Economy Stakeholder Platform), enabling the recommendations to continue informing research proposals, policy advice, stakeholder dialogues and scientific publications, and supporting the ongoing development and implementation of circular economy and climate policies beyond the project's lifetime. Following project completion, T6 will also establish a dedicated LinkedIn group, based on the interest of Community of Interest members, to maintain the network, facilitate knowledge exchange between researchers, policymakers and practitioners, and share relevant research, policy developments and good practices on circular economy-related topics.

Exploitation: Policy exploitation is already materialising through several concrete channels at both European and national levels. *UOX* successfully submitted evidence on data centres to a UK parliamentary inquiry, demonstrating how CircEUlar research can directly inform legislative scrutiny and policy development. *JRC* collaborated on a policy paper exploring the integration of circular economy modelling into the European Commission's impact assessments and intends to build on these insights in future modelling exercises, while disseminating the findings across relevant Commission services. At the national level, BOKU incorporated findings from Deliverable D2.1 into the Austrian Resource Use Report prepared for the Ministry of the Environment. More broadly, each of the five CircEUlar policy briefs identifies the European policy initiatives and legislative processes to which its findings are most relevant, providing a clear pathway for future exploitation. Consortium partners will continue to promote these recommendations through their advisory roles, policy networks and future research activities, supporting the uptake of CircEUlar evidence within ongoing European and national policy development.

- **Stakeholder Engagement Methodology**

This KEO consists of the CircEUlar Stakeholder Engagement Methodology, a transferable framework for systematically integrating stakeholder knowledge throughout sustainability research and innovation projects. It was designed by T6, with support from LMU on backcasting, and is documented in Deliverable D1.1 (background and approach) and D1.2 (delivery). It combines scoping interviews, stakeholder mapping and the establishment of a Community of Interest, an in-person expert workshop including participatory backcasting exercises, preliminary pathways development and validation sessions (examining the feasibility, parameters, implications and assumptions of the models), bilateral exchanges, event partnerships and policy dialogue. The methodology was implemented and refined throughout the project, providing a practical framework that can be readily adapted by future Horizon Europe projects and other sustainability initiatives seeking to strengthen the relevance, legitimacy and uptake of research outcomes. Its implementation demonstrated that sustained, reciprocal stakeholder engagement not only improves research quality and policy relevance but also strengthens the co-production of knowledge between researchers, policymakers and other societal actors.

Sustainability: The CircEUlar Stakeholder Engagement Methodology is publicly available through the project website and CORDIS and on Zenodo[24], ensuring its long-term accessibility and reuse. Its sustainability is supported by *T6*'s intention to continue applying and refining the methodology in future Horizon Europe and other research projects, building on the lessons learned during CircEUlar.

[24] https://doi.org/10.5281/zenodo.22115535

Future applications will strengthen mechanisms for maintaining long-term stakeholder involvement, documenting effective engagement approaches and adapting activities to evolving research questions and policy priorities. The methodology has also been documented and integrated into several focus area-specific scientific publications, ensuring that its conceptual foundations, practical lessons and evidence base continue to be disseminated within the research community. Through open access, continued methodological refinement and academic uptake, the CircEUlar Stakeholder Engagement Methodology is intended to remain a living resource for researchers and practitioners.

Exploitation: The stakeholder engagement methodology is already being exploited and adapted by consortium partners in their ongoing research and proposal development activities. *T6* is offering training and consultancy on designing and delivering meaningful, non-extractive stakeholder engagement processes, drawing on this experience. More broadly, partners recognised the value of CircEUlar's reciprocal approach, in which stakeholders actively contributed to research design, model development and policy reflection rather than acting solely as consultees. Several partners have already indicated their intention to incorporate elements of the methodology into future work, including the participatory backcasting exercises, PESTLE framework and iterative stakeholder dialogue. For example, *JRC* will consult the methodology to validate future model assumptions, while *INEGI* plans to replicate the stakeholder engagement approach, particularly the urban workshops and structured backcasting process, in future research projects. These examples illustrate the methodology's transferability across research domains and its potential for uptake in future sustainability research projects. *T6* will exploit the methodology in future EU and national proposals and will also include it in its commercial offer. Indeed, facilitation and stakeholder engagement is a key service offered by T6 and it will be promoted to public and private actors interested in deepening the relationship between science/innovation and policy/society/economy.

- **Material inventories for the transport rolling stock**

This KEO provides material inventories for the transport rolling stock, compiled jointly by *NTNU*, in collaboration with *IIASA* and with further contributions from *BOKU* on transport infrastructure material stocks. The datasets support a comprehensive geographical analysis of material stocks in the mobility sector and the decarbonization potential of circular consumption practices, with CircEUlar's main contribution being to enable the scaling and generalizability of this analysis so that findings can be transferred to other regions.

Sustainability: The material stock data, led by *NTNU* and *IIASA* as well as *BOKU* will be uploaded to the Scenario Explorer and Zenodo and archived permanently. *NTNU* confirmed that its Vehicle Material Inventory framework is designed to be updated with new market scenarios - for example for battery materials - so that the data remains relevant over time. The maintenance model relies primarily on an open-source, community-based approach (a "coalition of the willing"), whereby the code released on GitHub and linked to the Zenodo CircEUlar community can be updated and improved by the community, increasing the probability of continued use without a dedicated funding stream.

Exploitation: *NTNU's* Vehicle Material Inventory provides a modular framework for estimating the material composition of rolling stock - information otherwise difficult to access in the public domain - with dual utility for academic reuse and for policymakers interested in material composition and circular economy strategies. The team was contacted, through JRC channels, by the European office on taxation (DG TAXUD) interested in the data on the material composition of vehicles, specifically regarding secondary steel stocks entering Europe, and it benchmarked its models against publicly available OEM data. *JRC* itself engaged directly with the data as part of its mobility focus area, in collaboration with *NTNU* and *IIASA*, integrating the vehicle material inventories into its in-house JRC-GEM-E3 model to explore how consumer-side and behavioural factors relate to socio-economic indicators such as sectoral output and employment, and sectoral emissions, and how circular vehicle strategies can be represented even where full parameter detail is unavailable; because the effects of circular practices are not well captured by standard national accounting indicators such as GDP,

the analysis relied more heavily on the model's emissions and employment components. *JRC* noted that engaging with the data required only limited internal resources, suggesting similar collaborations could be replicated relatively easily elsewhere. This JRC-GEM-E3 model is fully internal to *JRC* and therefore the code cannot be published. However, a first draft of the results of the mobility application was included in one of CircEUlar's deliverables. Around six papers are planned or in progress on battery material stocks and vehicle compositions by *NTNU*, in collaboration with *IIASA*, including a joint paper with *NTNU*, *IIASA* and *JRC.* Another paper is planned with the CIRCOMOD partner *Freiburg University*. All are expected in autumn 2026. *JRC's* contribution also fed into the CircEUlar policy brief on how this modelling can support EU policymakers, tailored to the European Commission's climate target work (see Policy recommendations for policy making). The collaboration has also established lasting connections between JRC and CircEUlar's research groups - with *IIASA* on buildings and *NTNU* on vehicle material intensities - extending into adjacent JRC workstreams such as the carbon border adjustment mechanism; *JRC* plans an internal exchange on modelling experience with the team behind its sister model, *GEM-E3 at E3Modelling in Athens*, used in the related CIRCOMOD project, which has broadly similar capabilities. The outputs allow easier estimation of the steel and aluminium volumes exiting the vehicle stock, assisting public administrations in planning and understanding material flows, and *NTNU* plans to incorporate the models and findings into university teaching.

- **EUBUCCO building stock database**

EUBUCCO[25] is a scientific, open-access database of individual building footprints covering more than 322 million buildings across the 27 EU Member States, Norway, Switzerland, and the UK. It is built from 57 open datasets, combining government registries (62.2%), OpenStreetMap (17.4%), and Microsoft building footprints (20.4%), which have been collected, harmonized, and validated into a single, common database of building stock characteristics. Developed by *PIK* and *TUB*, EUBUCCO is treated as a standalone KEO, distinct from the broader conflation framework used to download, harmonise and merge the underlying data and from the material-stock modelling layer built on top of it. The database provides the basis for a comprehensive geographical analysis of the building stock and the decarbonization potential of circular consumption practices, with CircEUlar's main contribution being to enable the scaling of this analysis and support the generalizability of the results so that findings can be transferred to other regions.

Sustainability: While the data is archived on Zenodo[26], the primary, user-friendly access point is a dedicated server funded by the *PIK* institute, offering visualisations and product details; the source code for the documentation and download functionality is available on GitHub[27] under an MIT license. Maintaining the database requires continued funding, and since the team intends to keep it open access, commercialisation is not considered a preferred option in the long term. Options discussed for long-term continuity include transferring the database to an institution funded for its maintenance, and a possible partnership with ICLEI for day-to-day stakeholder interaction.

Exploitation: The team intends to use EUBUCCO for further research and plans to apply for additional EU funding to improve data quality and develop interfaces for municipalities. It has already applied, together with *IIASA*, for a consortium project using the database for energy-renovation scenarios, retrofits and urban mining, with around three further project ideas in development.

- **Fossil-free Ecoinvent database and material-substitution research**

Empa - Swiss Federal Laboratories for Materials Science and Technology - developed Fossil-free Ecoinvent, a parametric model, published in Resources, Conservation & Recycling, that allows generating customized life-cycle databases free of fossil fuel inputs. Since most existing LCA databases, including the widely used Ecoinvent database on which this tool builds, reflect today's

[25] https://eubucco.com/
[26] https://doi.org/10.5281/zenodo.7225259
[27] https://github.com/ai4up/eubucco

fossil-heavy supply chains, they offer limited insight into future scenarios based on renewable energy; Fossil-free Ecoinvent addresses this gap through an open-source framework that systematically replaces coal, oil, and gas inputs with renewable alternatives, synthetic fuels, and electrified systems, offering 48 adjustable parameters to "defossilize" electricity, heat, transport, and industrial processes. Fossil inputs are scaled down or substituted, and new datasets for emerging technologies such as electric trucks, hydrogen fuel cells, and synthetic fuels are added, resulting in a transparent, customizable database that can simulate partial or full transitions away from fossil energy. The tool is intended for both academic researchers and industry practitioners seeking to model decarbonized supply chains, including ambitious or unconventional pathways, investigate minimum carbon footprints, or analyze environmental trade-offs such as the increased resource demand associated with renewable technologies. This work sits alongside broader research from the team showing that, seen through the lens of biophysical constraints in supply chains rather than a standard life-cycle-assessment perspective, interventions such as material substitution can have a much larger, dynamic effect on reducing CO_2 emissions.

Sustainability: This research is documented one published paper, with one further paper in draft expected by mid-2026, each accompanied by a Zenodo repository containing the code and data needed to reproduce the findings; most underlying models are documented on GitHub and linked within the papers, with one exception hosted in the "Inside Maker" environment. All related publications and repositories are being linked to the CircEUlar Zenodo community to ensure discoverability by project officers and reviewers. Maintaining Fossil-free Ecoinvent is a recognised challenge: updating its code is a maintenance task rather than a scientific advance, making it difficult to secure dedicated funding, and there is no guarantee that an organisation such as Ecoinvent will adopt or maintain the tool going forward; its continuation therefore depends on whether future projects require it, at which point updates could be included as a specific task.

Exploitation: *Empa*'s main exploitation route is continued research through secured funding rather than policy engagement - a follow-up Horizon project is already underway - and new connections established with sustainable-mining researchers at the University of Leoben are supporting further proposal development. Societal reach is pursued through media releases, which generate public interest, and through outreach activities such as the team's participation in Pint of Science (2023). Project results are also integrated into teaching at the University of St. Gallen (energy transition and circularity), ETH (material science), and executive MBA programmes.

The following outputs are of smaller scope, as outlined above, and are accordingly presenting the description, sustainability and exploitation together.

- **Serious game on circular behaviour**

RUG developed a research-based “serious game” - a card-based board game - designed to raise awareness of circular behaviours, increase perceptions of being able to engage in circular behaviours, and strengthen social norms of circular behaviour. The game “Empower: Play your part” can be played by people who are interested in exploring circular behaviours more. These may be private individuals, employees, and public officials. The game will include all materials in English, Dutch, and German and will be distributed to potentially interested parties, such as non-governmental organizations working on sustainability, university staff for teaching purposes, or organizations that want to explore circular behaviours with their employees. The research team will send out the physical game to such parties as well as to all project partners. Further, interested parties can request a physical version of the game. Distribution channels include the CircEUlar website, the environmental-psychology group website, direct use at workshops and science-communication events, such as the European Researcher’s Night or the Dutch Science Communication Day, and submission to the EU Innovation Platform, supported by a promotional campaign planned for early September 2026. Exploitation routes include using the game as an

intervention in scientific studies and within university teaching. The current version is considered a lasting output for which no formal revision plan is foreseen.

- **Behavioural nudging evidence on resource efficiency**

CMCC produced a published, open-access study on the direct and spillover effects of nudging resource efficiency in the presence of other behavioural interventions, based on a randomised controlled trial with a partner utility in Ferrara. The underlying administrative microdata are owned by the utility and shared under a non-disclosure agreement that does not permit redistribution, even in anonymised or aggregated form. Consequently, the exploitable output is the peer-reviewed paper itself rather than an open dataset. The estimated treatment effects are also intended as an input to CircEUlar's waste-modelling component, calibrating it against causally identified estimates rather than untested assumptions. The results were translated into an operational output for the partner utility and have already shaped practice. Following the policy evaluation, the utility moved from a randomised rollout to making a waste-efficiency report the default campaign for all customers, retaining only the simplified, norm-based feedback component validated by the project's results, and extended the intervention - driven directly by this evidence - to customers in other municipalities under its service area, constituting a multi-city rollout within the same corporate group. The potential to offer a similar service to other cities is considerable, because the underlying intervention - a social-norm or comparative feedback report - is a well-established behavioural tool rather than a solution built only for this setting. It has been widely applied to electricity consumption across many countries and utilities and has since been adapted to water, gas and waste. This matters for exploitation potential because implementation costs and barriers are low. The intervention only requires the administrative consumption data on a customer base that is readily available to any utility in order to construct peer comparisons, with no new infrastructure, metering technology or customer-facing changes needed beyond producing and distributing the report. Moreover, because the mechanism is generic, the effect sizes and design lessons from this study are informative for any utility considering a similar nudge, not only for the original partner. This is corroborated by the electricity case - the domain in which norm-based reports were first introduced and are now most widely studied - where estimated effect sizes tend to be fairly similar across different utilities and programmes, provided the intervention is applied within the same country.

- **Exploring Circularity Through Science and Art**

Within the framework of the Klima Biennale Wien, CircEUlar demonstrated the potential of artistic practices to increase the accessibility, visibility and societal relevance of complex scientific research. Through the Sensing Resonance initiative, researchers and artists co-created a series of artworks translating circular economy and climate research into engaging cultural experiences. *T6* captured these intersections between art and science in a dedicated video series (*Art Meets Science: Bridging Worlds for CircEUlar Pathways*) and a podcast episode (*Ecosystem Exchange - Episode 4. CircEUlar - A conversation with Nora Mayr*) exploring the role of art in science communication. These outputs represent a transferable engagement model that can be adopted by future research projects, cultural institutions, or other organisations seeking innovative approaches to communicating science, while the multimedia materials remain available as resources for outreach and educational purposes. In fact, CircEUlar was invited to showcase the artworks "Verde Perto", a local carbon neutrality exhibition in Matosinhos (Portugal, March-June 2025), where INEGI was invited to show, among others, CircEUlar results to the local population, confirming the reusability of the materials beyond their original context.

6.2 Summary of exploitation routes

As it becomes evident from the above descriptions, scientific publications and academic outputs are a central exploitation route, in particular for the academic partners. *UOX* reported three papers published, two under review and two in progress, including a commentary derived from the Energy

Transition Week panel in Norway and a contribution to the Oxford Energy Forum. Several partners are integrating project results into teaching, and ongoing PhD and master's work is expected to yield further publications after the project's conclusion.

Table 1 below summarises the exploitation routes identified for the different main KEOs, following the same convention used for related projects: “x” indicates a route that will be followed up, while “(x)” indicates a route the consortium considers important but for which no concrete collaboration has yet been established, though partners will continue to pursue it.

Table 1 - Overview of the exploitation routes identified for the CircEUlar KEOs.

Key Exploitable Output	Follow-up research	Consultancy and services to public authorities and businesses	Influencing policy	Uptake within professional or community networks	Capacity building and higher education
CircEUlar Scenario Explorer	x	(x)	x	x	
CCS empirical data	x	(x)	x	x	x
Circular ReBoundary tool	x		x	(x)	x
Open-source models and tools	x	x	x	x	x
Policy recommendations	(x)		x	x	
Stakeholder engagement methodology	x	x		x	
Material inventories for the transport rolling stock	x	x	x	x	x
EUBUCCO building stock database	x	(x)		(x)	
Fossil-free Ecoinvent database and material-substitution research	x	(x)		(x)	x

6.3 Potential exploitation and sustainability obstacles and mitigation strategies

The interviews highlighted a number of recurring obstacles to the long-term sustainability and uptake of the project’s outputs, together with the strategies partners intend to use to mitigate them.

- ### Funding for maintenance versus open access

The most widely shared concern is that maintaining open-access tools and databases requires resources that are difficult to secure, because updating code and data is treated as a maintenance task rather than a scientific advancement. *PIK*, *EMPA*, *BOKU* and *INEGI* all noted that continuity depends on new funding rather than base funding. The mitigation strategy shared across partners is to embed maintenance and further development as specific tasks within follow-up projects - as achieved through REMASS (*BOKU*, *IIASA*), the EDITS project running to 2029 (*IIASA*) and the new Horizon grant for the Circular ReBoundary tool (*CMCC*) - and, where relevant, to explore transferring outputs to institutions funded for long-term maintenance.

- **Third-party data licensing and access**

Several outputs are constrained by third-party data licensing. *BOKU* can release only aggregated data because the underlying database mixes sources with different licenses, and it had to adapt its data feeds when providers moved data behind paywalls after the proposal phase. *CMCC*'s Ferrara study relies on utility-owned microdata under a non-disclosure agreement that prevents redistribution. In both cases the mitigation is to publish what can be shared - aggregated data, documentation and the peer-reviewed analysis - while remaining compliant with open-science requirements, and to be transparent about the constraints.

- **Long research horizon versus short-term decision-making**

UOX and *JRC* both pointed to the mismatch between the long time horizon of the project's analyses (up to 2050) and the short-term decision frames of many policymakers and businesses, which limits immediate operational uptake. The mitigation is to target the specific audiences for whom long-run strategy is relevant - such as long-term strategy units and impact-assessment teams - and to translate results into decision-relevant formats.

- **Institutional capacity and competing priorities**

JRC noted that its involvement functioned as a "soft link", so competing priorities and urgent requests can force adjustments to research timelines. *PIK* highlighted capacity constraints for day-to-day stakeholder interaction. Mitigation strategies include partnering with organisations such as ICLEI for sustained stakeholder engagement and planning realistically around available institutional resources.

- **Structural mismatch between consumer data and macro-models**

LMU highlighted a structural mismatch whereby consumer-side survey data could not be directly integrated into the macro-level modelling frameworks used by other partners - an issue not fully foreseen at the outset that limited some cross-partner interaction. The lesson learned, relevant for future projects, is to design conceptual integration between work packages from the start and to document which engagement and integration strategies proved most effective.

- **Barriers to commercialisation**

Commercialisation is constrained for several outputs. *PIK* noted that the open-access nature of EUBUCCO and its dependence on a public research institution's data make commercialisation unattractive in the short term, while *CMCC* observed that promoting a publicly funded, non-commercial tool in commercialised environments is difficult, as some promotional venues charge fees typically associated with for-profit providers. The shared approach is to prioritise open access and dissemination through academic and professional channels rather than commercial routes, and to keep the tools discoverable on public platforms.

6.4 Collaboration with partners and external stakeholders

One of the most valuable and enduring outcomes of CircEUlar has been the development of collaborative networks among consortium partners and with external stakeholders, providing a solid basis for future cooperation. While in several cases the project deepened pre-existing relationships rather than creating entirely new ones, partners consistently emphasised the value of the resulting network.

Concrete follow-up collaborations have already materialised. The REMASS project brings together *BOKU* and *IIASA*, building on a collaboration that strengthened during CircEUlar and served as a proving ground for joint work. *IIASA* and *PIK* deepened their collaboration and, together with further partners, have submitted a new Horizon proposal; *PIK* and *IIASA* also applied jointly for a consortium project using the EUBUCCO database. *INEGI* enlarged its modelling network through the project

and applied with *IIASA* to a Horizon Europe Cluster 5 call. *UOX* is developing a proposal with a consortium partner on a relationship initiated during CircEUlar, and *EMPA* established new connections, for instance with researchers at the University of Leoben working on sustainable mining. *JRC* values the connections made with *IIASA* and *NTNU* and intends to reuse *NTNU*'s material-intensity data in related workstreams such as the Carbon Border Adjustment Mechanism, while also coordinating with the sister GEM-E3 modelling group in Athens to align methodologies.

Partners also underlined the strengthened links with the sister projects. The close collaboration between CircEUlar and CIRCOMOD - including the shared use of the RASMI dataset and the continued engagement with stakeholders from earlier workshops - was highlighted as an exceptionally positive experience, even where it has not yet translated into new funded proposals (a first proposal of BOKU and the Leiden University to a research funder in the Netherlands got rejected). Across the consortium, partners agreed that CircEUlar catalysed a network of complementary actors with shared ambitions for future collaboration, both within and beyond circular-economy and climate research.

Beyond the collaborations established between consortium partners, through T6's work, CircEUlar demonstrated the long-term value of embedding stakeholder engagement throughout the research process rather than treating it solely as a dissemination activity. Through a reciprocal and non-extractive approach, the project brought together actors from across the quadruple helix - research, policy, industry and civil society - to contribute directly to narrative development, pathway design, model refinement, policy recommendations and research validation. This strengthened both the quality and practical relevance of the research while fostering lasting relationships and social capital across the circular economy community. Across the consortium, partners recognised the value of treating stakeholders as partners in knowledge creation and highlighted the importance of flexible, iterative engagement that can evolve alongside research and policy priorities. These lessons are already influencing the design of new proposals and research activities, with partners planning to incorporate participatory backcasting, structured policy.

7. Timeline (*When*)

The overall communication, dissemination and exploitation strategy will be implemented throughout the project in three main phases, supporting other project activities and following the general project work plan. Each of these has specific objectives and will therefore perform specific actions using appropriate channels.

7.1 Awareness phase (COMMUNICATION)

This phase focuses on the creation of a communication and dissemination strategy with planned activities to create an initial awareness about the project. The main objective is to inform, promote and communicate activities and first results. Indeed, by M6 all the communication and dissemination products about the project were set and project activities, first results and planned outputs started to be promoted.

In particular:

- development and publication of the overall strategy;
- realisation of the visual identity of the project;
- writing the first press release for the launching of the project;
- creation of the website;
- opening of social media channels;
- realisation of a roll-up for presenting the project;
- creation of database of stakeholders, related projects and initiatives, and events;
- coordination meetings on potential joints outreach activities with sister projects.

7.2 Strategic phase (DISSEMINATION)

As soon as the actions of the project have results, this phase begins to further increase awareness and spread knowledge for others to use. In particular, the promotional materials will be adapted and started to be used by partners to engage the audience and disseminate the first results and the relevant news regarding ongoing activities and actions. Dissemination activities will be also oriented to attract attention and pave the way for the use and uptake of outputs: these include presentation of results through scientific papers, conferences or networking events. Also, the outreach through networks and towards policy makers at European level will be started.

7.3 Impact phase (EXPLOITATION)

This phase is dedicated to making concrete use of the results of the project and wider the impact. In particular, the overall mission is to improve the understanding of the circular provision of goods and services to simultaneously achieve a low-carbon economy, decrease the demand for material inputs, and promote economic prosperity and a just distribution of economic benefits; advance the integration of social science-based knowledge into modelling tools and scenarios applied in climate change mitigation and circular economy analyses; ensure widespread application of new modelling approaches for linking circular economy potentials and impacts into climate change mitigation pathways; and build societal acceptance of circular consumer practices to reduce material use and greenhouse gas emissions.

In order to achieve these impacts, empirical results, full datasets of cross-national surveys and new model results on low-carbon circular economy features consistent with EU Green Deal targets will be openly and freely available.

Update M20: At this time, CircEUlar's communication and dissemination activities have transitioned into a strategic phase, focused not only on enhancing project awareness and visibility, but also on disseminating its initial outcomes and results. This effort involves active engagement with partners, sister projects, and stakeholders to effectively amplify and disseminate these contents across broader networks.

Update M36: The project has entered the exploitation phase, which aims to create impact through the concrete use of its results. Activities include broad promotion of the main outcomes at events on different levels, as well as the delivery of publications, policy recommendations, and the organisation of a final conference. In addition, regular communication efforts, such as updating the website to highlight consortium activities and posting on social media, will continue until the project's end. A project video will also be produced to further enhance project main results.

Update M48: The communication, dissemination and exploitation activities were implemented according to the planned timeline while remaining flexible to respond to emerging opportunities and developments. The final project phase concentrated on disseminating the main results, supporting exploitation and ensuring the long-term visibility of project outcomes.

8. Methodology & Structure for the communication and dissemination activities of CircEUlar (*How*)

Task 1.5 Communication and dissemination activities is led by T6. In particular, T6 is responsible for the visual identity, design and printing of materials and templates; designing and implementing the social media and online presence for communicating objectives, activities, team, events, results and tools of the projects; coordinating the participation in events to ensure strong uptake of scientific results by relevant stakeholders; looking for reaching established networks to exploit for a wide achievement of the target audience; tracking and monitoring coordination.

As shown in Annex 1, all partners have an impressive experience in communication and dissemination as well as strong networks through which the CircEUlar outreach will be fostered. In particular, the project coordinator IIASA will play a crucial role in the development and regular updated of the project website, the coordination of the scientific dissemination (including publications and conferences), the management of the Zenodo community and its maintenance of its institutional repository PURE for aggregation services like OpenAIRE, the coordination of the networking with the sister projects and in the organisation of the final scientific outreach event.

All partners will actively contribute to the dissemination activities on social media and the project website by the regular provision of news managed through a weekly rotation system. News and social media content by partners are then elaborated and scheduled by the communication lead for the CircEUlar Twitter and LinkedIn accounts. Additionally, partners as well as members of the CircEUlar Advisory Board are asked to share news and outputs from the project using the channels that each department / organisation uses successfully for communicating project activities and result, e.g.,

- partners who have established institutional newsletters can publish selected project news through these tools;
- partners who have established institutional social media accounts can share the content published on CircEUlar social media, mentioning the project handle and using the strategic hashtag. (See Annex 1 - Partners' communication channels)

8.1 Monitoring activities to maximise impact of the project

T6 also coordinates the activities to measure and guarantee the achievement of communication, dissemination and exploitation goals, through a periodic monitoring of Key Performance Indicators (KPIs), and a fine-tuning or adaptation of planned activities in the communication and dissemination strategy. The KPIs monitoring will take place on a six months' basis, whereas the reporting of KPIs will be a regular section in the project periodic reports to the European Commission. Table 3 (based on DoA) shows the general project KPIs and the targets employed by the CircEUlar consortium to maximise impact that the project aspires to.

Table 2 - List of communication, dissemination and exploitation KPIs of the CircEUlar

Type of Measure	KPIs	Target	M48
Scientific publications	Scientific publications in peer-reviewed journals (Number of publications)	20	63, 1 preprint, 3 accepted manuscripts and 3 under review
	Downloads/page views of scientific publications in peer-reviewed journals19 (Number of downloads/page views)	10,000	156,169 [1]
	Citations of scientific publications in peer-reviewed journals (Number of citations)	300	1,071 [2]
Stakeholder workshops and outreach events	Total number of stakeholder events organized	6	20 [9]
	Total persons directly reached through project activities, including meetings, workshops, and presentations (Number of participants)	1,500	~ 5,743
	CircEUlar presentations at scientific conferences or other related events (Number of presentations)	50	107

	Outreach events for stakeholders and experts (e.g., side-events at UNFCCC negotiations and other international events) (Number of events)	3	2 (IVECF 2026; IRP Side Event 2026)
	Events in collaboration with the Vienna Biennale for Change to reach to contribute to the public discourse about the contribution of circularity to addressing climate change	2	6
	Stakeholders interacted with (Number stakeholders)	50	~486 [10]
Policy briefs and web-based outreach tools	Number of policy briefs (incl. summary for policy makers)	3	5
	Number of web-based outreach tools	2	2 (Circular ReBoundary; CircEUlar Scenario Explorer)
Website and social media	Unique visitors to the project website	2,000	14,155
	Media pieces (e.g., press releases and articles, videos, audio clips) (Number of pieces)	100	101 Blog posts on News and Events (CircEUlar website); 32 Videos on YouTube channel; 24 Blog posts on institutional websites; 1 Blog post on WIT News; 1 News Item via the Newsletter of the ECESP; 1 News Item on the ECESP; 1 Blog post on IVECF; 2 media releases by EMPA
	Number of Twitter followers	1,000	67 Followers on Bluesky + 741 Followers on LinkedIn [7]
	Dissemination material (e.g., brochures and flyers) (Number of items)	4	1 Roll-Up; 6 vision sketches used in breakout sessions (mobility (3) and housing (3)) at the stakeholder event in Berlin, September 2025; board game; 6 digital materials for final event (agenda, speaker bios, presentation pack, interactive outputs interface and mini report of key insights) and 1 video on key project findings and policy insights.
Networking	Research collaborations with institutions outside the consortium (Total number of institutions)	6	87+ [8]

	Collaborative events with related projects (Number of events)	4	12 (RP3: CircEUlar, CircoMod and CO2NSTRUCT Joint Final Event in Brussels; Circular Economy Modelling Workshop, Lisbon 2026; Presentation of CircEUlar project at the EDITS Annual Meeting 2025; IRP Side Event 2026; Data centres webinar with PRISMA)
Open Access to data and tools	Number of users of CircEUlar Scenario Explorer (visits per month)	100	~40
	Number of data views/downloads (downloads per month)	30	Datasets: 396 / 182 Software: 64 / 24

***Table 2 Notes**:*

[1] Page view and download data were obtained from ZENODO. In instances where ZENODO data was unavailable, publisher metrics or readership data from SCOPUS were used as alternative sources.

[2] Citations were sourced from OpenAIRE. In two instances where data was unavailable, publishers' metrics were used.

[3] Total number of stakeholder events organised (RP1): By means of breakout groups, the stakeholder workshop (Brussels, March 2024) bundled three stakeholder interactions for the three CircEUlar focus areas into one event.

[4] Total number of stakeholder events organised (RP2): 3 - Brussels, March 2024 (stakeholder workshop with three stakeholder interactions for the three CircEUlar focus areas); 2 - Groningen, September 2024 (stakeholder workshop with two stakeholder interactions, one focusing on consumer behaviour and the other on business practices); Joint Event on Circular Economy Strategies to Support Carbon Neutrality (Brussels, September 2024, jointly with CircoMod and EEA); 4 x online sessions, March/April 2025, on preliminary pathways; 2 x online sessions, July 2025, on PROs and EPR on HHs appliances and waste; 3 – Berlin, September 2025 (backcasting with two breakout groups (mobility and housing), 1 AI4UP workshop).

[5] The number of persons directly reached through project activities was calculated by multiplying the number of presentations by the average number of participants (typically 30).

[6] The number includes (RP2): 16 interviews; 29 attendees at the event in Brussels (March 2024); 23 attendees at the event in Groningen (September 2024) - in total 24, but one stakeholder also attended the Brussels event and was therefore not counted twice; 45 attendees at the Joint Event in Brussels (September 2024); 42 attendees across four online stakeholder events in Spring 2025; 60 attendees at the EU Green Week Partner Event (June 2025); 11 attendees across two online stakeholder events in July 2025; 5 individual interviews - 2 Electrolux, 2 ISO & 1 Stichting OPEN; 19 attendees at the backcasting event in Berlin September 2025; 6 attendees at the AI4UP event in Berlin September 2025; and 36 additional stakeholders signed up for the newsletter but are not included in the numbers above.

[7] The project discontinued communication on the short-form social media X during the RP2 and set up a Bluesky account.

[8] Collaborations established in RP1 and RP2 continued.

[9] Total number of stakeholder events organised (RP3): 5 - 1 webinar organised with Bruegel as part of the PRISMA and CIrcEUlar continued collaboration in April 2026, final event organised in collaboration with sister projects CIRCOMOD and CO2NSTRUCT in Brussels in May 2026 including 1 hybrid policy event and 3 in-person breakout groups: construction ecosystems, service-focused measures and system-wide enablers including digitalisation.

[10] This total number 486 comes from 256 from RP2 (292 minus 36 who just received the newsletter), 20 participants to the joint CircEUlar and PRISMA webinar in April 2026, 90 online participants for the final policy event, 62 in-person (72 minus 10 who were CircEUlar research partners) and 58 newsletter recipients who had not been involved in the previously mentioned activities.

Update M20: In addition to X account, CircEUlar is also using LinkedIn. Therefore, the total amount of followers will count both the one of X and the one of LinkedIn. The post engagement will be also evaluated to better understand the success of project communication and the interest of the audience.

Update M36: In 2025, CircEUlar decided to leave X and open BlueSky. Therefore, the KPI counting the "Number of Twitter followers" is now calculating the followers of LinkedIn and BlueSky. Moreover, we are also considering the post engagement as a measure of success.

Update M48: Since the public release of the CircEUlar Scenario Explorer in July 2026 as part of Deliverable D6.2, 118 visitors were recorded, translating into about 40 monthly visitors for the period July to September. With the journal publications that feature the circular economy driven net-zero pathways still being in review or in preparation, the Scenario Explorer has not year been advertised. Higher usage is expected with the acceptance of the peer-reviewed journal publications which will go hand-in-hand with press releases and outreach activities that will feature the CircEUlar Scenario

9. Conclusions

The communication, dissemination and exploitation plan with the definition of target groups and main channels shall ensure a smooth and effective communication and dissemination throughout the project, in line with the general timeline of the project. Some activities cannot be planned in detail now (e.g., topics of policy briefs, concrete networking activities or detailed information on KEOs) as they depend on external circumstances or on first project results.

Therefore, internal updates of this strategy are planned at the end of M20, M38 and M48 of the project. These updates will also take into account the analysis of achievements through the KPI and respective necessary adaptations for the next phase of communication, dissemination and exploitation activities.

Update M20: The updated Communication, Dissemination and Exploitation Plan integrates the insights gained during the first 20 months of the project and took into consideration the achieved values for the KPIs (these are shown in the first progress report). This period was primarily dedicated to raising awareness of CircEUlar and sharing its preliminary results through both communication and dissemination channels. It also involved strategic stakeholder engagement through the organisation of the first stakeholder workshop entitled 'Towards Net-Zero through a Circular Economy', and initiated collaboration with the Vienna Climate Biennale for Art&Science. Looking ahead, the strategy remains dynamic and will be further refined in subsequent reporting periods and at the end of the project. Ongoing updates and adjustments will ensure that the plan remains responsive to emerging challenges and opportunities, ultimately maximising the impact of CircEUlar.

Update M36: This version is considering a phase in which the project focused more on dissemination activities oriented to attract attention and pave the way for the use and uptake of outputs, including include presentation of results through scientific papers, conferences or networking events. From now on, the efforts will be on the strategic impact of the project results for supporting their sustainability and exploitation also after the project has ended.

Update M48: This final update reflects the project's increasing focus on results-oriented dissemination, aimed at enhancing the visibility, accessibility and uptake of project outputs through targeted communication and dissemination activities.

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Annex 1: CircEUlar partners' communication channels

PARTNER	WEBSITE	NEWSLETTER	TW	LI	FB	IG	OTHER
IIASA	https://iiasa.ac.at/programs/ece	https://iiasa.ac.at/options-magazine	@iiasavienna	https://www.linkedin.com/company/iiasa-vienna	@IIASA	@iiasavienna	• Zenodo: https://zenodo.org/communities/iiasa-ece/ • IIASA Connect https://connect.iiasa.ac.at/ • GitHub: https://github.com/iiasa • IAMC: https://www.iamconsortium.org/news-jobs/iamc-news/ https://iiasa.ac.at/media/press-releases-by-email
BOKU	https://boku.ac.at/en/wiso	https://boku.ac.at/wiso/sec/social-ecology-newsletter	@WiedenhoferD @BOKU_SEC		@socialecologyvienna		

PARTNER	WEBSITE	NEWSLETTER	TW	LI	FB	IG	OTHER
CMCC	https://www.cmcc.it/research-organization/research-divisions/sustainable-earth-modelling-economics	https://www.cmcc.it/mediacommunication/newsletter	@CmccClimate	https://www.linkedin.com/company/cmcfoundation	@CmccClimate	@cmccclimate/	
LMU	https://www.geographie.uni-muenchen.de/department/fiona_eng/department/sozialgeographie/index.html		@LMU_Muenchen @egrealis				• Research Gate: Henrike Rau, Eoin Grealis
NTNU	https://www.ntnu.edu/ept		@NTNU		@ntnu.no	@ntnu	
RUG	https://www.epgroningen.nl/		@epgroningen		@epgroningen		
T6	https://www.t-6.it/		@T6Ecosystems	https://www.linkedin.com/company/15783396/			
TUB	https://www.susturbecon.tu-berlin.de/sustainability_economics_of_human_settlements/						
MCC	https://www.mcc-berlin.net/en/research/working-						

PARTNER	WEBSITE	NEWSLETTER	TW	LI	FB	IG	OTHER
	groups/land-use-infrastructure-and-transport.html						
EMPA	https://www.empa.ch/web/s506		@Empa_CH	http://www.linkedin.com/company/empa	@Empa-Swiss-Federal-Laboratories-for-Materials-Science-and-Technology	@empa_materials_science	
UOXF	https://www.creds.ac.uk/		@CREDS_UK	https://www.linkedin.com/company/credsuk/			
INEGI	https://www.inegi.pt/en/		@inegi_portugal	https://www.linkedin.com/company/3264346/	@inegi.portugal	@inegi.pt/	

Annex 2: CircEUlar potential collaboration & networks, related projects & initiatives, magazines & platforms

Annex 2 provides a list of organisations, magazines and platforms that CircEUlar aims to use for communication, dissemination and exploitation purposes. Detailed information on each of the identified organisations or projects are collected in a database which is continuously updated and is an internal document of the consortium and its two sister projects CIRCOMOD and CO2NSTRUCT.

International collaboration & Networks

- Energy Demand changes Induced by Technological and Social innovations (EDITS): The EDITS network brings together experts of various disciplines to regularly discuss about, and engage in the multi-faceted energy demand research. The EDITS community works together based on common interest in interlinked topics, on transferring methodological knowledge, and on exploring modelling innovations across demand-side models.
- EUROSTAT - Eurostat is the statistical office of the European Union that aims to provide high-quality statistics and data on Europe.
- Integrated Assessment Modeling Consortium (IAMC) - An organisation of scientific research institutions that pursues scientific understanding of issues associated with integrated assessment modelling and analysis.
- Intergovernmental Panel on Climate Change (IPCC) - The United Nations body for assessing the science related to climate change which provides regular assessments of the scientific basis of climate change, its impacts and future risks, and options for adaptation and mitigation.
- Organisation for Economic Co-operation and Development (OECD) - The OECD is an international organisation that works to build better policies that foster prosperity, equality, opportunity and well-being for all.
- UNEP International Resource Panel (IRP) - The International Resource Panel (IRP) is a global science-policy platform established by the United Nations Environment Programme (UNEP) in 2007 to build and share knowledge needed to improve our use of natural resources. It includes scientists and governments from both developed and developing regions, civil society, industrial and international organizations.

Related projects/initiatives with shared interest

- Circular Economy Modelling for Climate Change Mitigation (CIRCOMOD) - CIRCOMOD aims at developing a new generation of advanced models and scenarios that will assess how CE can reduce future GHGs and material use.

- Modelling the role of circular economy construction value chains for a carbon-neutral Europe (CO2NSTRUCT) - CO2NSTRUCT aims to augment such models with circular economy measures, boosting their capability to generate and assess circular options. This will contribute to achieving the emission reduction targets set by policymakers and evaluate the circular economy's impact on greenhouse gas abatement
- NAVIGATE H2020 - By tackling existing weaknesses and lack of capabilities of the current generation of Integrated Assessment Models, NAVIGATE provides new insight into how long-term climate goals can translate into short-term policy action, and how countries and sectors can work in concert to implement the Paris Agreement.
- MAT_STOCKS - MAT_STOCKS focuses on the empirical investigation of the stock-flow-service nexus. It generates global stock, flow and service databases, investigates long-term case studies, maps stocks at high resolution, develops innovative models of stock-flow-service interrelations and analyses their importance for sustainability transformations.
- iDODDLE - The iDODDLE project will develop a new thematic, cross-domain, interdisciplinary science of digitalised daily life to support action on climate change.
- 2D4D – Disruptiv Digitalisation for Decarbonization - 2D4D aims to ensure that digital transformation will be an enabler for decarbonisation. The project will identify and measure the decarbonisation consequences of disruptive digitalisation technologies in three challenging sectors: additive manufacturing in industry, mobility-as-a-service in transportation, and AI in buildings.

Magazines, Platform and freely European accessible tools

- Horizon Magazine - An online magazine which collects the latest news and features about thought-provoking science and innovative research projects funded by the EU.
- European Circular Economy Stakeholder Platform - A joint initiative by the European Commission and the European Economic and Social Committee, the European Circular Economy Stakeholder Platform which brings together stakeholders active in the broad field of the circular economy in Europe.
- EU Circular Talks - A platform for stakeholder interaction and discussion on circular topics, in the form of online workshops, webinars or interviews with high-profile supporters and experts of the circular economy. Participants will also be invited to join the debate on our Linkedin Groups.
- Carbon Brief - An online platform sharing the latest developments in climate science, climate policy and energy policy to help improve the understanding on these topics.
- The Forum Network - An open platform for anyone to browse, read and share its content about the most pressing social and economic challenges confronting society.

Annex 3: CircEUlar Identity Handbook

The CircEUlar Identity Handbook aims to present:

- The CircEUlar logo and its use;
- Guidance on the fonts to be used;
- The EC rules for publications and specific applications in the CircEUlar project.

For more information:
http://circeular.org

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