Plan for the dissemination and exploitation including communication activities - final

Deliverable 7.10

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Control Sheet			
Version	**Date**	**Editor**	**Summary of Modifications**
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1	29/05/2025	Carla Silva, Teresa Silva	Submitted version of the report, with inputs from MAGELLAN CIRCLE and CITEVE

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List of Abbreviations

Acronyms	Description
ANI	*Agência Nacional de Inovação* (National Innovation Agency)
C&D	Communication and Dissemination
C&D&E	Communication, Dissemination, and Exploitation
CA	Consortium Agreement
CMS	Content Management Program
CMYK	Cyan, magenta, yellow, black (colour system)
CSS	Cascading Style Sheets
D	Deliverable
DoA	Description of Action
EC	European Commission
ETP	European Textile Platform
EU	European Union
EUBCE	European Biomass Conference and Exhibition
EVA	Ethyl Vinyl Acetate
GA	Grant Agreement
GDPR	General Data Protection Regulation
HADEA	European Health and Digital Executive Agency
HES	Higher or Secondary Education
HEX	Hexadecimal colour (colour system)
HTML	Hyper Text Markup Language
IAPRI	International Association of Packaging Research Institutes
IP	Intellectual Property
IPR	Intellectual Property Rights
KERs	Key Exploitable Results
KPIs	Key Performance Indicators
M	Month
MS	Microsoft
NCs	Nanocapsules
O	Objective
PE	Polyethylene
PES	Polyester
PET	Polyethylene terephthalate
PHA	Polyhydroxyalkanoate
PHP	PHP: Hypertext Preprocessor

Acronyms	Description
PP	Polypropylene
R&D	Research and Development
R&I	Research and Innovation
RCI	Renewable Carbon Initiative
RGB	Red, green, blue (colour system)
RIA	Research and Innovation Action
RRI	Responsible Research and Innovation
RTDs	Research and technology developer
SEO	Search Engine Optimisation
TRL	Technology Readiness Level
VC	Value chain
W2BC	**Waste2BioComp**
WP	Work Package

1. Introduction

The overall objective of WP7 - Dissemination, Communication, Training, Exploitation and Innovation Management - was to maximise the project's impact, by: ensuring effective communication and outreach of the project´s activities and results to the identified target groups; disseminating **Waste2BioComp** (**W2BC**) by raising awareness about the project's results and making them available to the multiple stakeholders; providing the tools and develop the skills needed for the implementation of biomaterial-based manufacturing activities (training); developing the project's exploitation strategy, realised by market analyses, benchmarking and technology watch, business models and business plans for commercialization. Related to this exploitation, the WP includes innovation management, which encompasses Intellectual Property Rights (IPR) management and Open Science matters.

Thus, the present document updates Deliverable D7.1 — Plan for the dissemination and exploitation including communication activities, and Deliverable D7.7 - Plan for the dissemination and exploitation including communication activities - intermediate, whose main aim was to draw up a communications and dissemination strategy for the project and its implementation, as well as define the exploitation strategy for the results of the project, as these are achieved. This document constitutes the final update and consolidation of the project's communication, dissemination, and exploitation (C&D&E) strategy, building on the initial framework outlined in D7.1 and incorporating all updates and outcomes up to Month 36.

D7.1, D7.7 and D7.10 were/are documents designed for the use of all consortium members involved in the **W2BC** project, designated as "public" regarding the dissemination level. The deliverables kept updated the Dissemination, Communication, and Exploitation strategies of the project, as well as identified in detail stakeholders, actions, tools, materials, guidelines, KPIs and procedures agreed.

The organisation of the activities described in the D7.1, D7.7 and D7.10 was performed in close cooperation with the consortium members. Technical results were published in journals and open-access platforms. In addition to electronic communication, other means of communication were used, such as on-site face-to-face communication, two-way remote communication, and audio/video.

In detail, this document consists of:

- A detailed communication strategy, including the conference and communication objectives, identification of target groups, and key messages;
- Project visual identity (includes logo, templates, etc.) with strong pictures and images that illustrate the theme and objectives of the project;
- Digital tools and channels such as the website, social media, videos, newsletters, etc.;
- Planning for the production of newsletters and other targeted mailings for press;
- Events and outreach strategy for project promotions to target groups;
- Responsibilities of the partners and measurable targets (KPIs) for the strategy.

D7.1 was modified according to the project's needs. The results of the strategies implemented were made visible every year through the updated version of deliverable D7.1 (M06, M24 – D7.7, and M36 – D7.10).

This updated document, Deliverable D7.10, provides a revised overview of the project's C&D&E strategy. The objective remains to maximise the project's impact by ensuring that its results reach the appropriate audiences and are effectively utilised. Concise updates have been integrated throughout the document to reflect the progress made since the project's inception. These updates cover key areas such as target audiences, key messages, digital marketing strategies, social media engagement, event participation, open access publications, and the timeline of communication and dissemination (C&D) activities. By incorporating these updates, the document ensures that all stakeholders are informed of the latest developments and aligned with the project's overall objectives and expected outcomes.

2. Summary of the Waste2BioComp Project

W2BC is a project funded under the Horizon Europe Programme of the European Commission (EC) with the aim of helping the European Union (EU) reach its 2050 target of climate neutrality by impacting and generating significant change in the manufacturing sector. Reduction of the latter pollution and waste and increase of its reprocessing potential is pivotal to achieve a true circular and sustainable economy. The replacement of fossil raw materials by bio-based ones is crucial for the green transition of the manufacturing industries. To lower the environmental impact to a greater degree, bio-based products should be easy to reuse and recycle. However, a transition from conventional materials to bio-based ones requires not only the development of new raw-materials (e.g., biopolymers), but also the adaptation or even implementation of new manufacturing routes for them. The textile, packaging and footwear sectors contribute in large-scale to the world pollution: 10 % of the global greenhouse gas emissions are caused by clothing and footwear production and, in 2018, the generated packaging waste in the EU was estimated at 174.1 kg per inhabitant. Petrochemical-based materials used in the textile, footwear and packaging sectors are a threat to the environment due to their non-biodegradable and non-renewable nature.

W2BC has identified polyhydroxyalkanoates (PHAs) as a versatile bio-based class of polymers, having potential to replace traditional materials with high environmental footprint, such as polyester (PES), polyethylene (PE), and polypropylene (PP), thus minimising the environmental impact and allowing a cradle-to-cradle design of products.

Specific R&I objectives:

O1. Development of application tailored biopolymers, precursors, and additives.

O2. Development of smart inkjet printing systems for bio-based inks deposition.

O3. Development of smart manufacturing processes for bio-based foams, films, composites, and textiles.

O4. Production of demonstrators for the textile, packaging and footwear value chains (VCs) and their validation.

O5. Re-manufacturing and recycling alternatives for the demonstrators.

O6. Toxicity and sustainability assessment: demonstrate that the new bio-based materials do not present any toxicity (including cytotoxicity) and are more sustainable than the existent petrochemical analogues.

O7. Dissemination, Communication, Training & Exploitation: develop training materials and 26 workshops, lectures, and training sessions, to support the creation of a skilled workforce in biomaterial-based manufacturing activities for the textile, footwear, and packaging VCs. Develop a business plan for each of these VCs with the **W2BC** new materials/products.

3. Communication and Dissemination Objectives

The main objectives of the communication plan are to lay out the overall strategy, by creating a clear and consistent message (why and what to communicate), that shall be spread among a target audience and through different communication channels (website, social media, newsletters, videos).

In short, the communication strategy aims to inform, promote, and communicate the project's activities and results by reaching out to its multiple audiences (citizens, the media, stakeholders) from the start of the project until the very end. Besides being a legal obligation under Article 38.1 of the Grant Agreement, communication is crucial to:

- Engage with stakeholders;
- Attract experts to the project;
- Generate market demand;
- Raise awareness of how public money is spent;
- Show the success of a European collaboration.

Complementary to the abovementioned, the aim of the dissemination strategy is to make the project's results public. Through its "open science" movement, knowledge and results will be made public and free of charge, not only to scientists but others that can learn from the results whether they are policymakers, civil society, sectors of interest and so forth. These results have been presented as soon as **W2BC** has had data to share, with the aim of:

- Maximise results' impact;
- Allow other researchers to go a step forward;
- Contribute to the advancement of the state of the art;
- Make scientific results a common good.

The main dissemination outputs of this project will be scientific papers, technical reports, project videos, social media publications, infographics, and training materials. These will be the cornerstone of the project's exploitation and dissemination strategy, as the industry can eventually turn these ideas into commercial products.

4. Communication and Dissemination Strategy

4.1. Target Audiences and Description

The identification of target audiences of the **W2BC** project is crucial to customise the messages and dissemination & communication activities. Each group of stakeholders has different points of interest and demands regarding the project. According to this strategy, messages must be shaped and delivered in an effective manner.

Dissemination & communication channels and activities described on this document were clearly focused on them and the messages were adapted.

The following audience and stakeholders of the sector (Table 1) were identified before the starting of the project, considered at the European, national, and regional levels. During its development, partners were asked to report about contacts, networking and activities established with these groups.

*Table 1 **W2BC** Target Groups and characterisation*

Target Group	Characterisation
Manufacturing industries in the three VCs	Manufacturing industries in the **footwear, textile and packaging VCs** are the clear end-users and potential early exploiters of the **W2BC** results, replicating them at a large-scale.
Players across the textile, packaging, and footwear VCs	**Chemical industry** (e.g., manufacturers of PHAs and PES); Developers of packaging, footwear, and textile applications. **Technology developers** (e.g., inkjet printing and automatization equipment); Companies chemically recycling PET and/or other PES into valuable polyols.
Players from other VCs	The **automotive and building & construction** VCs: for PHA-based foams or even for energy absorbing components (like bumpers) or soft foams in diverse parts (steering wheel); for the replacement of PET-barrier foils for house and roof insulations; wood plastic composites. **Producers of plastic furniture** and/or household articles, sports goods. **Pharma and cosmetic companies** (e.g., replacement of PP-microparticles in toothpastes by biodegradable PHA-micro-nanoparticles, application of nanocapsules (NCs) with bioactives in creams, biodegradable packaging for cosmetic goods).
Universities & Research Centres	**W2BC** applied research has been exploited in new knowledge generation resulting in publications and having a direct impact on **graduates and researchers** working on these developments. Research in the three demonstrated VCs, as well as in transposing these innovative applications to other industries. This project had also an interdisciplinary endeavour, which will open the door for the projects' results to be exploited on research in adjacent areas/subjects [e.g., **polymer chemistry, biochemistry, biotechnology, biomaterials, and medicine** (e.g., orthopaedics)].

Target Group	Characterisation
Workers & Students	Training in the project has been directed to students and mainly to upskilling the manufacturing industries' workforce in the footwear, packaging, and textile VCs, through lectures, seminars, and practicums. It has generated training materials to be used for training beyond the project's activities to interested workers and students.
Standardisation bodies on bio-based materials	The project's innovative approach will contribute to fill existing gaps in the standards and potentially will lead to new standardisation requirements for new materials/products.

Update (M24 & M36)

Since its inception, the **W2BC** project has strategically focused its communication efforts on key target audiences, leveraging the extensive network of contacts held by its partners. The primary audiences include manufacturing industries within the textile, packaging, and footwear value chains. These sectors have shown significant interest in adopting bio-based materials produced through the **W2BC** technologies, aiming to enhance sustainability and reduce environmental impact.

In parallel, **W2BC** has actively engaged with players across various VCs, including the chemical industry and technology developers, to foster innovation and collaboration. Academic institutions, such as universities and research centres, have played a vital role in the project's dissemination activities. Numerous research collaborations and scientific publications have contributed to the scientific community's understanding of bio-based materials. Training sessions and workshops have been conducted to advancing knowledge and validating the performance of **W2BC** bio-based materials.

To support skills development, training sessions and workshops were organised to educate workers, students, and industry professionals, ensuring a workforce well-equipped with the latest advancements in bio-based technologies. Moreover, **W2BC** has maintained dialogue with standardisation bodies, advocating for frameworks that facilitate the broader adoption of sustainable materials across EU industries.

As the project reaches its conclusion, this final deliverable highlights not only the execution of the C&D strategy but also the concrete impacts achieved. The project has successfully raised awareness, built capacity, and stimulated market interest in bio-based solutions. Looking forward, several exploitation pathways have been initiated through partner networks and ongoing collaborations, ensuring that **W2BC** innovations continue to deliver value beyond the project's duration. This enduring engagement supports the wider EU goal of transitioning toward a circular and bio-based economy.

4.2. Key Messages

The main purpose of any activities regarding C&D in a European project is to generate awareness to itself by informing citizens, media, authorities, industry, policy makers, and other relevant entities and individuals about its objectives and results. As such, the key messages that **W2BC** aims to promote and communicate will be the key areas of its impact and action.

On a macro-level, these have necessarily included the promotion of bio-based products (namely PHAs) as materials with high potential to replace more traditional, higher environmental footprint raw materials; the strategic approach of the textile, footwear, and packaging value chains to new and innovative, environmentally friendly solutions that promote the twin and green transitions; the progress in smart manufacturing in these sectors to increase productivity and contribute to the reduction of waste and CO_2 emissions.

It was then important to identify, at the level of each Work Package (WP) and, in some cases, of tasks, which were the main outputs to be disseminated. These were more technical and of more relevance to targets within each sector or in the scientific community but had also some translation to a broader audience. In each case, the partners looked to determine the key messages they wanted to communicate based on the progress of the project.

From the start of the project we already predicted some of the most important ones, or at least the ones which the consortium understood to be those that they strived for. They are summarized below.

Main Key Messages

- Bio-based products have the potential to replace traditional materials, with a positive environmental impact;
- The textile, footwear, and packaging VCs are building towards innovative solutions to address the twin and green transitions;
- Smart manufacturing processes are improving the efficiency, productivity and impact in waste and emissions in these sectors.

WP-specific Messages

- The potential of PHAs to replace traditional raw materials in these sectors is high (WP1, WP3 and WP4);
- Smart processes such as inkjet printing systems can aid the achievement of the twin and green transition objectives (WP2, WP3 and WP4);
- Circularity is possible by synergies within these VCs, and the re-manufacturing, recycling and repolymerization of the materials developed is a possible alternative, or at the very least these have the potential for lower environmental impact (WP5 and WP6);
- New and adjusted skills, as well as business plans and strategies, are needed for the industry to have the capacity to absorb these new concepts and processes (WP7).

Update (M24 & M36)

Throughout the project, **W2BC**'s key messages have consistently underscored the importance of sustainability, innovation, and the transition towards bio-based materials. These messages highlight the project's commitment to reducing environmental impact, promoting circular economy principles, and fostering technological advancements within the textile, packaging, and footwear industries. This messaging has been effectively communicated through newsletters, social media outreach, and public presentations, contributing to broad awareness and interest among stakeholders.

As the project has matured and more tangible outputs have emerged from individual work packages, **W2BC** has progressively refined its communication approach. The focus has shifted towards more targeted, work package-specific messaging, highlighting the unique contributions and breakthroughs of each component. This evolution ensured that stakeholders received clearer, more relevant insights into the project's multifaceted progress and supported the broader dissemination of technical achievements and practical applications.

By aligning messaging with the project's development stages, **W2BC** has maintained coherence while deepening engagement with its diverse audiences, laying a strong foundation for post-project communication and uptake.

4.3. Communication and Dissemination Channels and Activities

4.3.1. Communication and Dissemination Policy and Rules and Support of the EU

W2BC closely followed what is stipulated in Article 17 and Annex 5 of the Grant Agreement (GA), namely by:

- striving to promote the Project to multiple audiences in a public (except on IPR-conflict cases), coherent and effective manner;
- guaranteeing the visibility of EU funding, by ensuring the European flag and funding statement were/are present on the different C&D materials and activities;

- giving due notice internally when intending to disseminate any results, and in such cases where the consortium feels there's potential for broad media public reach, inform the granting authority.

Furthermore, this deliverable (together with the previous version D7.1 and D7.7) is the document that determined the C&D strategy, and as such has functioned as the repository for the duties of the partners, namely the WP7 leader, as well as kept track of any updates that could potentially affect the rules of Article 17 and Annex 5 of the Agreement.

4.3.2. Website

The **W2BC** website (available at www.waste2biocomp.eu) has served as the central hub for all project-related information and news, including the dissemination of the project results, updates and resources. Designed as a one-stop shop, the website has been regularly updated with content covering project objectives, milestones, partner activities, events, media materials, and training outputs.

Website objectives

- Increase projects recognition/visibility;
- Increase online exposure with a contemporaneous design compatible with mobile devices;
- Generate *leads;*
- Maximise the project impact within the Horizon Europe framework;
- Promote project and results transparency;

The website has been designed with a user-first approach, using visually compelling elements and strong messaging to engage visitors from first contact. A contemporary and intuitive layout guides users to key sections, such as News, Media, Training, Outputs, and Project Information, with minimal clicks, ensuring efficient navigation and access to relevant content.

Carried out using the WordPress® content management system (CMS), the website combines ease of maintenance with full customisability. It is optimised for smartphones and tablets and built using a mix of HTML, CSS, PHP, and JavaScript. Security is ensured through the integration of iThemes Security, protecting both the content and user data.

As the project concludes, the **W2BC** website stands as a lasting digital asset, supporting ongoing dissemination, knowledge transfer, and stakeholder access to project outcomes beyond the project's funded duration. It is ensured to stay online for five (5) years after the conclusion of the project, in line with the best practices and guaranteeing the permanence of project results and materials for a considerable duration.

4.3.3. Social Media Guidelines

MAGELLAN CIRCLE has overseen the management of **W2BC**'s official social media channels (X, LinkedIn, and YouTube), ensuring consistent visibility and public engagement across the platforms. These channels have been instrumental in disseminating project updates, promoting events, highlighting achievements, and engaging stakeholders across relevant sectors. To maximise outreach and engagement, all project partners have been encouraged to actively support the social media strategy by tagging the official **W2BC** accounts in relevant posts; retweeting and commenting on project-related content; and sharing and engaging with **W2BC** publications on LinkedIn.

In addition to external communication, internal collaboration has been facilitated through a dedicated MS365 SharePoint platform managed by CITEVE. This secure and centralised environment has supported seamless information exchange across the consortium, document storage and version control, and improved transparency and communication between partners.

Together, the strategic use of public social media channels and the internal SharePoint workspace has supported both external visibility and efficient project coordination, contributing to the overall success and impact of the **W2BC**'s communication strategy.

4.3.4. Communication Materials

MAGELLAN CIRCLE has carried out a comprehensive package of communication materials to support the consistent communication of the **W2BC** project across all platforms and stakeholder interactions. This package includes a general project presentation, promotional flyers and brochures, customisable Word and PowerPoint templates, roll-ups and visual display materials. These resources have been made available to all consortium members to ensure a unified visual identity and coherent messaging across external communications.

In terms of dissemination activities, individual partners were responsible for the creation of scientific and research publications and communications relevant to their specific areas of work. To ensure consistency, accuracy, and alignment with the overall project narrative, all dissemination materials were subject to internal review by consortium members.

This coordinated approach to C&D ensured both flexibility for individual partner contributions and coherence in how the **W2BC** project was presented to external audiences.

4.3.5. Reporting Events

Public seminars and conferences have proven to be highly effective tools within any C&D strategy. These events provide key opportunities for the consortium and the broader community to engage directly, share project results, and foster meaningful dialogue around emerging innovations.

In that sense, the **W2BC** project planned the organisation of the three main moments in which public presentations have been held: Kick-Off Conference, Midterm Conference, and Final Conference.

Each of these events was strategically timed to mark important project milestones and to facilitate engagement with various stakeholders. These conferences served multiple functions:

- Provide a platform for partners to present their work and developments in a clear and accessible format;
- Enable dialogue with diverse audiences, including scientific, civil society, and industrial actors;
- Share project achievements in an inclusive and understandable manner;
- Strengthen relationships and explore synergies with potential collaborators and stakeholders.

As physical events, these gatherings also played a critical role in facilitating networking and informal exchange, which are essential for raising awareness, building support, and identifying opportunities for future cooperation. Additionally, the consortium also participated in external events, during the entire duration of the project, to disseminate the **W2BC** and its results. Through these conferences, **W2BC** not only disseminated knowledge but also cultivated lasting connections that contribute to the sustainability and legacy of the project.

4.4. Waste2BioComp Visual Identity

The **W2BC** Brand Guidelines ensured that all communications were visually consistent, recognisable, and aligned with the project's identity. They served as a key reference for partners and collaborators, outlining how to use brand elements effectively across all platforms and materials.

4.4.1. Logo

The **W2BC** logo is the cornerstone of the project's visual identity. It is composed of two essential elements – the icon and the logotype – which must always appear together in their designated configuration (Figure 1). The project's Brand must never be altered, distorted, tilted, handled, or disassembled in any application. There must always be sufficient space surrounding the logotype to avoid competition with other elements and to maintain its visual impact. The recommended open space is relative to the logo size and is 1x the height of the circle starting from our icon.

Maintaining brand consistency helps build recognition and trust across all communication channels. By following these guidelines, all partners contribute to a cohesive project image that reinforces **W2BC**'s visibility and impact.

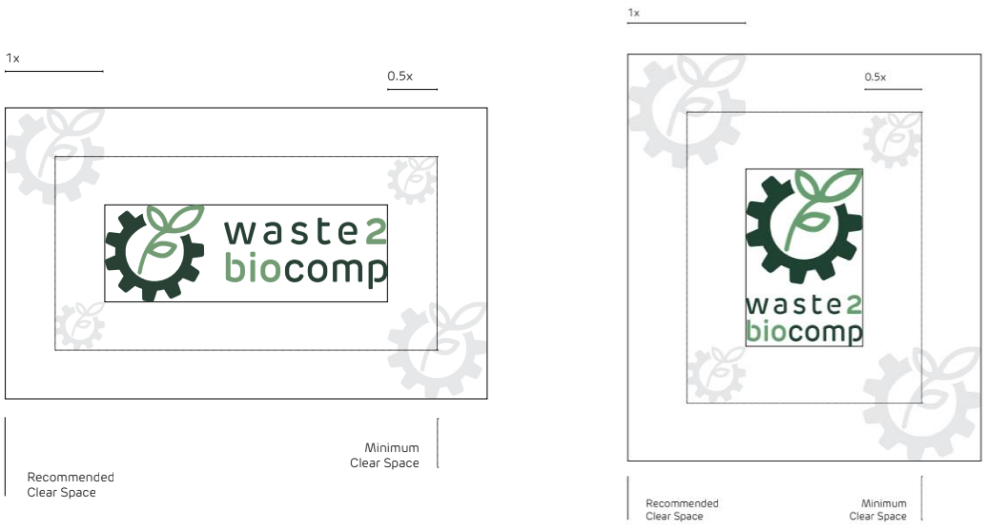

*Figure 1 **W2BC** Logo Spatial Awareness.*

LOGO VARIATIONS

These are the official versions of the **W2BC** logo (Figure 2). No other arrangement or colour is permitted. They are available in PDF format, compatible with Adobe® Illustrator®, for both print (CMYK) and digital (RGB).

*Figure 2 **W2BC** logo colour variations.*

The white (negative) version of the logo is intended for dark backgrounds. If the logo cannot be reproduced in colour, it should be used in the black or white version (Figure 3).

*Figure 3 **W2BC** logo negative version variations.*

ICON

The **W2BC** icon is recommend being used as a social media Avatar, Favicon for the Website, and as an App Icon. All combinations on Figure 4 are permitted. The selection of the icon should be made so that the most contrast to the background for optimal legibility is achieved.

Minimum Icon Size: 10 mm

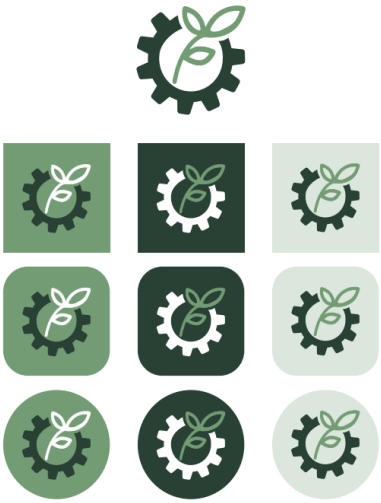

*Figure 4 **W2BC** icon variations.*

4.4.2. Templates

The following document templates were used with both internal and external audiences and were essential to ensure a uniform experience throughout the project.

Word

The word layout is suitable for short and long documents like reports and similar types of communications. There are two cover page designs – with a light and dark colour background (Figure 5). The cover page is followed by an optional contents page.

The document is the A4 Vertical [210x297mm] format and follows the typography and colour scheme enumerated below (section 4.4.3).

*Figure 5 **W2BC** Word template layout.*

PowerPoint

In what concerns the 16:9 aspect ratio presentation format, **W2BC** has a single PowerPoint® template which has been used across in all internal and external communications (Figure 6).

Similar to the word template, the PowerPoint follows the typography and colour scheme enumerated below (section 4.4.3) and is composed of two different cover page designs (with a light and dark colour background) from which the entity formatting the document must choose to work on.

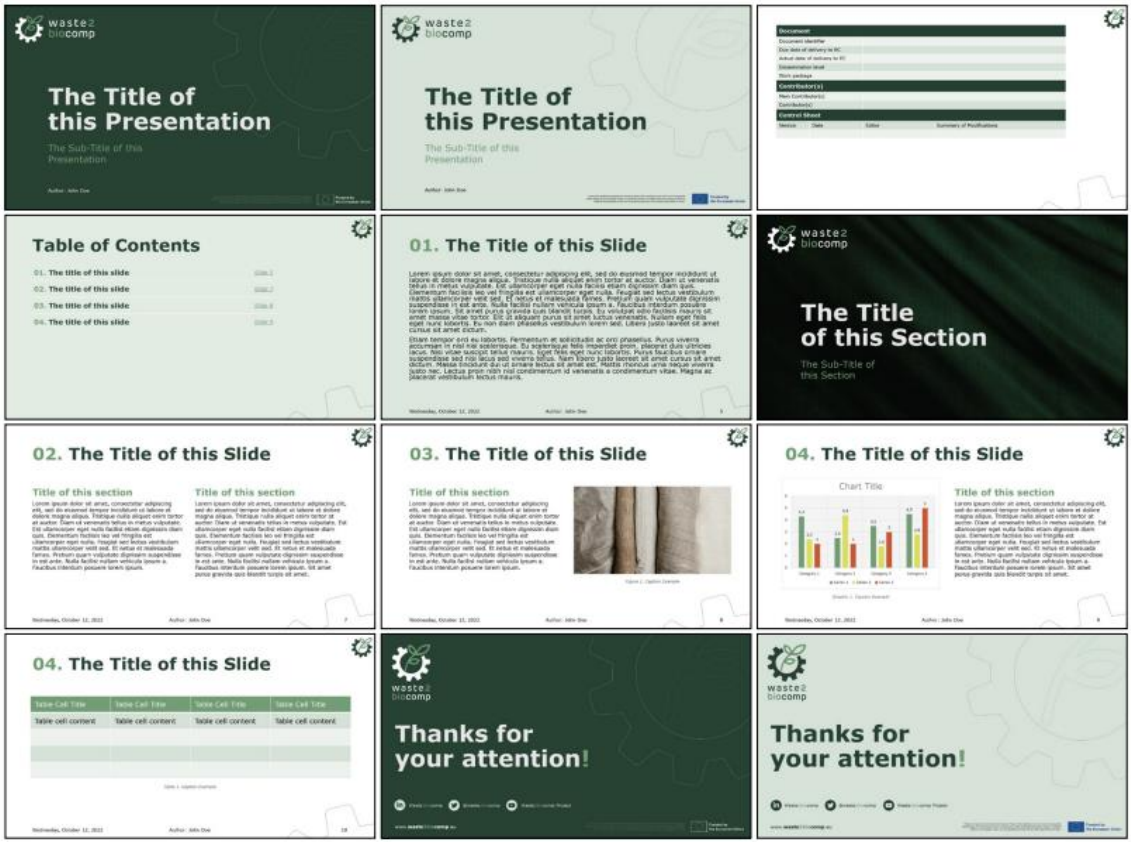

*Figure 6 **W2BC** Powerpoint template layout.*

Social Media Banners

As part of the project's visual communication strategy, a set of dedicated social media banners was created to ensure a strong, consistent first impression across digital platforms. These banners were designed to visually reflect the core values of the **W2BC** project, innovation, sustainability, and modernity, and to reinforce the project's overall brand identity.

The banners serve a dual role: capturing the attention of key target audiences through impactful visual design and enhancing brand recognition and reinforcing the **W2BC** identity across all online communication channels. Each banner was tailored to meet the specific format and technical requirements of the respective social media platforms – X, LinkedIn, and YouTube – ensuring optimal display and user engagement. Moreover, all banners prominently acknowledge the support and funding of the European Union, in full compliance with Horizon Europe communication obligations.

Below are representative examples of the social media banners designed for the **W2BC** project's three official channels.

Figure 7 X banner example.

Figure 8 LinkedIn page banner example.

Figure 9 LinkedIn cover page banner example.

Figure 10 YouTube banner example.

4.4.3. Colours and Font Guidelines

Colour is a key factor in ensuring rapid recognition of our brand, and it is therefore important that our brand colours are reproduced accurately. We have defined our colours with specific values for both print and digital. All documents, schemes, graphics, and so forth, should adhere to these specifications for all applications.

MAIN PALETTE

The primary palette consists of three colours. Dark Green is our main colour. It is used in the logo, and extensively throughout the visual identity, carrying the strongest brand recognition.

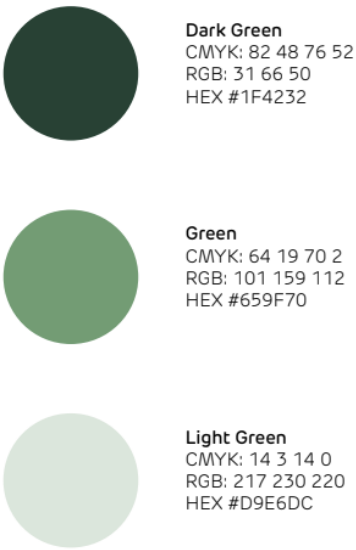

*Figure 11 **W2BC** Main Colour Palette.*

SECONDARY PALETTE

The secondary palette has been developed to complement our primary colours. It provides versatility in situations where many colours are needed, e.g., to create complex graphs and charts. This palette should be used only when the primary palette does not suffice.

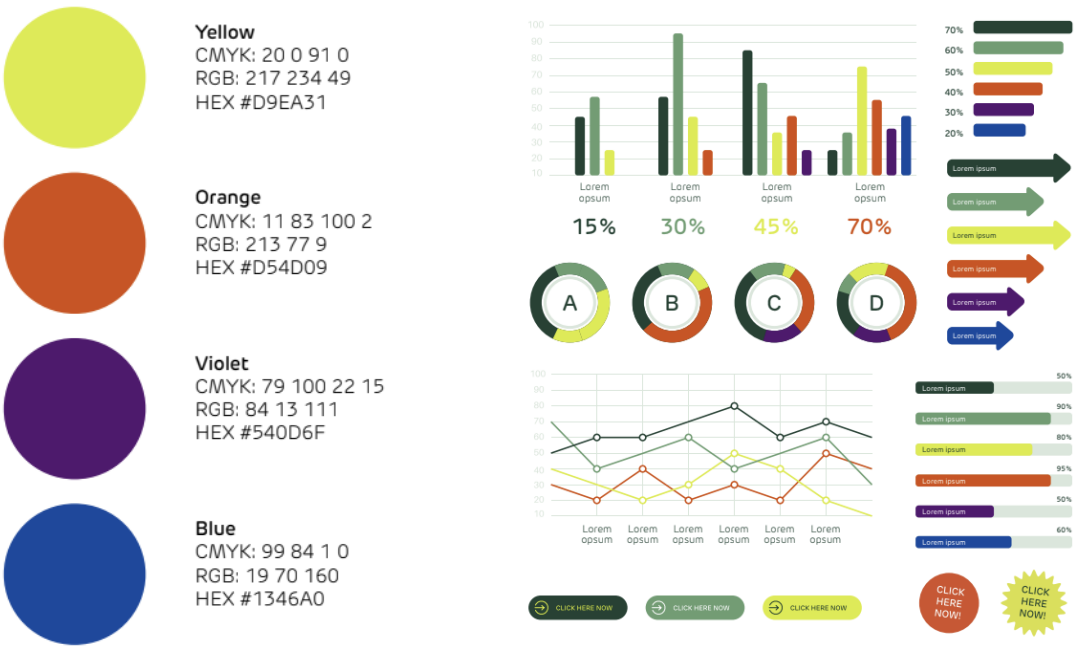

*Figure 12 **W2BC** Main Secondary Palette and examples of application.*

5. Communication Tools and Actions

5.1. Digital Marketing Strategy

To build visibility, engagement, and a sense of community around the **W2BC** project, a digital marketing strategy was established based on three core pillars:

1. Project Website (www.waste2biocomp.eu): The website serves as the primary digital hub, regularly updated with news, events, and project developments. It provides stakeholders with timely and accurate information on the project's progress;
2. Social Media and Newsletters: The project's social media platforms and newsletters play a key role in sharing updates, attracting website traffic, and engaging stakeholders. These channels facilitate two-way communication, allowing for community interaction and feedback;
3. Search Engine Optimisation (SEO): SEO techniques have been employed to improve the project's visibility on search engines like Google, enhancing discoverability and driving organic traffic to the website.

Update (M24)

The **W2BC** project team has initiated exploratory efforts into various digital marketing tools to enhance project visibility and stakeholder engagement. While a comprehensive digital marketing campaign has not yet been created, the foundational work has been laid out to identify the most effective platforms and strategies for future outreach. The primary reason for this phased approach is the team's assessment that the project has not yet generated content substantial enough to support specific, impactful digital campaigns.

Looking ahead, the **W2BC** team plans to launch a broader digital marketing campaign in the second half of 2024. This upcoming campaign will aim to capitalize on the project's accumulated outputs and milestones, providing a richer and more compelling narrative to share with the target audiences. The focus will be on highlighting significant achievements, research findings, and practical applications of the bio-based materials developed within the project. This strategy will ensure a more robust and engaging digital presence, aligning with the project's overall communication goals.

Update (M36)

As the **W2BC** project progressed and began generating concrete outputs, the C&D team expanded its digital marketing efforts, moving beyond exploratory planning into the implementation of targeted digital campaigns aimed at increasing engagement and visibility.

Several digital campaigns were successfully executed, including:

- "Meet the Speakers" Campaigns for both the Midterm and Final Conferences, designed to introduce key voices and raise interest in events. These campaigns helped build momentum and participation across the **W2BC** community;
- A paid content push was activated for the Final Conference, boosting the reach of promotional materials to targeted stakeholders through sponsored posts on social media platforms;
- The "Meet the Ambassadors" Campaign, which featured influential figures from the packaging, footwear, and textile sectors. These ambassadors helped promote the **W2BC** project's achievements, innovations, and sustainability efforts through short video interviews, serving as key voices in amplifying the project's impact across their respective industries. A dedicated section on the **W2BC** website showcases each ambassador with their photo, name, company affiliation, and a personal statement highlighting the importance of the **W2BC** initiative and the broader role of EU-funded projects in advancing sustainable innovation;
- A project video campaign was launched to highlight **W2BC**'s concrete results and innovations. This video showcased applications across the project key sectors (packaging, textiles, footwear, and inkjet printing), offering a compelling visual summary of the project's impact.

These digital activities marked a strategic shift in the project's communication approach, from preparatory groundwork to active dissemination, leveraging both organic and paid media to amplify **W2BC**'s messages. These campaigns provided a tested foundation for future digital engagement and

knowledge transfer, particularly during the final dissemination phase and beyond the project's lifetime.

5.1.1. Website

The **W2BC** website (available at www.waste2biocomp.eu) served as a central C&D hub, providing comprehensive access to project-related information and resources. Carried out in accordance with the European Commission's visibility and communication guidelines, the website is continuously updated to reflect the project's progress and outputs.

The website includes the following content:

- General information about the project;
- Description of all **W2BC** consortium partners;
- Overview of project objectives and work packages;
- Training section hosting capacity-building materials developed during the project;
- Outputs section where public deliverables, scientific publications, and key findings are shared;
- News & Events section covering relevant developments and **W2BC** participation in external events;
- Media Room containing newsletters, press material, and other communication tools;
- BIOMATTERS section, which presents the BIOMATTERS cluster composed of **W2BC** and its five sister projects, along with a description of the cluster's shared objectives and collaborative goals;
- Contact information and legal disclaimers in compliance with Horizon Europe requirements;
- Direct links to all **W2BC** social media channels.

Hosting and Maintenance

The ongoing maintenance of the **W2BC** website, ensuring the site remains functional, secure, and up to date, is primarily handled by MAGELLAN CIRCLE. For advanced technical maintenance and hosting services, the project collaborates with Boutik Studio, an award-winning creative agency with extensive expertise in branding, design, and web development. This partnership ensures the platform remains modern, secure, and aligned with best practices in web management.

Update (M24 & M36)

Since its launch, the **W2BC** website has been systematically updated to mirror the project's evolution and expand its content offering. These updates enhance both user engagement and the website's role as a core dissemination tool. Key Updates Include:

- Integration of the BIOMATTERS Cluster Page: This section presents the BIOMATTERS cluster composed of **W2BC** and its five sister projects, along with a description of the cluster's shared objectives and collaborative goals;
- Expanded "News & Events" Section: Regularly updated with the project's participation in high-profile events such as Techtextil Forum 2024 and Hannover Messe 2023, this section helps demonstrate **W2BC**'s visibility and involvement in key industry dialogues;
- "Newsletters" Archive: A dedicated area where stakeholders can access all **W2BC** newsletters, providing periodic updates on milestones, project activities, and upcoming initiatives;
- Ambassadors Section: A visually engaging space that showcases **W2BC**'s ambassadors with photos, company details, and statements on the significance of **W2BC** and EU funding for sustainable innovation. This feature supports both outreach and credibility among sectoral stakeholders.

These enhancements were part of the broader digital communication strategy and were implemented to ensure the website effectively reflected the project's progress and outcomes. As the project concludes, the website stands as a central, lasting resource for the **W2BC** community and stakeholders, featuring rich content such as video summaries, newsletters, event highlights, and project outputs. It will continue to serve as a reference point for the results and impact of **W2BC** beyond the project's lifetime (5 years).

5.1.2. Newsletter and Mailings

Newsletters and mass emails are among the most effective digital tools to reach targeted audiences directly. This channel has proven especially valuable for a new project like **W2BC**, where, in the early stages, it often served as the primary means through which consortium partners could engage their networks.

From the outset, partners leveraged their existing mailing lists (always in full compliance with GDPR) to disseminate the first issues of the **W2BC** newsletter. This strategy allowed the project to begin building a dedicated audience. Over time, this audience was expanded and strengthened through additional communication efforts, including social media, event participation, and dissemination of materials.

The **W2BC** bi-annual newsletter served as a central communication tool, designed to share the latest project updates with stakeholders. Each issue included news highlights, project milestones, links to relevant resources, and calls to action – all presented in a concise and accessible format. Initial editions were distributed via partners' networks, while later editions benefited from the growing project-specific subscriber base.

In addition to regular newsletters, targeted email campaigns were deployed for specific purposes, such as promoting events, training sessions or disseminating key results. These were used selectively, ensuring relevance, avoiding audience fatigue, and always respecting GDPR compliance. To support these efforts, dedicated project email accounts were created for managing newsletters and outreach campaigns, alongside the establishment of **W2BC**´s social media channels.

*Table 2 Schedule of **W2BC** Newsletters*

Edition	Month
1st Newsletter	M07 (December 2022)
2nd Newsletter	M12 (May 2023)
3rd Newsletter	M19 (December 2023)
4th Newsletter	M24 (May 2024)
5th Newsletter	M31 (December 2024)
6th Newsletter	M36 (May 2025)

Update (M24 & M36)

Throughout the project's duration, newsletters were published consistently and in line with the established schedule. The final edition was published in May 2025, marking the conclusion of communication efforts during the active phase of the project. All editions are publicly accessible via the Media Room section of the **W2BC** website: https://waste2biocomp.eu/mediaroom/ (Figure 13.

Each issue followed a clear, structured format, with varying themes and highlights tailored to project developments at the time. Prior to each release, partners were invited to contribute updates from their work packages or relevant events, ensuring broad representation across the consortium.

The newsletter series played a key role in stakeholder engagement, enhancing the visibility of **W2BC**'s progress and results across sectors, and will remain available online as a reference for future initiatives and interested stakeholders.

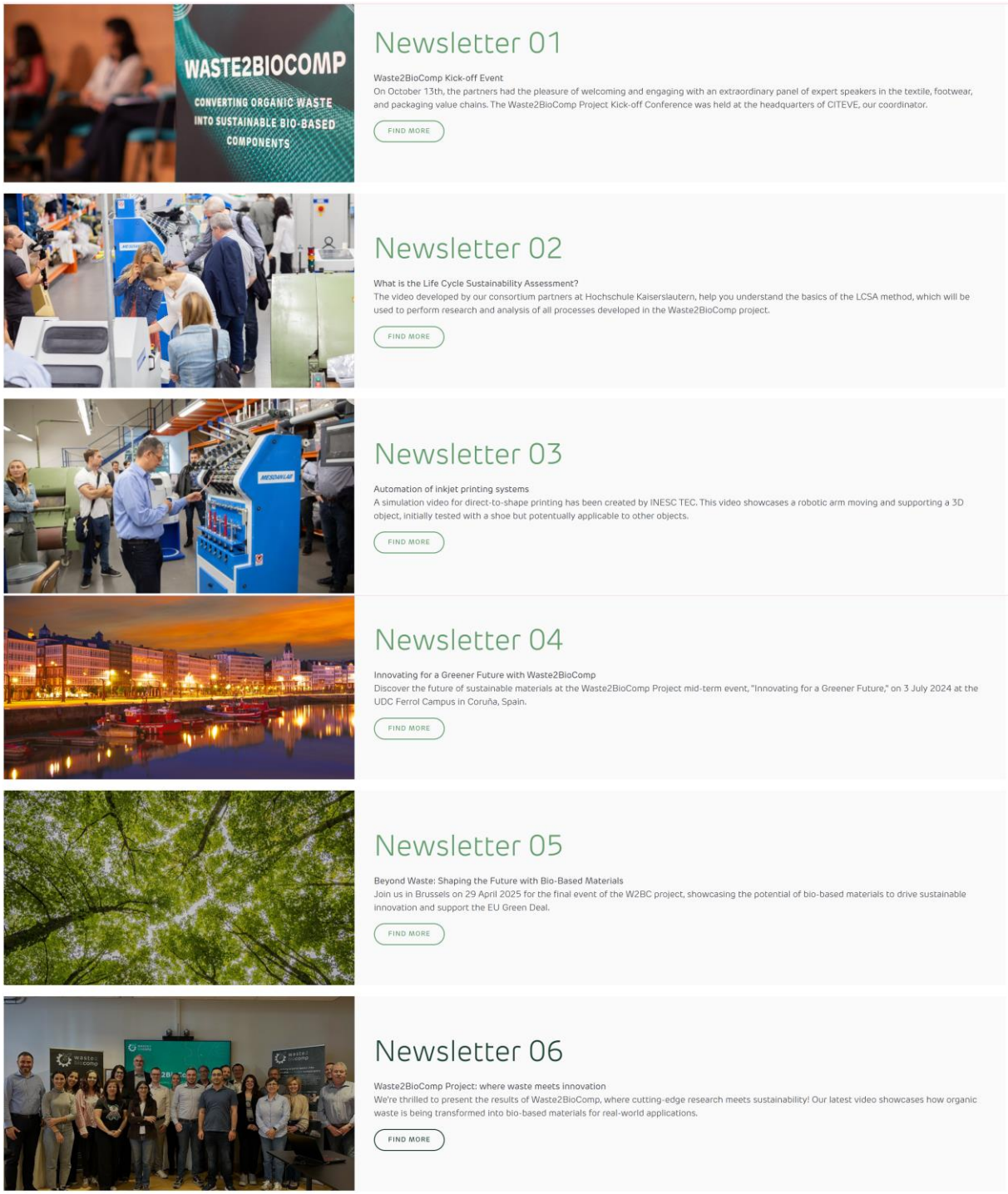

*Figure 13 Newsletter repository in **W2BC** 's website.*

5.2. Social Media Channels

The creation of **W2BC** social media channels has increased the visibility and impact of the results attained in the project as well as constituted a community which facilitated the interaction between the **W2BC** and its different audiences. **W2BC** social media channels are aimed at informing, promoting, and communicating the project's activities and results.

For that effect three social media accounts were created and are currently set and updated regularly:

- **X:** https://x.com/waste2biocomp
- **LinkedIn:** https://www.linkedin.com/company/waste2biocomp/
- **Youtube** (Audio-visual content): https://www.youtube.com/channel/UCVJI5rrE7QBnHCjzQCWNpIQ

MAGELLAN CIRCLE leads this task with the support of all partners in the consortium to ensure accurate and transparent communication (for its multiple audiences) and dissemination (for its specialist audiences). Additionally, recommendations and requirements for social media on EU funded Research and Innovation Action (RIA) projects were taken in consideration.

X

X is used to establish meaningful relationships with relevant audiences such as the EC, policy makers, stakeholders, civil society and so forth. Moreover, the platform will be a propeller of the "community" referred previously by rightly communicating the **W2BC** ethos and providing, then again, a transparent means of communication where audiences can closely follow the project's current endeavours.

The page is located at:

https://x.com/waste2biocomp

Hashtag: #Waste2BioComp

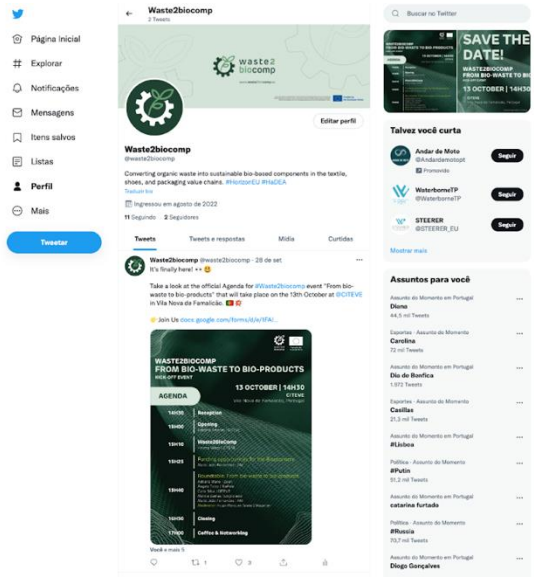

*Figure 14 **W2BC** X page.*

LinkedIn

LinkedIn already was the most obvious platform to place **W2BC** and develop a network of connections to raise awareness for the Project, and in recent times it has become more and more effective at its purpose, by allowing meaningful, efficient, and targeted connections and interactions, as well as different options that allow an entity or individual to reach its goals.

It has thus been another one of the main channels of **W2BC**, where every communication, news, media content or updates generated by the Project and/or its partners has been posted.

The page is located at:

https://www.linkedin.com/company/waste2biocomp/

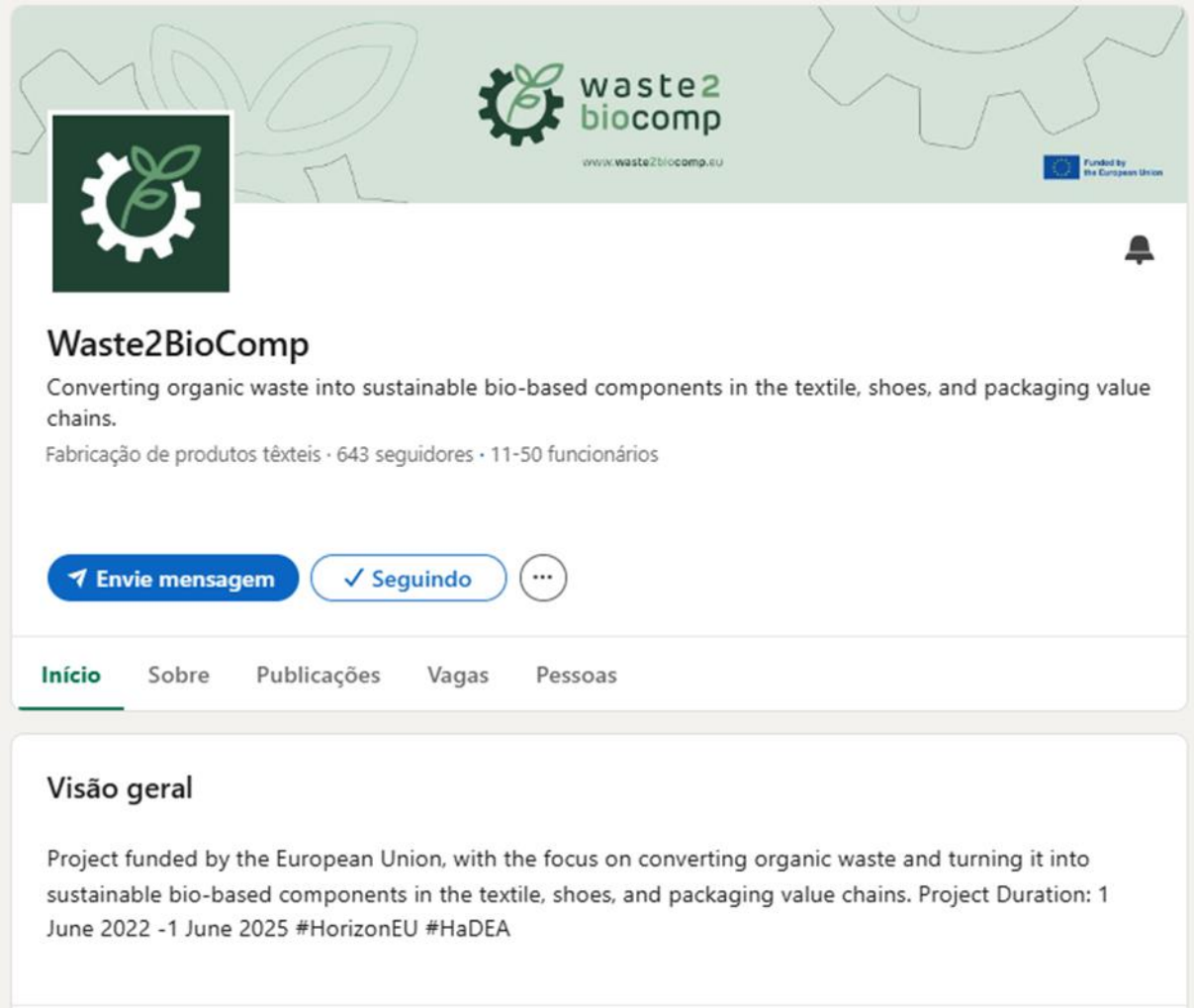

*Figure 15 **W2BC** LinkedIn page.*

YouTube

A YouTube account was created to serve as an audio-visual content repository for the videos and/or animations produced during the project's lifespan. With the creation of the latter, the **W2BC** benefits from a creative and easy method of sharing information to a larger audience in a short time. Furthermore, YouTube has also helped increase **W2BC**'s SEO through the use of backlinks. Backlinks have been created by adding the project's website link onto the YouTube profile page and within the description of each video posted on the channel. Consequently, it is expected an organic increase in traffic directed towards the project website.

The page is located at:

YouTube Link: https://www.youtube.com/channel/UCVJI5rrE7QBnHCjzQCWNpIQ

Hashtag: #Waste2BioComp

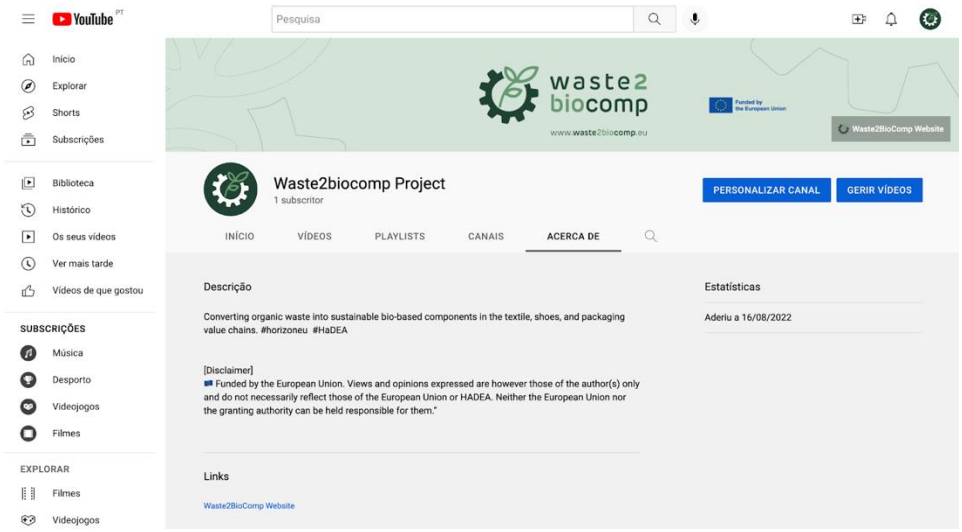

*Figure 16 **W2BC** YouTube Channel page.*

Social Media Management Tools

To streamline the coordination and publication of content across **W2BC**'s social media channels, the consortium aimed to adopt a social media aggregator tool. These tools help simplify campaign scheduling, maintain consistency across platforms, and optimise resource use.

Among the considered options, Loomly was identified as a strong candidate. The leader of WP7 had previously used Loomly in similar EU-funded projects and found it particularly effective. The platform enables centralised management of different social media channels, allowing for the creation of unified campaigns with shared copy and visual assets across platforms. At the start of the project, Loomly was set as the preferred tool, with flexibility left open for adjustments depending on the evolving needs of the project or the availability of other tools offering more suitable functionalities.

Update (M24 & M36)

Throughout the project, **W2BC** maintained a consistent and dynamic presence across X, LinkedIn, and YouTube, with content tailored to each platform's format and audience. The project successfully utilized tools such as Loomly to manage and schedule content, ensuring cohesion and efficiency in communications.

We have regularly posted updates about the project's milestones, events, and significant achievements. These posts have included insights from conferences, such as the Techtextil Forum 2024 and Hannover Messe 2023, where project advancements were showcased. Additionally, we have shared news about our collaborations and the latest development, reinforcing our commitment to sustainability and innovation.

The social media strategy focused on key project developments and moments, including coverage of major events, updates on work package progress, and dissemination of key results. Campaigns such as "Meet the Ambassadors" and project milestones further reinforced **W2BC**'s commitment to sustainability, bio-based innovation, and cross-sector collaboration.

Figure 17 X (Twitter) post.

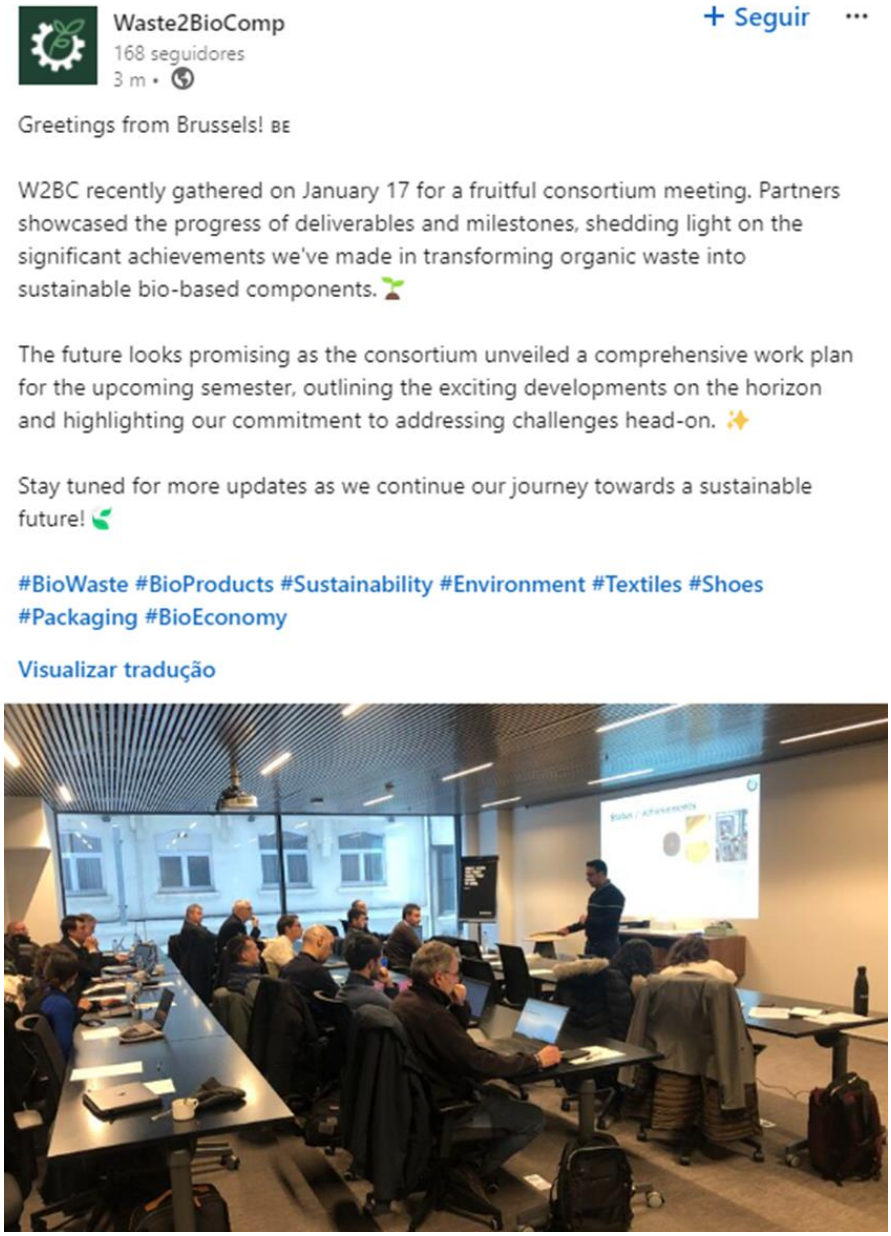

Figure 18 Linkedin Post.

In the final year of the project, from May 2024 to May 2025, the **W2BC** LinkedIn page demonstrated strong performance, reflecting the success of its targeted communication efforts. During this period, the page recorded 154,579 impressions, 2,837 reactions, 1,594 page views, and gained 476 new followers. These figures highlight the project's growing reach and sustained engagement with a diverse professional audience, reinforcing the effectiveness of social media as a key pillar of **W2BC**'s dissemination strategy.

Overall, social media played a crucial role in expanding the project's visibility, engaging stakeholders across industries, and amplifying **W2BC**'s impact within and beyond the European research and innovation ecosystem. All posts and associated media will remain available as part of the project's digital legacy.

5.2.1. Digital Campaigns

In addition to organic social media activity, the consortium identified the importance of leveraging targeted paid campaigns to maximise the reach and impact of the C&D strategy. These campaigns were planned to be most effective once key **W2BC** demonstrators were operational, providing tangible outputs to showcase.

Given the rapidly evolving landscape of social media advertising, it was essential to remain flexible and continuously assess the most effective tools and approaches. The primary platforms considered for paid campaigns included X Ads (such as Promoted Tweets, Follower campaigns, or Trend Takeovers), LinkedIn Ads (Dynamic Ads, Sponsored Messaging), and potentially YouTube Ads, aligned with where **W2BC** maintained an active online presence. Additionally, Google Ads was considered for its broad reach and cost-efficiency potential, depending on partner input and budget allocation.

Partners recognised the inherent risks of paid campaigns not delivering expected returns, highlighting the importance of leveraging WP7 leadership's prior experience and expertise. To optimise campaign effectiveness, there was also consideration for using consolidated advertising platforms that integrate multiple ad services for streamlined management.

Update (M36)

As mentioned above, the **W2BC** project progressed and began generating concrete outputs, the communication team strategically transitioned from exploratory planning to the implementation of impactful digital campaigns. These efforts aimed to significantly boost engagement, visibility, and stakeholder involvement during the project's most critical phases.

Several targeted digital campaigns were successfully executed, including:

- "Meet the Speakers" Campaigns for both the Midterm and Final Conferences, designed to introduce key voices and generate anticipation and engagement. These campaigns contributed to increased participation and helped position the events as central moments for stakeholder interaction and knowledge sharing;
- A paid content push was activated for the Final Conference, with LinkedIn Ads used to promote sponsored posts targeting stakeholders from relevant sectors. This expanded the campaign's reach and ensured that promotional content effectively reached its intended audiences;
- The "Meet the Ambassadors" Campaign featured respected figures from the packaging, footwear, and textile industries. Through short video interviews, these ambassadors promoted **W2BC** 's achievements, innovation potential, and sustainability focus. A dedicated section of the W2BC website presents each ambassador's photo, name, company affiliation, and a personal statement on the importance of the **W2BC** initiative and the broader impact of EU-funded projects in driving sustainable transformation;
- A project video campaign was launched to showcase **W2BC**'s results and innovations. This video highlighted practical applications in packaging, textiles, footwear, and inkjet printing, offering a compelling, accessible summary of the project's outcomes and relevance to industry.

These digital activities marked a significant evolution in **W2BC**'s C&D strategy, moving from foundational groundwork to a robust, multi-channel approach leveraging both organic and paid media. The success of these campaigns laid a tested foundation for future digital engagement and knowledge transfer, supporting the project's final dissemination phase and ensuring that its impact extends beyond the project's lifetime.

5.3. Printed Materials

As outlined in Section 4, the **W2BC** project was expected to produce the following printed materials: two (2) project roll-ups and six hundred (600) flyers. These materials serve as multi-purpose assets to promote the project, showcase consortium partners and EU support, and generate interest in its outcomes.

Project roll-ups were designed to communicate the **W2BC** brand and mission, providing a strong visual impact in public spaces and events. They deliver a clear, consistent message to target audiences while visually reinforcing the project's identity.

Project flyers, with their concise and visually engaging format, support the same communication goals. They provide stakeholders with a quick, accessible overview of the project's purpose, activities, and expected results.

Update (M24)

The project has successfully produced a general roll-up (Figure 20, left) and a digital version of the project flyer (Figure 19, left) and poster (Figure 19, right), which have been widely used by partners during public presentations and events to visually communicate the **W2BC** project's mission and core elements.

Figure 19 Project flyer (left) & poster (right).

Update (M36)

A second roll-up was designed and produced to focus specifically on the project's results, highlighting the innovations achieved across key value chains – packaging, textiles, and footwear – as well as the transversal inkjet printing activities (Figure 20, right). This result-focused roll-up provides a more technical and outcome-driven visual narrative, supporting targeted dissemination efforts and reinforcing the project's visibility and impact among stakeholders and industry audiences.

The **W2BC** project was expected to produce six hundred (600) flyers to support general C&D activities. However, in line with the project's emphasis on sustainability and digital outreach, the consortium chose not to proceed with the full-scale printing of flyers. Instead, efforts were concentrated on digital communication tools, which allowed for more environmentally conscious dissemination and broader reach. Project materials were made available through online channels, including downloadable PDFs, social media content, and the website, ensuring accessibility without the environmental footprint associated with large-scale print distribution.

Figure 20 Project roll-ups.

5.4. Standard Project Presentation

A standard project presentation in PowerPoint (.pptx) format was created to ensure a consistent and professional visual identity across all internal and external presentations delivered by the **W2BC** consortium partners. The template aligns with the overall **W2BC** brand guidelines, maintaining visual coherence with other communication materials such as flyers, roll-ups, and social media assets. This ensures that all presentations – whether at events, meetings, or public engagements – reflect a unified and recognisable project image. In Figure 21 is an example slide from the presentation template.

*Figure 21 Example of the cover slide of the standard **W2BC** presentation.*

More than just a useful tool, this presentation template is mandatory for all partner presentations conducted within the scope of the **W2BC** project. It serves to standardise communication, ensuring a cohesive visual and informational identity across all C&D activities. Additionally, it complies with EU requirements, such as the correct placement of logos and acknowledgements, and aligns with the stipulations set out in the Consortium Agreement. This guarantees that all project-related presentations adhere to the necessary branding and procedural guidelines, reinforcing both the credibility and visibility of **W2BC**.

5.5. Videos

Video content has been developed as a strategic communication tool to enhance project awareness and convey the **W2BC** message in an accessible, engaging format tailored to a wide audience. In addition to boosting accessibility, video content also supports the project's SEO efforts, as platforms like Google prioritise video content, particularly from YouTube, in search results. All video materials are primarily published on the **W2BC** YouTube channel but may also be shared across the project's social media channels and website whenever relevant.

An initial project video was produced and published during the early stages of the project, covering the kick-off event: "*Waste2BioComp: From Bio-Waste to Bio-Products*", which can be found here.

Update (M24)

A new video titled "Life Cycle Sustainability Assessment: What Is It and What Are Its Challenges?", which can be found here, was produced to explain the concept and complexity of sustainability assessments in the context of bio-based materials.

Update (M36)

As the project reached its final phase, several key videos were produced to maximise the impact of **W2BC** 's dissemination efforts:

- Project results video: This video illustrates how organic waste is being transformed into bio-based materials for real-world applications. It features concrete examples from the sectors of compostable packaging, sustainable footwear, textiles, and inkjet printing, emphasising **W2BC**'s contribution to a circular economy.

- Final Conference highlights: A dynamic recap of the Final Conference, capturing keynote speeches, interactive roundtable discussions, the BIOMATTERS Corner, and live demonstrations of the project's outcomes. The video offers an inspiring snapshot of the project's culmination and its collaborative spirit.

- Inkjet Printing automation simulation video: A technical video simulating the automation of inkjet printing systems, which are a transversal component of the **W2BC** project. This video visually explains the integration of these systems into industrial processes.

- Training Sessions: Several recorded training sessions were produced on relevant topics such as Life Cycle Assessment (LCA), alternative fibres, and End-of-Life alternatives. These serve as valuable educational resources for stakeholders and future projects.

- Ambassador Interviews: A series of short video interviews with five (5) **W2BC** Ambassadors from the packaging, textile, and footwear sectors. These ambassadors shared personal insights on the importance of the project and the broader value of EU-funded sustainability initiatives.

All videos are hosted on the project's YouTube channel, embedded in the **W2BC** website, and promoted through social media campaigns, amplifying reach and visibility across digital platforms.

5.6. Media Relations

In addition to the targeted outreach to scientific journals and industry-specific media outlined in section 5.7, it is essential for a project of **W2BC**'s scope and societal relevance to also establish and maintain a presence in general media outlets, particularly in digital formats.

To this end, the C&D team has actively monitored and identified relevant online publications and mainstream media platforms that could serve as valuable channels for sharing project updates, breakthroughs, and outcomes with the broader public. While individual partners may leverage existing media contacts, it has also been a strategic objective for **W2BC**, as a standalone initiative, to cultivate its relationships with journalists and editorial teams across Europe.

Proactive engagement efforts included:

- Issuing press releases and distributing them to media lists tailored to key project milestones;
- Inviting press and media representatives to major events such as the Midterm Conference and the Final Conference;
- Providing accessible materials (e.g., visual assets, short project summaries, quotes) to facilitate coverage;
- Prioritising online news platforms, while remaining open to opportunities across broadcast and print media.

5.7. Events

Events have played a crucial role in the **W2BC** C&D strategy, providing invaluable opportunities for direct engagement with stakeholders across research, industry, and policy sectors. Trade fairs, industry-specific conferences, and broader innovation forums have allowed the project to present its findings in environments where audiences are primed for innovation and collaboration.

From the outset, partners were encouraged to attend events in their respective sectors to raise awareness about the project's aims and share updates on technical developments. Physical communication tools such as roll-ups and flyers have been used strategically at these events, along with demonstrators and publications, to reinforce **W2BC** 's messages.

Therefore, the consortium has actively participated in numerous events to disseminate its findings and engage with industry stakeholders. Notable events include the Techtextil Forum 2024, where the project team presented innovative results related to bio-based pigment inks for digital textile printing applications. This forum provided an excellent opportunity to showcase the project's advancements and foster discussions with experts in the field. Additionally, the **W2BC** project made a significant impact at Hannover Messe 2023. Participation in this prestigious industrial fair allowed the project team to communicate their progress on bio-based and biodegradable polymer materials to a broader audience. These events, along with various consortium meetings and other industry conferences, have been instrumental in promoting the project's objectives and forging valuable partnerships within the bio-based materials sector. We were also present in the iTechStyle Summit 2023 and 2024 editions (an international conference on the textiles and clothing), in the IAPRI Conference 2024, and the Bio-MATTERS cluster event "Circular value chains for Bio-Based products: the BIO-MATTERS cluster" inserted in EUBCE conference in June 2024.

Building on the consortium's ongoing engagement with industry and research stakeholders, the **W2BC** project successfully organised one vent at the start of the project to effectively communicate its goals, and two major events in the final phase to disseminate results and foster collaboration.

Kick-Off Conference – "Waste2BioComp"

13 October 2022, CITEVE, Vila Nova de Famalicão, Portugal

The **W2BC** project officially launched with a Kick-off Conference that brought together project partners, industry players, and public stakeholders to introduce the project's vision and objectives. Key moments included:

- Project Presentation, where the **W2BC** concept, work plan, and value chain approach were shared with attendees, setting the foundation for collaboration and stakeholder engagement;
- A session on Funding Opportunities for the Bioeconomy, delivered by ANI (National Innovation Agency – Portugal), which provided valuable insights into national and European funding instruments supporting bio-based innovation;
- A roundtable discussion, titled "From Bio-Waste to Bio-Products", featuring speakers from RIOPELE, CITEVE, Logoplaste, and ANI. The discussion highlighted the challenges and opportunities in converting bio-waste into high-value bio-based materials across different industrial sectors.

This inaugural event was a strong starting point for **W2BC**'s dissemination and engagement strategy, establishing early connections with relevant actors and reinforcing the project's alignment with the EU's circular economy and bioeconomy goals.

*Figure 22 **W2BC** Kick-off Conference (Portugal).*

Midterm Conference – "Innovating for a Greener Future"

3 July 2024, UDC Ferrol Campus, Spain

This pivotal event brought together researchers and industry stakeholders to assess the project's progress at its halfway mark. Key highlights included:

- A technical session titled "R&D on Biopolyesters in **W2BC**", featuring presentations from the project partners, HSKL, UDC, CITEVE, PROPAGROUP, and IVW. These showcased cutting-edge research and development in bio-based material innovation;
- An industry-focused session, "Biopolymers from R&D to Industry", with contributions from ADBioplastics, KOD Bio, Coltec, and CETIM, emphasising the transition from laboratory research to scalable, real-world applications;
- An exhibition area, which allowed attendees to interact with demonstrators and explore materials developed under **W2BC**, offering tangible insights into the project's impact.

*Figure 23 **W2BC** Midterm Conference (Spain).*

Final Conference – "Beyond Waste: Shaping the Future with Bio-Based Materials"

29 April 2025, L42 Business Center in Brussels, Belgium

Organised jointly with the BIOMATTERS Cluster, this high-level event served as the culmination of the **W2BC** project and brought together:

- EU policymakers, researchers, industrial leaders, and project partners to reflect on **W2BC**'s achievements and explore future pathways for bio-based innovation;
- A keynote address by Werner Bosmans (DG Environment) focusing on EU circular economy policies and strategies;
- Presentations across **W2BC**'s value chains: packaging, footwear, textiles, and inkjet printing, highlighting technological breakthroughs and environmental benefits;
- A global perspective on the bioeconomy presented by Jukka Kantola (World BioEconomy Forum), followed by an engaging panel discussion led by Simone Maccaferri (CBE JU), joined by Silvia Maltagliati (DG RTD), Lutz Walter (Textile ETP), Rick Passenier (GO!PHA), and Željko Pazin (EFFRA);
- The BIOMATTERS Corner, a hands-on exhibition space where each of the Cluster's projects, BIO-UPTAKE, AMBIANCE, GREEN-LOOP, NEW WAVE, VITAL, and **W2BC**, showcased real-world applications of their research.

This conference not only celebrated the conclusion of **W2BC** but also reinforced the project's role as a driver of sustainable innovation in the EU bioeconomy landscape.

*Figure 24 **W2BC** Final Conference (Brussels).*

In addition to these key moments, the consortium partners collectively attended thirty (30) external events across Europe and internationally. These participations served to promote the project, share knowledge, and strengthen networks within the bioeconomy, materials science, and sustainability sectors, ensuring widespread visibility and uptake of **W2BC**'s innovations.

5.8. Open Access and Journals

The **W2BC** project has developed a significant amount of research results which have been disseminated to different key scientific communities in the three value chains.

The consortium has adopted a new approach to the scientific process, extending the principles of openness to the whole research cycle, by fostering a cooperative work and sharing of results, both between partners & with the public community, as early as possible, thus allowing a faster diffusion, adoption & commercialisation of then Research and Innovation (R&I) results.

The **W2BC** consortium has been granting Open Access to scientific papers published in open-access journals (Gold Access), and on the Open Research Europe platform. All these scientific publications, as also technical reports (that after IP analysis are not deemed as confidential, for which access will be granted only for authorised project participants) will also be made available through public repositories such as Research Gate, PubMed, Open Access Infrastructure for Research in Europe, Registry of Open Access Repositories, Directory of Open Access Repositories, the EC portals and tools (e.g., CORDIS, European Open Science Cloud, OpenAIRE, Horizon Magazine), the project website (where pre-prints will be made available), and the websites of project partners. **W2BC** has also encouraged citizens, civil society & end-users, to engage in the co-creation of Responsible Research

and Innovation (RRI) contents, generating valuable knowledge (e.g., training courses) for the developed smart manufacturing technologies & bio-based materials.

Update

At the end of the project, seven scientific articles have been published in peer-reviewed journals, reflecting key advances in the project's research areas across the bio-based value chains. These publications cover biopolymer development, and bioplastics and biocomposites production.

In addition, two master's thesis have been completed within the scope of **W2BC**, in the areas of sustainable fibres using new biopolymers, further contributing to academic knowledge and supporting capacity-building in the field of bio-based materials and sustainable manufacturing.

Several scientific articles are also being prepared to be published in the next two months, with the results of the project, in the different VCs. All published content is or will be made available through open-access channels, including the Open Research Europe platform and public repositories such as ResearchGate, and institutional repositories, ensuring alignment with Horizon Europe's Open Science policy. Pre-prints and relevant research outputs are also shared via the project website and partner platforms, contributing to the European Open Science Cloud.

This progress illustrates **W2BC**'s proactive approach in ensuring that scientific output is accessible, reusable, and impactful beyond the project's duration.

5.9. Ambassador Marketing (Referral Marketing Strategy)

As part of its broader C&D strategy, the **W2BC** project successfully implemented an Ambassador Marketing campaign, designed to amplify the project's visibility and impact across key sectors. This initiative brought together a group of highly respected experts and thought leaders representing the full breadth of **W2BC**'s value chains – textiles, footwear, packaging, and renewable carbon-based materials.

The selected ambassadors played a vital role in supporting the project's outreach and credibility:

- Amaya Igartua, Coordinator of Material Initiatives | TEKNIKER: contributing with deep technical expertise and industry insight in materials R&D;
- Rudy Koopmans, Executive Director | Against All Odds: providing leadership and expertise in sustainable packaging innovation;
- José Alexandre Oliveira, Chairman of the Board of Directors | RIOPELE: representing a key industrial player in textile innovation;
- Christopher vom Berg, Executive Manager | Renewable Carbon Initiative (RCI): highlighting the relevance of renewable carbon in the materials transition;
- Paulo Gonçalves, Marketing Communications Manager | APICCAPS: bringing a strategic communications perspective from the Portuguese footwear industry;
- Lutz Walter, Secretary General | Textile ETP: offering a policy and innovation framework from the European textile platform;
- Rick Passenier, Founder | GO!PHA: connecting the project to international developments in PHA-based bioplastics and circular economy initiatives.

The **W2BC** website features a dedicated Ambassador Section, where visitors can find:

- Short video interviews with each ambassador, offering first-hand insights into how they view **W2BC**'s role in sustainable innovation;
- Individual feature articles with written interviews, hosted as project news items, delving into each ambassador's background, thoughts on the bioeconomy, and relevance of **W2BC**.

This multi-format content approach allows the project to engage a diverse audience by combining dynamic audiovisual storytelling with in-depth written commentary.

The ambassadors were also central to a targeted social media campaign, aimed at expanding the project's digital reach:

- Each ambassador was introduced individually, with coordinated posts across LinkedIn and X (formerly Twitter), including excerpts from their video interviews and links to their full features;
- Posts were scheduled strategically to maintain a regular flow of engagement over time;
- Campaign hashtags such as #MeetTheAmbassadors, #CircularEconomy, and #BioBasedInnovation were used to connect with broader discussions in sustainability and innovation.

This campaign not only highlighted the ambassadors' expertise but also positioned **W2BC** as an active contributor to the ongoing dialogue around sustainable industrial transformation in Europe. The ambassador marketing strategy proved to be a high-impact initiative, successfully combining personal credibility, sectoral relevance, and digital storytelling. It has helped the **W2BC** project build bridges between research, industry, and policy audiences, reinforcing its role as a leading voice in Europe's bio-based innovation ecosystem.

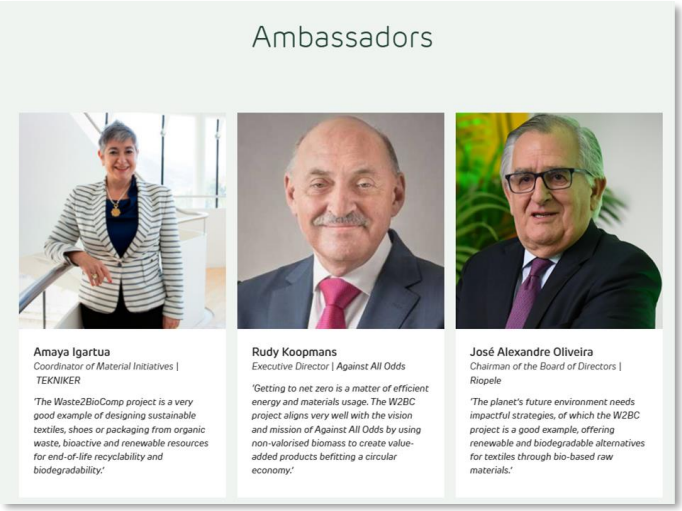

*Figure 25 Ambassador section on **W2BC** website.*

5.10. BIOMATTERS Cluster

To amplify the reach and impact of bio-based innovations, **W2BC** joined forces with five other Horizon Europe-funded projects — AMBIANCE, BIO-UPTAKE, GREEN-LOOP, NEW WAVE, and VITAL — to establish the BIOMATTERS Cluster. This alliance focuses on promoting sustainable manufacturing practices and developing bio-based alternatives to conventional materials.

By pooling resources and expertise, the cluster enhances stakeholder engagement, fosters public awareness, and strengthens cooperation among EU-funded research initiatives. This collective effort not only boosts the visibility of each project's outcomes but also contributes to a more sustainable and innovative future.

The initiative was organised around periodic meetings involving representatives from each project. These exchanges provided a platform to identify synergies in C&D, align messaging for common target audiences, and explore opportunities for joint participation in external events and policy dialogues. One of the most notable outcomes of this collaboration was the organisation of a joint conference in parallel with **W2BC**'s final event, which brought together stakeholders from across the participating projects to showcase results, share best practices, and amplify the collective impact of the Cluster.

More information is available on **W2BC**'s website.

6. Targets and KPIs

The **W2BC** project successfully met most of its C&D KPIs, with strong performance in areas such as website traffic, LinkedIn engagement, event participation, and open access outputs. These efforts significantly contributed to the project's visibility and impact across key value chains and stakeholder groups.

However, the project did not reach its target number of followers on X (formerly Twitter). This shortfall can be attributed to several external factors, including:

- Oversaturation of content on X, making it more difficult for posts to stand out;
- A general decline in organic reach on the platform due to algorithm changes;
- Reduced interest in X among professional and institutional audiences, who increasingly engage through LinkedIn and other platforms.

Despite this, the project's strong performance on LinkedIn and other digital channels ensured that the overall communication goals were met, and its key messages were effectively delivered to relevant stakeholders.

Table 3 Targets and KPIs of W2BC

Tool/Channel	Aim/Description	Target KPI	Achieved KPI
Project Website	• One-stop-shop for all project-related information and news, including the dissemination of the project results. • Regularly updated (with project information, results, partners, events, etc.) and will be used to disseminate the project's training activities and resulting materials.	≥1500 unique visits by the end of the project	Project website launched 2.300 visits
Social Media	• LinkedIn and Twitter Accounts. • YouTube channel used as a repository of the videos of the project.	Followers: >200 on X >200 on LinkedIn	43 followers on X 644 followers on LinkedIn
Printed Materials	• Roll-ups and Leaflets to be used for external project events.	2 Project Roll-ups 600 leaflets' copies	2 roll-ups produced 50 leaflet copies printed
Newsletters and Infographics	• bi-annual newsletter • infographics to communicate developments and data in a concise way.	≥6 newsletters ≥6 infographics	6 newsletters published 6 infographics produced
Digital Campaigns	• Targeted campaign for the W2BC's stakeholders, namely the footwear, packaging, and textile VCs	≥500 people engaged	Video of the project results campaign on LinkedIn: 604 views
Scientific Articles and Journals	• Publication of papers in academic journals, as well as technical reports and articles in specialized media.	≥15 publications of papers & Technical reports	7 papers published (>6 to be submitted in next 2 months) 2 MSc Thesis
List of Ambassadors	• List of individual ambassadors (e.g., relevant stakeholders, namely within the 3 VCs) which will represent and publicly promote the project.	≥1 ambassadors' campaign ≥5 video quotes disseminated	≥1 ambassadors' campaign on LinkedIn 5 videos disseminated

Tool/Channel	Aim/Description	Target KPI	Achieved KPI
Videos	• Short project presentation video will be produced to be shared with media and will be uploaded on the project's social media channels.	>300 views across all platforms	1073 views on YouTube (all project videos) Video of project results: 843 views (all platforms)
Project Conferences	• Hybrid (physical/online) high-level conferences.	3 project conferences	3 project conferences organised: • Kick-off Event in Portugal: 60 registrations and over 40 attendees (13th & 14th of October 2022) • Midterm event in Ferrol: 37 attendees (3rd of July 2024) • Final conference in Brussels: 100 registrations and over 60 attendees (29th April 2025)
External Events	• Participation of partners in trade fairs and conferences (national and international) on applications for bio-based materials.	2 per year of Project	30 events attended

7. Timeline of Communication and Dissemination Activities

Figure 26 presents a general Gantt chart of the main communication activities, distributed from the beginning until the end of the Project. Some of have suffered some adjustments or rescheduling due to the normal proceeding of a project of this magnitude, and the partners have always looked to find the most suitable dates and moments to develop any communication activities. Nonetheless, it is important to set out with a plan and so the main outline of the calendar for WP7's C&D actions is presented below.

Activities	2022							2023												2024												2025				
	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M
C&D and Exploitation Plan						1																	2													3
Visual Identity			4																																	
Website						5																														
Social Media			6																																	
Digital Campaigns																	7												8							9
Newsletters							10					11							12				13							14						14
Videos						16																							17							18
Media Relations																						19														20
Events					21																	22														23

1-3	C&D Plan (D7.1, D7.7, D7.10)	6	Social media created	16-18	Videos production	22	Midterm Event
4	Visual Identity completed	7-9	Digital campaigns activation	19-20	Articles published	23	Final Conference
5	Website published	10-15	Newsletters editions	21	Kick-off Event		

Figure 26 Gantt Chart of the C&D activities.

Update (M24 & M36)

The **W2BC** project has made significant progress in adhering to its planned timeline for C&D activities. Most tasks progressed as scheduled, ensuring that key milestones and deliverables were met on time. This includes consistent updates to the project's website, active engagement on social media channels, and participation in relevant industry events.

By M36, **W2BC** has completed its C&D activities, aligning closely with the original work plan and timeline. Throughout the project's lifecycle, all major tasks were carried out effectively, ensuring strong visibility and stakeholder engagement across the three value chains — textiles, footwear, and packaging.

Key achievements included:

- Consistent updates to the project website, with news articles, publications, and multimedia content shared regularly;
- Active engagement across social media platforms (LinkedIn and X), where the project maintained a steady presence and ran successful thematic campaigns, including the Ambassador Campaign;
- Participation in major industry events, such as Techtextil Forum, Hannover Messe, MOD'UNICA, among others.

While there were initial delays in the publication of scientific articles and in launching specific digital campaigns, the last activity was fully addressed during the final reporting period, while efforts are ongoing to fulfil the publications KPI: **W2BC** had published 7 peer-reviewed scientific articles and supported 2 master's thesis and has several papers in the phase of submission.

Overall, the **W2BC** project met its C&D goals, effectively showcasing its innovations and results. The team's adaptive approach to managing early challenges ensured that all core outputs were delivered, contributing to lasting visibility and impact within the European bio-based innovation landscape.

8. Exploitation Strategy

The Exploitation strategy of the **W2BC** project will pave the way towards a future exploitation of the results generated, considering a sustainable strategy aligned with solid business plans for each of the targeted VCs. The consortium established the following key exploitation measures to implement during the project:

- The operation of demonstrators in the 3 VCs (WP4), which will be the steppingstones for larger scale production and industries' commercialization in the future;
- Establishing B2B contacts with other potential end-users in the manufacturing industry and other players along the VCs which could uptake **W2BC**'s solutions, particularly in the footwear, packaging, and textile VCs;
- Reach out to other R&I institutions and players (namely end-users) from other industries which are identified during the dissemination activities, to establish potential applications for other VCs;
- Guarantee further exploitation through a clear policy of intellectual property rights for the scientific and technical results after the lifetime of the project;
- Certify the involvement of standardization bodies to uptake necessary standardization activities.

To define a proper exploitation strategy, the consortium partners interacted with the coordinator (also responsible for Task 7.5, where the business plans were defined) on the categorisation of the project results, according to their commercialisation potential and need for IP protection.

8.1. The Exploitation Methodology

The Exploitation Strategy of **W2BC** promotes the guidelines, best practices, and technical advancements while establishing intellectual property protection on key exploitable results of the project to make the best use of future commercial opportunities. Thus, the main goal of the exploitation strategy was to first identify the possible exploitable results that could arise from the project, and plan suitable actions for each exploitable result, driven to make **W2BC** a successful and sustainable project.

Although the Exploitation could only start once research results were available, as it focuses on making concrete use of research results for commercial, societal, and legal (e.g., standardisation) purposes, it was important to have a previous prediction of the most probable exploitable results from the project, and how these can be exploited to better benefit the consortia, each partner individually, and the society.

There is a wide spectrum of results that may be recognised as exploitable, including research/ lab scale results, scale-up results, demonstrators, policy recommendations or standardisation activities.

CITEVE, as the Exploitation Manager, designed an exploitation methodology customized to the nature and size of the **W2BC** consortium and considering its fast-track implementation phase (36 months). This methodology guaranteed the creation of robust joint and individual exploitation plans at the end of the project. This methodology was presented by CITEVE to all partners on the M18 consortium meeting. No changes were suggested by the partners, so a solid commitment from all the consortia was expected, and they had an active participation and involvement in the development of the final exploitation strategy for the bio-based materials created along the project, and on the development of the business cases for each VC.

Exploitation issues were brought to the attention of all partners from a very early stage in the project, to ensure that findings regarding market and commercialization could still be fed into the Research and Development (R&D) part of the project. The monthly meetings for each WP, where the coordinator/ exploitation manager was also present was valuable to identify Key Exploitable Results (KERs) not already identified, and any issue that could arise in terms of their exploitation.

8.2. The Exploitation Timeline

The exploitation methodology was implemented during the 3 years of the **W2BC** project, intensifying the efforts dedicated as the results become more consistent and technologically mature, which happened in the last year of the project, where the demonstrators were produced and validated.

The involvement of all partners, together with a good market survey – done in sub-task 7.5.1 Benchmarking – and the support of the Ambassadors, was key to gather information on how best to exploit the project results to penetrate further in the market of bio-based materials and their production technologies, and all of the R&D, toxicity and sustainability results, and end-of-life alternatives obtained.

The permanent presence of an innovation and IPR management strategy (Task 7.4) was also considered in the implementation of the exploitation methodology, as this is a paramount tool for maximizing the impact of **W2BC** and its implementation, the success of the exploitation strategy and avoidance of any disagreements among the consortium partners.

Also, the training and C&D activities made a huge contribution to increase the potential exploitation of KERs of the project, as these reached wider audiences and targeted groups. Namely, the workshops organized, as well as the three project events, were excellent opportunities to show samples of the developed materials (after assuring IP protection) to the industry, scientific and wider communities, and catch their attention to the potential being carried out in **W2BC**.

8.3. IP and Knowledge Management Strategy

The IP and knowledge management strategy was based on the procedures and agreements included in the CA and GA of the **W2BC** project, following the EC guidelines. The CA specifies the organisation of work between parties and the management of **W2BC**; defines rights and obligations of parties, including their liability and indemnification. It also supplements (but not conflicts) the provisions of the GA concerning access rights and set out of rights & obligations of the parties.

This IPR´s strategy depends on different factors, including pre-existing patents, trademarks, registered designs, and the single partners' exploitation claims – called the background. This is already included in the CA, and its use as a sound basis, any IPR issues will be resolved.

There was a dedicated task to Innovation and IPR management (T7.4), which was led by CITEVE, with the collaboration of all partners. This task run along with the development of the exploitation strategy in T7.5. Deliverable D7.3 – Report on the IPR activities – describe in detail the IPR policy and all activities carried out along the project.

8.4. Evaluation of Business and Innovation Potential - Benchmarking and Technology Watch

In order to extend knowledge on each relevant VC and its competitors, **W2BC** has included a benchmark and technology watch activity (T7.5.1). It was designed as a way to analyse all possible limitations and weaknesses of the innovative bio-based materials and production technologies under development. In a product Benchmarking study, meant to design new products or upgrade the current ones, usually reverse engineering is performed on competitors' products to find their strengths and weaknesses. In a similar way, a Benchmarking study was performed with the main objective of comparing the innovative bio-based materials and manufacturing technologies created in **W2BC** with the current commercial (petrochemical) solutions available at the market, namely:

- shoe sole and three-layered shoe insole materials were compared with current used Ethyl Vinyl Acetate (EVA) materials;
- flexible plastic films and rigid plastic packages were compared with marketed petrochemical plastics for the same purpose;
- sportswear textiles were compared with marketed petrochemical sportswear;

- inkjet-printed garments (PES and cellulose), leather and packaging paper substrates printed with bio-based inks were compared with equivalent products inkjet printed with petrochemical inks as to their colour fastness properties.

Similar properties as the fossil-based counterparts were mostly obtained. In the comparison study, products efficacy, safety, end-of-life alternatives, and sustainability were accessed for benchmark, as also the manufacturing technologies applied. Therefore, by comparing the results and processes of those studied (the commercial "targets") to one's own results and processes, the Consortium learned how well the targets perform and, more importantly, the business processes that explain why they might be successful.

As the generated knowledge, besides the developed demonstrators, is also valuable for the project and its innovation potential, all the KERs identified (see section 8.6.1) were analysed by each partner from a double business and innovation perspective. Each result was assessed bearing in mind the following pillars:

- strength of business idea;
- target sector and competition issues;
- target market and customers;
- issues.

8.5. Development of a Commercialization Strategy Plan

The envisaged application of **W2BC** materials towards market implementation of bio-based materials and manufacturing technologies relates to:

- Bio-PHAs for spray coatings (technical textiles), foams (for shoe soles and insoles), films and bio-composites (for flexible films and rigid packaging), microparticles and capsules;
- Bio-based microparticles for bio-composites (for the packaging VC);
- Bio-based functional capsules for foams (for shoe insoles);
- Bio-based pigments for bio-inks for inkjet printing on different materials;
- Manufacturing technologies adapted for the new materials to be developed in **W2BC**, namely: chemical and biotechnological processes, encapsulation techniques, electrospray system, compounding technologies, blown extrusion, thermoforming, inkjet printing, colour removal system, and chemical recycling approaches;
- Characterization techniques adapted and/or validated for the new bio-based materials;
- Know-how generated on the manufacturing of the new bio-based materials and final demonstrators.

Besides the targeted VCs of **W2BC** – textile, footwear, and packaging – other possible markets for the produced products have been identified (Table 1).

The overall commercialization strategy links different findings from WP1 to WP6 to guarantee that all perceptions from the Offering up to the Selling stages do meet a common understanding of related activities which is accepted by the Consortium.

The regulatory assessment, toxicity, and sustainability assessments to be carried out under WP6 have further increased the exploitation and marketability of the developed materials and technologies.

8.5.1. Product Standardization Framework

It is not possible to achieve a proper market uptake, i.e., it is not reasonable to develop exploitation strategies, without assuring that the materials, technologies, and demonstrators created fulfil key regulations, standards, and certifications. The dedicated Task T6.4 to Regulatory assessment (standards and regulations) helped ensure that the products developed in **W2BC** comply with the existent regulations, standards, and certifications, or may even contribute to new standards. CITEVE was responsible for this task, and Deliverable D6.4 contemplates the results of this analysis, to increase the impact of the project results, and upgrade the business plans produced for each VC.

8.5.2. Networking with Other Projects and Initiatives

An important aspect of all R&D projects is the possibility of sharing information and establishing synergies with other related R&I projects and initiatives. The bio-based sector is a major one, that is increasing each year. The consortium has established some cooperations and synergies with other companies and institutes, that gave valuable inputs for the project. A particularly important initiative is the Made in Europe Initiative, from which **W2BC** is part off.

The project has also entered the BIO-MATTERS cluster, formed by the sister projects from the same call, fostering knowledge and difficulties exchange between the projects.

CITEVE, as the coordinator, is the main responsible to establish the link with other projects and initiatives, but all partners have made a commitment to be attentive to new collaborative opportunities. The participation in joint events and workshops was fully promoted, to facilitate the establishment of these synergies.

8.5.3. Access to Different Funding Schemes

As **W2BC** is a RIA project, its developments are expected to end at TRL6. Thus, to further exploit and scale-up the results, different funding schemes are under analysis, including a portfolio of private and public funding sources. The consortium is analysing which might be the best option, according to the results attained in the project, and the growth strategy defined by each partner.

8.6. Exploitation Plan

8.6.1. Exploitable Results

The KERs identified in the Description of Action (DoA) in the GA and in the CA were updated and increased as the project evolved, and new results were obtained. The list below shows the main KERs identified for **W2BC**, for which more details (IPR strategy, and commercialization approach and risk) are identified in Table 4.

- Bio-based components/materials, namely:
    - Pigments – to be explored by PILI, as the IP owner of processing knowledge and being already expanding its producing capacity;
    - PHA shoe insoles – to be explored by NORA, as a current producer of these products (but in non bio-based form) and having already established channels for their commercial exploitation;
    - Plastic flexible films – to be explored by PROPAGROUP, as a current producer of these products (only some bio-based) and having already established channels for their commercial exploitation;
    - Rigid plastic packaging – to be explored by UDC;
    - Textile materials for sportwear – to be explored by RIOPELE, as the producer of the "base" textile fabric used in these, and as a current producer of these products (not 100% bio-based) and having already established channels for their commercial exploitation;
- Inkjet printing equipment – to be exploited by MTEX NS, as a current producer of printing equipment and having already established channels for their commercial exploitation;
- System for control of inkjet printing system – to be explored by NIXKA, as a current producer of printing control systems and having already established channels for their commercial exploitation;
- Chemical recycling know-how for different bio-based components – to be explored by GR3N, as the IP owner of the processing knowledge;
- New PHAs – as its producer, HSKL owns the IPR of the process;

Thus, **W2BC** counts with 6 internal industrial partners for the exploitation of the new bio-based components/materials and manufacturing technologies, that will use their existent knowledge, and

the one generated during the project, to upscale the project results, and, through their existent commercial channels, and the establishment of new channels based on new opportunities given by **W2BC** results, increase the marketability potential of the outcomes of the project. A new exploitation external partner is being considered, and further will be analysed for the exploitation of the above mentioned KERs.

Before the signature of the GA, the partners discussed and agreed on the previous background knowledge that they will use in the **W2BC** project, in the way this knowledge will be managed and the way the new generated IP will be protected and granted to the project partners during the project execution. This point was carefully analysed and described in Annex 1 of the CA.

The RTDs and HES will foster the exploitation of the KERs by licensing or selling they IP counterpart, but always in a constructive way, so that no initial limitations are placed to the exploitation of the KERs. Additionally, the RTDs, HES and partner MAGELLAN CIRCLE will also increase their business opportunities, by getting science closer to the market and supporting the policy priorities for creating jobs, growth, and investment in research. They will also enhance their capacities (knowledge competences) for future collaborative projects with industry, improve their professional network, and curricula, through the publication of patents, scientific papers, and scientific communications.

Table 4 Exploitable W2BC outputs and partners involvement (N/A - not applicable; t.b.d. - to be defined)

KER	Owner/ responsible	Partners involved (if any)	Role played	Under which conditions (IPR)	Business model?	Issues to be solved before going to market	Who will explore	Sector of application	Target group	Objectives and message	Commercial methodology	Estimated date of commercialization
New PHAs – production process & materials	HSKL	N/A	Production of the PHA materials	Patent pending NDA to be signed with inmatech technologies GmbH	No (In development)	Feasibility study with different materials	HSKL	Ceramic industry	Raw material producers for ceramic industry	Special binders for ceramics	Selling special blends	Not before end of 2025
New PHAs – production process & materials	HSKL	N/A	Production of the PHA materials and 3D-printing filaments	Patent pending NDA to be signed	No	Feasibility study with different materials	HSKL	Additive manufacturing	t.b.d.	t.b.d.	t.b.d.	Not before end of 2025
Microparticles (MPs)	UDC	HSKL	UDC: production of the microparticles HSKL: production and supplying of the PHAs	No formal IP protection yet – internal know-how	No	Industrial production, Validation of release profiles, regulatory aspects (i.e. food packaging)	UDC, with potential uptake by packaging or material innovation companies	Bioactive materials for food packaging, pharma, cosmetics.	Packaging industry (food, pharma, cosmetics), material developers	Provide a platform of bio-based MPs for active packaging	Technology transfer, co-development projects	2030
Antimicrobial nanocapsules (NCs)	IVW	HSKL CITEVE NORA UDC	IVW: modification of polymers to improve NCs properties; production of the NCs HSKL: production and supplying of the PHAs CITEVE: application of NCs NORA: application of NCs UDC: testing antimicrobial activities	No formal IP protection yet – internal know-how	No	Upscale, thermal stability of NCs	IVW, with potential uptake by innovation companies	Textile/apparel, healthcare, public transportation/hospitality, food, cleaning	Industries producing materials for the sectors of application mentioned	Use bio-based and safe NCs to provide antimicrobial properties to the materials	Technology transfer, co-development projects	t.b.d.

KER	Owner/ responsible	Partners involved (if any)	Role played	Under which conditions (IPR)	Business model?	Issues to be solved before going to market	Who will explore	Sector of application	Target group	Objectives and message	Commercial methodology	Estimated date of commercialization
Pigments – production process	PILI	N/A	Pigment or pigment's precursor producer	Patent filled	No	Scaling-up; Finishing of final pigment	PILI	Paints, Coating, Ink, Polymers	Producers of inks or coating formulations	Multiton-scale production	Customer/market driven	2027
Bio-based inks – production process & materials	CITEVE	PILI	CITEVE: production of the bio-based inks PILI: production and supplying of the pigments	No formal IP protection yet – Know-how generated on pigment dispersion. Potential for patenting under assessment	No	Study shelf life	CITEVE, with potential uptake by packaging or material innovation companies	Fashion & homewear Packaging	Inkjet companies	Versatile bio-based inks	Technology transfer, co-development projects	t.b.d.
PHA based shoe insoles – production process & materials	NORA	HSKL	NORA: production of the PHA based foams and insoles HSKL: production and supplying of the PHAs	No formal IP protection yet – internal know-how	Yes	Availability and cost of PHA	NORA	Shoe insoles	Existing NORA clients	Sustainable solution for insoles	Marketing through existing channels	2028
PU based foams	IVW	N/A	Production of the foams	No formal IP protection – internal know-how	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Plastic flexible films – production process & materials	PROPAGROUP	HSKL IVW UDC	PROPA: production of the PHAs-based films HSKL: production and supplying of the PHAs IVW: characterization of the films UDC: characterization of the films	patent (HSKL) + Trade secret among partners	Yes	Increase the amount of PHAs in the films from 70% to 100%. Narrow PHAs processing window and poor PHAs flexibility.	PROPAGROUP	Plastic packaging market Agricultural and horticultural market	B2B targeting converters Packaging manufacturers Brand owners	Cost-competitive production enabled by bio-based innovation. Bio-based flexible plastic films sales. Technology licenses and fees.	Direct commercialization Use the know-how generated to develop other results/products	2030

KER	Owner/ responsible	Partners involved (if any)	Role played	Under which conditions (IPR)	Business model?	Issues to be solved before going to market	Who will explore	Sector of application	Target group	Objectives and message	Commercial methodology	Estimated date of commercialization
						Limited raw material availability. Large scale testing/characterization esp. online during manufacturing				Licensing of compostable processes. Premium positioning for sustainable packaging materials		
Rigid plastic composites	UDC	HSKL	UDC: production of the PHA based composites HSKL: production and supplying of the PHAs	No current IP protection. Know-how generated on composite processing.	No	Long-term stability, validation of active substances release profiles, regulatory requirements (e.g. food contact)	UDC, in collaboration with interested industrial stakeholders	Active packaging (food, pharma, cosmetics)	Packaging converters, food brands, health/beauty product manufacturers	Deliver fully bio-based, functional rigid packaging materials that contribute to product preservation and sustainability	Partnering with industry for pilot applications, participation in trade events, publications and technology transfer	2028
Textile materials for sportwear – production process & materials	RIOPELE	CITEVE HSKL	RIOPELE: production of the PHA coated textiles CITEVE: development of the PHA dispersion HSKL: production and supplying of the PHAs	No current IP protection. Know-how generated on PHA aqueous dispersions and application by spray. Scientific papers soon to be written	Yes	Scale-up dispersion production, to allow industrial application on textiles. Increase amount of PHA in dispersions.	Coated textiles: RIOPELE Dispersions: CITEVE	Sportswear	Sportswear manufacturing companies	Bio-based textile coatings for moisture management properties	Direct commercialization Use the know-how generated to develop other results/products	2030
Inkjet 3D printing equipment, with robotic arm	MTEX NS INESC TEC	NIXKA	MTEX NS: production of the overall equipment	No formal IP protection yet – internal know-how & new one generated	No	Improve resolution of the prints on rounded objects	MTEX NS and INESC TEC	Fashion others	Stores or companies that would benefit from print	Print-on-demand Bio-based ink	t.b.d.	t.b.d.

KER	Owner/ responsible	Partners involved (if any)	Role played	Under which conditions (IPR)	Business model?	Issues to be solved before going to market	Who will explore	Sector of application	Target group	Objectives and message	Commercial methodology	Estimated date of commercialization
			INESC TEC: set-up the trajectories for the robotic arm NIXKA: Print engines Development						on demand technology			
Inkjet 2D printing equipment	MTEX NS	NIXKA	MTEX NS: production of the equipment NIXKA: Print engines Development	No formal IP protection yet – internal know-how	No	Create way to predict where the print is going to appear on the garment	MTEX NS	Fashion Packaging others	Stores or companies that would benefit from print on demand technology	Print-on-demand Bio-based ink	t.b.d.	t.b.d.
System for control of inkjet printing system	NIXKA	MTEX NS PILI CITEVE	NIXKA: Inkjet Print engines development; sample production on the different bio substrates; further bio inks characterization MTEX: inkjet equipment development PILI: pigment production CITEVE: inks development	No formal IP protection yet – internal know-how & new one generated	No	More related with the inks: Develop inks with other colours; check shelf life of the inks (e.g., sedimentation)	t.b.d.	Inkjet	Inkjet equipment producers	System adapted for water-based bio-inks is a promising solution based on bio pigments	t.b.d.	t.b.d.
Colour removing processes	CITEVE	N/A	Development of different approaches for colour removal on textile inkjet prints	No current IP protection. Know-how generated on colour removal approaches Scientific paper soon to be written	No	Scale-up process LCA Improve process for other inks/colours	CITEVE	Fashion – textiles in general	t.b.d.	Sustainable colour removal to allow re-manufacturing without damaging the fabric / garment	Technology transfer, co-development projects Or use the know-how generated to develop other	t.b.d.

KER	Owner/ responsible	Partners involved (if any)	Role played	Under which conditions (IPR)	Business model?	Issues to be solved before going to market	Who will explore	Sector of application	Target group	Objectives and message	Commercial methodology	Estimated date of commercialization
											results/products	
Chemical & Biogenic recycling processes	GR3N	HSKL	GR3N: development and actualization of PHA depolymerization strategies HSKL: Biogenic/chemical PHB production from GR3N monomers	No formal IP protection yet – Scientific papers soon to be written	No	No marketing interest at the moment	N/A	N/A	N/A	N/A	Use the know-how generated to develop other results/products	N/A
Chemical recycling - glycolysis	IVW	HSKL	IVW: Investigation of various formulations of alcohols and setup of reactors HSKL: production and supplying of the PHAs	No formal IP protection yet – know how generated on best glycolysis approach	No	What type of output quality is most promising for further use in new material cycles	IVW	Recycling of polyesters	R&D	N/A	N/A	N/A

8.6.2. Business Model Generation

As already identified in the Exploitation Strategy, three main business models were prepared within **W2BC**:

- Bio-based spray coated textiles for the Textile VC;
- Bio-based plastics for the Packaging VC;
- Bio-based shoe insoles for the Footwear VC.

Thus, in this activity, tailor-made business models for each of these VCs were created (D7.6), with a high exploitation potential with KER selected in previous activities. Such business models will be able to help to define future exploitation plans and are aligned with the main overall exploitation strategies of each partner within their organizations.

The key points considered for each Business Model produced are described in the respective deliverable (D7.6)

8.6.3. Exploitation and Business Plan Creation

Business plans were built (D7.6), establishing connections among the different KER and considering the synergies and relationships already identified. As a post-project activity, it will be analysed the possible "embedment" of such plans within the business/exploitation plans of each of the organizations. Given that the **W2BC** project is a RIA, the exploitation plans identified a proper technology assessment and upscaling roadmap to identify key development activities that might be needed to implement to increase the TRL of the obtained results (see CANVAS business canvas and SWOT analysis for each VC, in D7.6).

There is an agreement between the partners that the project partners are the first to exploit the project results themselves, by their own efforts or facilitate exploitation by others (e.g., through making results available under open licenses). This can take place via innovation management actions, copyright management, data management plan and stakeholder/users engagement, among others.

9. Conclusions

The C&D strategy for **W2BC** has been written and developed by MAGELLAN CIRCLE with the inputs of the project and consortium coordinator, CITEVE. The strategy is built upon communication strategies developed in the proposal stage and it describes in detail the tools and channels to be used for a successful communication of the project towards the identified targeted audiences.

The strategy provides a clear overview of the following actions:

- Target audiences;
- Communication tools;
- Communication channels;
- Communication strategy;
- Media and press;
- Events;
- Brand Identity;
- Key Performance Indicators;
- Open Access and Journals.

As the **W2BC** project concludes, the C&D&E activities have delivered on their mission to amplify the visibility and long-term impact of the project's innovations.

Over the course of the project:

- The communication strategy evolved into a multi-platform campaign, including a high-traffic website, strong social media presence, and video-based storytelling (e.g., Ambassador Campaign);
- Seven scientific articles and two Master thesis were produced and made available via open access channels;
- **W2BC** was showcased at major European conferences and trade fairs, and it hosted three key events: the Kick-off Conference in Portugal, the Midterm Conference in Spain and the Final Conference in Brussels, in collaboration with the BIOMATTERS Cluster;
- The ambassador marketing initiative successfully linked the project to influential figures across the textile, footwear, packaging, and renewable carbon sectors;
- The project maintained regular engagement with stakeholders, policymakers, and the scientific community, ensuring strong visibility and interest throughout its duration.

Although minor delays occurred in the early stages of publishing and digital outreach, these were successfully resolved, with all planned actions implemented by the project's end.

The strategy has proven effective in not only communicating the technical progress of **W2BC** but also in positioning the project as a central player in Europe's transition to a bio-based and circular economy. As the project closes, the communication tools, open-access resources, and networks established during its execution will continue to support the uptake and replication of its results, ensuring a lasting impact beyond the project's formal duration.

The Exploitation Strategy was developed and updated by the coordinator, CITEVE, as the leader of Task 7.5 – Benchmarking, Business Plans and exploitation strategy for the bio-based materials. This strategy reflects what the partners have already agreed upon during the proposal phase, while preparing the Grant Agreement, and throughout the consortium meetings, to reflect the most appropriate exploitation strategy for each of the KER that resulted from the project.

This document shows the accomplishment of Milestone 9 - Strategic tools for project impact maximization.

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