

HORIZON-CL6-2024-CIRCBIO-01-5

Programmed biodegradation capability of bio-based materials and products, validated in specific environments

MAGICBIOMAT

Manufacturing Guiding Tool for Circular and Programmed Biodegradable Materials Under Open Environment Conditions

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Deliverable: D10.3

Initial report on communication, dissemination and exploitation activities (Period 1)

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Authors

Author	Institution	Contact (e-mail, phone)
Evi Stavrou	**Isotech**	digital@isotech.com.cy, **+357 22452727**

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Point of Contact	Name: Demetra Orthodoxou Partner: ISOTECH Ltd Environmental Research and Consultancy Address: 95 Keryneias Avenue, 2113, Nicosia, Cyprus Phone: +35722452727 E-mail: project@isotech.com.cy
Partner:	ISOTECH Ltd Environmental Research and Consultancy, all partners

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Acronyms

AI	Artificial Intelligence
ANIPH	Avoiding the Negative Impacts Produced by Plastic Materials in Humanitarian Contexts
B2B	Business to Business
Bio2PEs	Bio-based Polymers to Replace Conventional Plastics
CDE	Communication, Dissemination and Engagement
CEN	European Committee for Standardization
D10.1	Deliverable 10.1: Communication, Dissemination and Engagement Plan
D10.2	Deliverable 10.2: Communication and Dissemination Resources
EC	European Commission
EU	European Union
GA	Grant Agreement
HE	Horizon Europe
ISO	International Organization for Standardization
KPI	Key Performance Indicator
M	Month
MOOC	Massive Open Online Course
TUS	Technological University of the Shannon
UNIPD	Università degli Studi di Padova (University of Padova)
WP	Work Package

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1. Executive Summary

The communication and dissemination activities for MAGICBIOMAT started in January 2025, Month (M) 1 of the project, and will run until the end of the project, in December 2029 (the project has a duration of 48 months). This deliverable presents the communication and dissemination (D&C) activities implemented under Task 10.3 of the MAGICBIOMAT project during the first reporting period (M1–M18). During this period, the project established its communication presence and achieved strong visibility and engagement across multiple channels while laying the foundation for future dissemination of validated project results. The main communication and dissemination results achieved during Period 1 are summarised in Table 1.

Table 1. Communication and dissemination KPI performance – period 1 (M1–M18).

KPI	Target	Achieved by M18	Status
Communication strategy and tools (D10.1, D10.2)	Plans and communication resources developed	D10.1 (M4), D10.2 (M6) delivered	🟢 Achieved
Social media presence	2–3 platforms established	Facebook, LinkedIn, Instagram, YouTube active	🔵 Exceeded
Social media activity	3–5 posts per quarter (equivalent to 18–30 posts during M1–M18)	60 posts published	🔵 Exceeded
Social media followers	≥200 followers by M18	676 followers	🔵 Exceeded
Audience reach	≥10,000 impressions	438,000 approx.	🔵 Exceeded
Website performance	2,500 users / 3,000 page views	9,741 users / 10,532 page views	🔵 Exceeded
Newsletter dissemination	1 newsletter/year, 100 subscribers by M18	1 newsletter, 194 subscribers	🔵 Exceeded
Press and media outreach	Media coverage generated	3 press releases, 10 media articles	✅ Implemented
Video content engagement	Awareness content produced	8 videos, 200,000+ views	✅ Implemented
Scientific publications	>15 publications (project lifetime)	4 publications	🟡 On track

Conference participation	Participation in scientific events	3 presentations	✅ Implemented
Webinars	Knowledge exchange events	3 webinars organised	✅ Implemented
Blog posts	5–10 posts (project lifetime)	9 blog posts published	🟡 On track
Stakeholder organisations engaged	≥10 organisations	99 organisations engaged	🔵 Exceeded
Synergies with EU projects	≥3 collaborations	2 collaborations (ANIPH, Bio2PEs)	🟡 On track
Public engagement actions	Awareness and engagement activities implemented	Campaigns, videos, webinars delivered	✅ Implemented

Communication activities focused on raising awareness of the project and introducing topics related to bio-based materials, programmed biodegradation, and circular design to a broad audience. Through targeted content, including video and visual formats, the project achieved strong engagement and visibility across multiple channels. At the same time, dissemination activities supported knowledge transfer to scientific and professional audiences through publications, conference participation, webinars, and expert-driven content such as the “Asking the Hard Questions” video series.

The communication and dissemination strategy proved effective, with several KPIs defined for the entire project duration already achieved or exceeded during Period 1. The activities implemented during this period provide a solid foundation for the next phase of the project, where efforts will focus on the dissemination of validated results, stakeholder engagement, and exploitation activities.

2. Introduction

2.1. Communication and dissemination objectives: Task 10.3

Task 10.3 contributes to the communication and dissemination objectives of the MAGICBIOMAT project by supporting awareness-building, stakeholder engagement, visibility of project activities, and dissemination of scientific and technical results. The task is implemented under Work Package (WP) 10 and follows the strategic framework established in D10.1 – Communication, Dissemination and Stakeholder Engagement Plan and D10.2 – Communication and Dissemination Resources.

During the first reporting period (M1–M18), activities focused on establishing the project's communication channels and digital presence, disseminating project objectives and early activities, supporting stakeholder engagement, and promoting knowledge exchange through scientific dissemination and collaborative activities. The activities implemented under Task 10.3 contribute directly to the WP10 objectives defined in the Grant Agreement (GA):

- O10.1: Development and implementation of the communication and dissemination strategy
- O10.2: Establishment of a strong visual identity and media presence
- O10.3: Implementation of communication and dissemination actions across relevant channels.

2.2. Scope of this report – D 10.3

This deliverable presents the communication and dissemination activities implemented under Task 10.3 of the MAGICBIOMAT project during the first reporting period (M1–M18). The report documents the activities implemented, evaluates their performance against the Key Performance Indicators (KPIs) defined in D 10.1, and assesses their contribution to project visibility, outreach, stakeholder engagement, and dissemination of project results. This reporting period covers activities implemented between January 2025 and June 2026 (M1–M18), including:

- project launch and media outreach activities
- social media and digital communication
- awareness campaigns and multimedia content
- website and newsletter dissemination
- scientific publications and conference participation
- webinars and knowledge exchange activities
- synergies with EU-funded projects and EU-level initiatives

2.3. Strategic approach

The implementation of Task 10.3 followed a multi-channel approach combining digital communication, media outreach, stakeholder engagement, and dissemination activities. The target was to communicate the MAGICBIOMAT research topics related to bio-based materials, programmed biodegradability, and circular design in an accessible and understandable way for different target audiences, including the public, industry stakeholders, researchers, and policymakers. The activities implemented during Period 1 aimed to:

- establish the project's communication and dissemination channels
- increase project visibility at national and European level
- support stakeholder engagement and knowledge exchange
- disseminate scientific and technical developments
- strengthen collaboration with relevant EU-funded initiatives and networks

All activities were implemented in alignment with the Communication, Dissemination and Stakeholder Engagement Plan (D10.1), which defines the project's communication framework, target audiences, communication channels, and KPIs.

3. Implementation of Communication and Dissemination Activities

During Period 1 (M1–M18), MAGICBIOMAT implemented a broad range of communication and dissemination activities aimed at establishing the project's visibility, supporting stakeholder engagement, and disseminating project-related knowledge to relevant audiences. The activities implemented during this period focused on:

- establishing the project's communication and dissemination channels
- building visibility at national and European level
- raising awareness on topics related to bio-based and biodegradable materials
- supporting knowledge exchange through scientific dissemination activities
- strengthening collaboration with EU-funded initiatives and relevant stakeholder communities

The activities presented in this section are organised according to their implementation format and communication objective, covering media outreach, digital communication, awareness campaigns, scientific dissemination, knowledge exchange, and clustering activities.

3.1. Project Launch and Media Outreach

During the first reporting period (M1–M18), the MAGICBIOMAT project initiated its communication activities through coordinated project launch and media outreach actions. The initial communication efforts focused on introducing the project's objectives, concept, and expected impact to relevant stakeholder groups, including academia, industry, policymakers, and the general public. These activities supported early awareness of the project among both specialised and non-specialised audiences.

A key activity during this phase was the preparation and dissemination of project press releases, which supported the initial visibility of the project and communicated key milestones and developments. The press releases were disseminated through the project website, media outlets, social media channels, and partner communication networks at national and European level. In addition, the communication activities implemented during this period also contributed to the achievement of the KPI targets defined in D10.1, particularly in relation to media outreach and visibility. The press releases published during Period 1 are summarised in Table 2.

Table 2. Press releases published during period 1 (M1–M18).

Press Release	Topic	Date	Organisation	Channels	Link
1	Project Kick-off Meeting (KOM) and project objectives	31-01-2025	UNIPD	Website, media	https://www.unipd.it/news/MAGICBIOMAT-project-programmed-biodegradability
2	Project launch announcement	16-01-2025	ISOTECH Ltd	Website	https://www.isotech.com.cy/news/cypriot-researchers-participate-in-the-european-research-for-the-development-of-bio-materials-with-adapted-biodegradation-process/
3	Project Kick-off Meeting (KOM) and project objectives	26-03-2025	TUS	Website, media	https://tus.ie/news/tus-receives-e775k-funding-to-develop-biodegradable-plastic-alternative/

The dissemination of these press releases generated media coverage across online news portals, institutional websites, and science communication platforms, contributing to increased visibility of the project beyond the consortium (Table 3).

Table 3. Media coverage generated during Period 1 (M1–M18).

Media outlet	Article title	Date	Country	Type	Link
Cyprus News (Limassol Today)	Κύπριοι ερευνητές σε ευρωπαϊκή έρευνα για την ανάπτυξη βιο-υλικών (Cypriot researchers in European research on bio-materials)	16-01-2025	Cyprus	Online news	https://new.cyprusnews.eu/limassol-today/kyprioi-erevnites-se-evropaiki-erevn/
Limassol Today	Cypriot researchers in European research on bio-materials	16-01-2025	Cyprus	Online news	https://limassoltoday.com.cy/eidiseis/kypros/kyprioi-erevnites-se-evropaiki-erevn/
Elemesos	Cypriot researchers in European research on bio-materials	16-01-2025	Cyprus	Online news	https://www.elemesos.com/kyprioi-erevnites-se-evropaiki-erevna-gia-tin-anaptyxi-vio-ylikon/
Offsite	Κύπριοι ερευνητές σε ευρωπαϊκή έρευνα για την ανάπτυξη βιο-υλικών (Cypriot researchers in European research on bio-materials)	16-01-2025	Cyprus	Online news	https://www.offsite.com.cy/eidiseis/koinonia/kyprioi-ereynites-se-eyropaiki-ereyna-gia-tin-anaptyxi-bio-ylikon

Taxidromos24	Κύπριοι ερευνητές σε ευρωπαϊκή έρευνα για την ανάπτυξη βιο-υλικών (Cypriot researchers in European research on bio-materials)	16-01-2025	Cyprus	Online news	https://bit.ly/4eaOO0i
Pafos24	Cypriot researchers in European research on bio-materials	16-01-2025	Cyprus	Online news	https://pafos24.com/kuprioi-ereunetes-se-europa%cf%8ake-ereuna-gia-ten-anaptuxe-bio-ulikon/
Nomisma	Κύπριοι ερευνητές σε ευρωπαϊκή έρευνα για την ανάπτυξη βιο-υλικών (Cypriot researchers in European research on bio-materials)	16-01-2025	Cyprus	Online news	https://nomisma.com.cy/features/enviroment/%ce%ba%cf%8d%cf%80%cf%81%ce%b9%ce%bf%ce%b9-%ce%b5%cf%81%ce%b5%cf%85%ce%bd%ce%b7%cf%84%ce%ad%cf%82-%cf%83%ce%b5-%ce%b5%cf%85%cf%81%cf%89%cf%80%ce%b1%cf%8a%ce%ba%ce%ae-%ce%ad%cf%81%ce%b5%cf%85%ce%bd/
Fast Forward	Cypriot Researchers Participate in European Study on Developing Biodegradable Materials	16-01-2025	Cyprus	Online news	https://fastforward.com.cy/tech/cypriot-researchers-biodegradable-materials
Università di Padova (via ANSA)	Alla ambientale di MAGICBIOMAT anche l'Università di Padova (The	31-01-2025	Italy	News agency	https://www.ansa.it/canale_legalita_scuola/notizie/universita_degli_studi_di_padova/2025/01/31/alla-ambientale-di-

	University of Padua also participated in the MAGICBIOMAT environmental event)				MAGICBIOMAT-anche-luniversita-di-padova_ba9d8b6f-24b3-4c3e-a9b1-49b075f8e634.html
Scienza Online	MAGICBIOMAT project coverage	07-02-2025	Italy	Science media	https://www.scienzaonline.com/eventi/itemlist/date/2025/2/7.html

Overall, the project launch and media outreach activities contributed to establishing the initial public presence of MAGICBIOMAT and supported visibility among both specialised and non-specialised audiences. An example of media coverage generated during Period 1 is presented in Figure 1.


HEADLINE The Mediterranean vampire snail, known …

HOME SCIENZAONLINE SCIENCE ONLINE EDITORIAL STAFF

Friday, February 7, 2025, 11:56 AM

MAGICBIOMAT: the project to develop circular bio-based materials with programmed biodegradability is underway.

MAGICBIOMAT, an ambitious project aimed at addressing the global challenge of plastic pollution by developing innovative, biodegradable, and environmentally friendly materials for a variety of applications, has officially begun.
The project, funded by the European Union's Horizon Europe program, is coordinated by the Technological University of the Shannon: Midlands Midwest (Ireland), with the participation of seven European partners: the

Figure 1. Example of media coverage for MAGICBIOMAT.

3.2. Digital Presence and Online Communication

3.2.1. Social Media Establishment and Management

During Period 1 (M1–M18), the MAGICBIOMAT project established and actively managed its presence across four social media platforms: Facebook, LinkedIn, Instagram, and YouTube. These platforms were used as primary communication channels to:

- introduce the project and its objectives
- raise awareness on topics related to bio-based materials, biodegradability, and circular design
- support awareness campaigns and dissemination activities
- engage with both specialised and non-specialised audiences

The official project social media channels are listed below:

- Facebook: https://www.facebook.com/MAGICBIOMAT
- LinkedIn: https://www.linkedin.com/company/MAGICBIOMAT/
- Instagram: https://www.instagram.com/MAGICBIOMAT/
- YouTube: https://www.youtube.com/channel/UCecUMAdLoVPnxunAtB3sb7w

A total of 60 social media posts were published during the reporting period, significantly exceeding the KPI target of 3–5 posts per quarter (i.e., 18- 30 during the first period) defined in D10.1. Project partners also contributed to increasing the project's visibility by resharing content through their institutional communication channels, extending the project's reach beyond its immediate audience. The performance of social media activities during Period 1 is summarised in Table 4.

Table 4. Social media activity overview (M1–M18).

Indicator	KPI target	Achieved by M18
Platforms established	2-3 (project lifetime)	4 platforms
Total posts published	3–5 posts per quarter	60 posts
Total reach	≥10,000 impressions (project lifetime)	~438,000
Followers	≥200 by M18	676

Overall, social media played a central role in establishing the project's communication presence and enabling continuous outreach throughout Period 1. An example of a social media post published during the reporting period is presented in Figure 2.



Figure 2. Example of social media post published on MAGICBIOMAT channels.

3.2.2. Website and Digital Presence

The official MAGICBIOMAT website (www.MAGICBIOMAT.eu) was launched in M6 and functions as the central hub for project-related communication and dissemination activities. The project website's homepage can be seen in the screenshot in Figure 3. The website provides information tailored to different audiences, including researchers, industry stakeholders, policymakers, and the general public. It includes:

- an overview of the project's objectives and concept
- information on consortium partners
- updates on project activities and developments
- a dedicated section for scientific publications and project results
- educational and awareness-oriented resources related to project themes

The website is regularly updated to ensure continuous access to project information and dissemination outputs throughout the project lifecycle. In addition, the website demonstrated strong performance during Period 1, significantly exceeding the project's lifetime KPI target of 2,500 users and 3,000 page views. By M18, the website had reached 9,741 users and 10,532 page views.

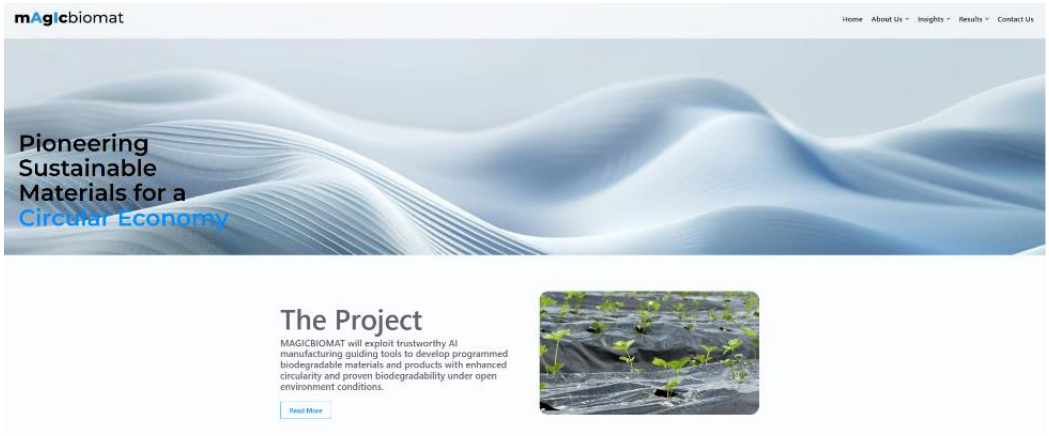


Figure 3. MAGICBIOMAT project website (homepage view).

3.2.3. Newsletter Dissemination

During Period 1, the MAGICBIOMAT project implemented newsletter dissemination activities to support direct communication with stakeholders and interested audiences. The first project newsletter was developed and released in M12 (a screenshot can be seen in Figure 4). It was disseminated through the project's communication channels, including social media platforms and LinkedIn, to ensure broad visibility among relevant audiences. The newsletter introduced the project and provided updates on project activities, developments, and dissemination actions implemented during the reporting period.

By the end of Period 1, the newsletter mailing list had reached 194 subscribers, significantly exceeding the KPI target of 100 subscribers by M18. Finally, the newsletter contributes to maintaining continuous communication with stakeholders and will continue to be published throughout the project duration.

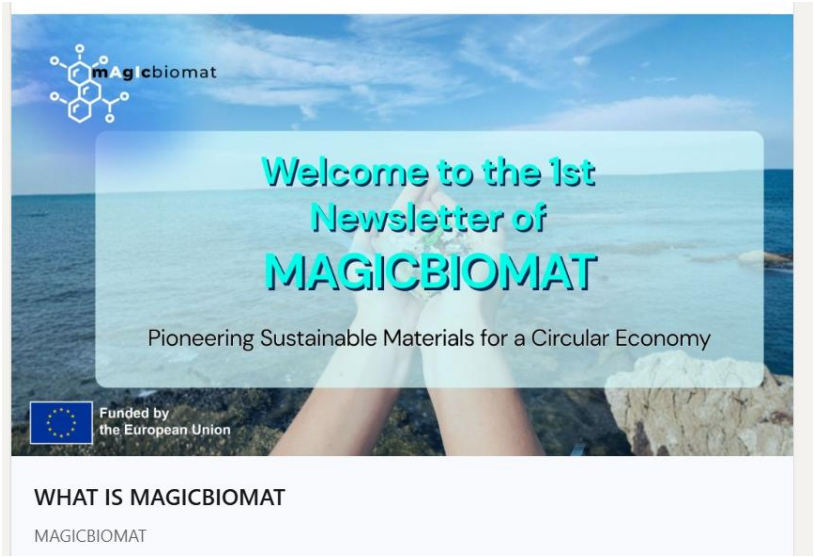


Figure 4. First MAGICBIOMAT newsletter.

3.3. Awareness Campaigns and Multimedia Content

During Period 1 (M1–M18), MAGICBIOMAT implemented targeted awareness campaigns and multimedia content activities aimed at increasing public understanding of topics related to bio-based materials, biodegradability, and circular design. These activities supported the project's communication objectives by translating scientific and technical concepts into accessible and engaging content formats suitable for non-specialised audiences. The awareness activities implemented during Period 1 included video-based communication campaigns, informative carousel content, and expert-driven multimedia dissemination initiatives.

3.3.1. Video awareness campaign

A video-based awareness campaign was developed to raise awareness about plastic pollution and introduce the key objectives of the project. The campaign included three videos published across the project's social media channels and YouTube platform: https://youtube.com/playlist?list=PLg7RbIkqV94WykyjmyN0f2rlNLFrE2EvZ&si=otdiD_AQ07_xg4iX

The campaign generated approximately 30,000 views across all platforms during the reporting period. The use of video-based communication supported wider audience reach and enabled the presentation of environmental challenges and sustainability-related topics in a visual and accessible format. Examples of the video awareness campaign are presented in Figure 5.



Figure 5. Examples of video awareness campaign content.

3.3.2. Informative carousel campaign

In parallel, an informative carousel campaign was developed to address key topics that are often not clearly understood by non-specialised audiences. In other words, MAGICBIOMAT deals with concepts such as bio-based materials, biodegradability, and circular design, which are frequently misunderstood or used interchangeably. To address this challenge, the carousel content was designed to explain these concepts in a clear, simple, and accessible way. The content of the carousel campaign was based on articles published on the project website resources section (https://www.MAGICBIOMAT.eu/resources/), ensuring that all communication was grounded in scientifically validated information. The campaign included 5 carousel posts covering topics such as:

- Differences between bio-based and biodegradable materials
- Environmental impact of plastics
- Circular design principles
- Common misconceptions around sustainability

The aim of this campaign was to translate complex scientific and technical information into easily understandable content for wider audiences, supporting both awareness and informed understanding of the project's thematic areas. An example of the carousel campaign is presented in Figure 6.

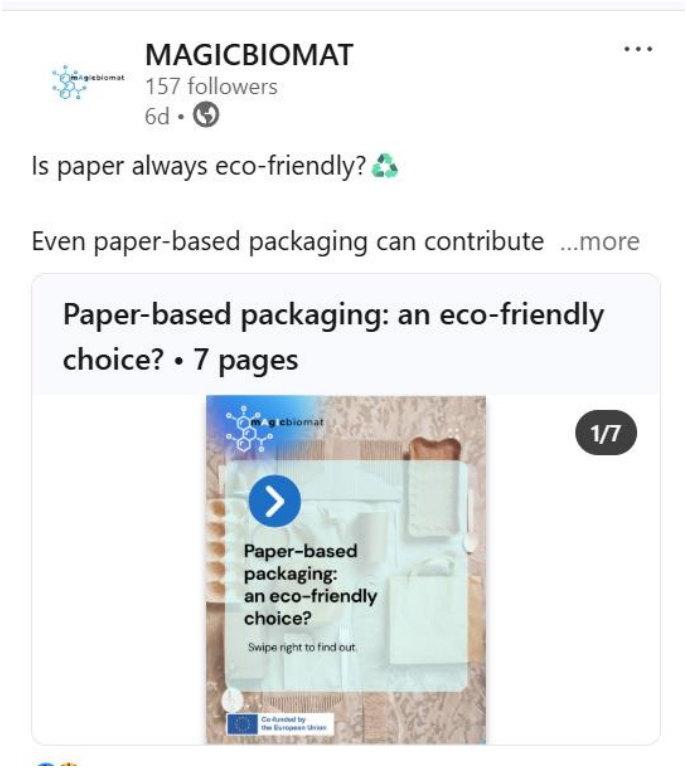


Figure 6. Example of informative carousel content developed for MAGICBIOMAT.

3.3.3. Expert video series: “Asking the Hard Questions”

During Period 1 (M1–M18), MAGICBIOMAT developed the video series *“Asking the Hard Questions”* as a dissemination activity aimed at supporting knowledge exchange and presenting expert perspectives on key challenges related to bio-based materials. The series features short video contributions from project partners, who respond to the same set of targeted questions addressing critical issues such as:

- the scalability of sustainable materials
- the balance between durability and biodegradability
- the readiness of industry to adopt bio-based solutions

By presenting multiple viewpoints from different organisations, the series highlights the complexity of these challenges and reflects both scientific and industry perspectives. A total of 8 videos were published across the project’s communication channels. You can view them all on the dedicated playlist on MAGICBIOMAT’s YouTube channel: https://youtube.com/playlist?list=PLg7RbIkqV94W8F2Jlq7jgswVgqklbpYTZ&si=-izQd7VCEeDpSqGL

The series generated more than 200,000 combined views across all project platforms, demonstrating strong audience interest and engagement. Unlike general awareness campaigns, this initiative contributes to dissemination by:

- presenting expert knowledge
- encouraging reflection on real-world challenges
- supporting dialogue between research and industry

Examples of the video series are presented in Figure 7.

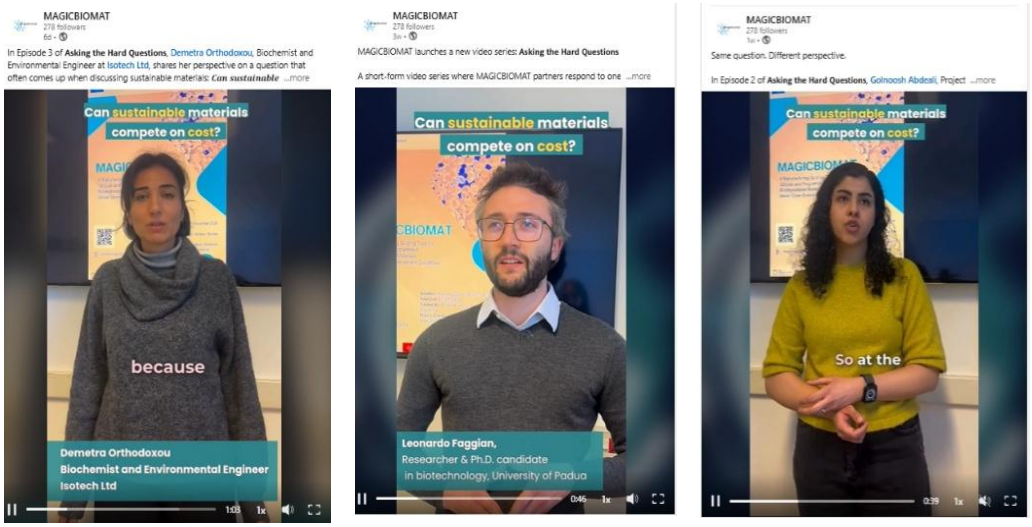


Figure 7. Examples of the "Asking the hard questions" video series.

3.4. Scientific Knowledge Exchange and Dissemination

During Period 1 (M1–M18), MAGICBIOMAT implemented scientific dissemination and knowledge exchange activities aimed at supporting the transfer of project-related knowledge to scientific, industrial, and professional audiences. These activities focused on:

- dissemination of peer-reviewed scientific outputs
- participation in scientific and professional events
- organisation of webinars and expert discussions
- strengthening collaboration and exchange between academia and industry

The activities implemented during this period contributed to increasing the visibility of the project within the research and innovation community and supported engagement with relevant stakeholders working in the fields of sustainable materials, biodegradability, circular design, and bio-based polymers.

3.4.1. Dissemination of research results

3.4.1.1 Peer-reviewed publications

During the reporting period, project partners produced scientific publications contributing to the dissemination of research results. A total of 4 peer-reviewed publications were published, as follows:

- Gong, K., Chen, Y., Lu, Y., Zhao, Z., Portela, A., Xu, H., Hu, M., Liu, H., & Collins, M. N. (2025). Study of Thermoplastic Starch/Poly (Butylene Succinate) Blends: The Effect of Reactive Compatibilizers. *Macromol*, *5*(3). https://doi.org/10.3390/macromol5030042
- Gong, K., Lu, Y., Portela, A., Taghinezhad, S. F., Lawlor, D., Connolly, S., Hu, M., Chen, Y., & Collins, M. N. (2025). A Comparative Study on the Compatibilization of Thermoplastic Starch/Polybutylene Succinate Blends by Chain Extender and Epoxidized Linseed Oil. Macromol, 5(2). https://doi.org/10.3390/macromol5020024
- Gong, K., Lu, Y., Liu, H., Portela, A., De Lima, T., Xu, H., Collins, M. N., & Chen, Y. (2025). A comparison of granule-based material extrusion and fused filament fabrication in the performances of TPS/PBS blend. *Journal of Materials Research and Technology*, *37*, 5177-5186. https://doi.org/10.1016/j.jmrt.2025.07.168
- Gong, K., Lu, Y., Liu, H. *et al.* (2025). Performance of Granule Material Extruded Thermoplastic Starch-Polybutylene Succinate Blend Using Taguchi Method. *J. of Materi Eng and Perform* **34**, 22373–22392. https://doi.org/10.1007/s11665-025-11487-w

The publications are also featured in the dedicated scientific publications section of the MAGICBIOMAT website: https://www.MAGICBIOMAT.eu/results/scientific-publications/

These outputs contributed to the dissemination of project-related knowledge within the scientific community and supported knowledge transfer in the field of bio-based and biodegradable materials.

3.4.2. Conferences and Events Participation

During Period 1, project partners presented MAGICBIOMAT at scientific conferences and industry-related events relevant to the project's thematic areas. Three presentations were delivered during the reporting period, contributing to the dissemination of project activities and research developments to specialised audiences. The presentations focused on topics related to sustainable polymer systems, biodegradable materials, circular design, and AI-supported material development within the context of the MAGICBIOMAT project. The delivered conferences are summarised in Table 5.

Table 5. Conference and event participation during period 1 (M1–M18).

Event	Date	Organiser	Location	Partner presenting	No. of participants
Professional webinar / industry event - Touch base with MAGICBIOMAT: Guiding tool for circular and programmed biodegradable materials under open environment conditions	12/05/2026	European Bioplastics	Online	TUS	80
Conference - Polymers 2026: From Sustainability to Smart Systems	08/04/2026	Setcor Media FZ-LLC	Lisbon, Portugal	TUS	350 approx.
IX International Seminar on Sustainable Biopolymers and Composites	4-5/05/2026	AIMPLAS (Plastics Technological Institute / Plastics Technology Centre)	Valencia, Spain	TUS	150+

These activities enabled direct dissemination of project results to specialised audiences and supported engagement with the research and innovation community.

3.4.3. Webinars

During Period 1 (M1–M18), dissemination activities included the organisation and participation in events aimed at supporting knowledge exchange and the transfer of project-related knowledge to relevant stakeholder groups. A key activity under Task 10.3 was the organisation of a joint webinar series in collaboration with the EU-funded project ANIPH - Avoiding the Negative Impacts produced by Plastic materials in Humanitarian contexts (GA No. 101181943), focusing on bio-based materials, circular design, and sustainable manufacturing. The selection of webinar topics was based on areas of convergence between the two projects, particularly in relation to:

- sustainable material design
- circular economy approaches
- integration of digital tools and advanced technologies in biomaterials development

This ensured that the webinars addressed challenges and provided relevant insights to both scientific and industrial audiences. The webinars were organised in an online format, allowing participation from international/national audiences across academia, industry, and policy sectors. Each session included expert presentations followed by discussion. The webinars organised during Period 1 are summarised in Table 6.

Table 6. Webinars organised during Period 1 (M1–M18).

Webinar title	Date	Organisations involved	Participants	Link
Circular by Design: Sustainable Manufacturing of Next-Generation Biomaterials	26-02-2026	University College Dublin; TUS; CETBIO; CETEC	45	https://www.MAGICBIOMAT.eu/circular-by-design-highlights-from-our-first-webinar/

AI Meets Biodegradation: Digital Tools for Smarter Bio-based Materials	21-04-2026	Los Alamos National Laboratory; Digiotouch; Agricultural University of Athens; TUS	28	https://www.MAGICBIOMAT.eu/aniph-x-MAGICBIOMAT-webinar-series-continues-strong/
3D Printing and Biofabrication: Designing sustainable materials	26-06-2026	University of Granada; TUS; CETEC	47	https://www.magicbiomat.eu/aniph-magicbiomat-webinar-reinforcing-biodegradable-plla-stents-with-3d-printing-technologies/

The first webinar, titled Circular by Design: Sustainable Manufacturing of Next-Generation Biomaterials, took place on 26 February 2026 from 14:30-15:30 CET. The webinar featured Prof. Kevin O'Connor (University College Dublin, UCD), Dr Yuanyuan Chen (Technological University of the Shannon, TUS), and Salvador Garcia (Centro Tecnológico del Calzado y del Plástico de la Región de Murcia, CETEC), and was moderated by Cristina Blaya (Centro Tecnológico del Calzado y del Plástico de la Región de Murcia, CETEC).

Through applied examples and research insights, the session addressed key challenges linked to scalability and sustainability, supporting the broader transition toward materials designed to return safely to nature.

The second webinar, titled “AI Meets Biodegradation: Digital Tools for Smarter Bio-based Materials”, was held on 21 April 2026, at 14:30-15:30 CEST. The webinar featured Dr Jessica N. Lalonde (Los Alamos National Laboratory, LANL), Marharyta Domnich (Digiotouch – MAGICBIOMAT), Marianna Kotzabasaki (Agricultural University of Athens, AUA), and Golnoosh Abdeali (Technological University of the Shannon, TUS).

The session focused on the role of artificial intelligence in accelerating the development of circular bio-based materials. By integrating advanced digital tools into the material life cycle, researchers can now

predict, programme, and optimise biodegradation pathways with unprecedented precision. The session highlighted how predictive tools and digital traceability systems support smarter polymer engineering and create more transparent value chains.

The third webinar, titled "3D Printing and Biofabrication: Designing Sustainable Materials", took place on 26 June 2026 from 14:30–15:30 CEST. The webinar featured Juan Antonio Marchal Corrales (University of Granada), Dr Yuanyuan Chen (Technological University of the Shannon, TUS), and Ana Voltes (University of Granada). The session explored how 3D printing and biofabrication technologies are enabling the development of bio-based and biodegradable materials with enhanced circularity and reduced environmental impact. Through applied examples and research insights, the session highlighted emerging applications in healthcare, advanced biomaterials and sustainable manufacturing, while demonstrating how additive manufacturing can support the development of high-performance materials with improved end-of-life management and greater sustainability.

All webinars were promoted through dedicated communication and dissemination activities, including social media campaigns, newsletter coverage, website announcements, and press releases issued by the project partners. Together, the webinars attracted 120 participants from academia, industry, research organisations, and other stakeholder groups.

The webinars provided an effective platform for disseminating project-related knowledge and facilitating dialogue between researchers, industry stakeholders, and practitioners. Recordings of the sessions remain publicly available online, extending their accessibility beyond the live events (the recording of webinar 3 is not available yet):

- Recording link – Webinar 1
- Recording link – Webinar 2

In addition to the webinars implemented during Period 1, two more sessions are planned in the next phase of the project, building on the established collaboration with ANIPH and expanding the thematic scope of the series. The webinars attracted numerous participants from both academia and industry, reflecting the relevance of the topics addressed. A screenshot from the joint ANIPH–MAGICBIOMAT webinar series is presented in Figure 8.

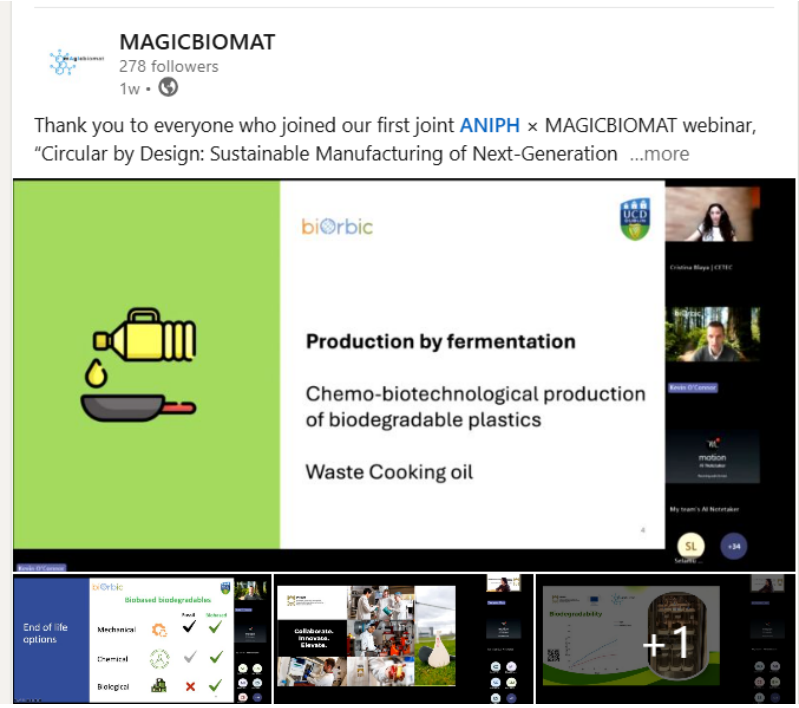


Figure 8. Screenshot from the joint ANIPH–MAGICBIOMAT webinar series.

3.5. Synergies and Clustering Activities

During Period 1 (M1–M18), the MAGICBIOMAT project actively pursued synergies and clustering opportunities with related initiatives, aiming to strengthen collaboration, enhance visibility, and maximise the impact of project activities. These activities focused on establishing connections with projects and platforms addressing similar challenges, particularly in the areas of bio-based materials, circular design, and sustainability.

3.5.1. Collaboration with EU-funded projects

MAGICBIOMAT established synergies with two EU-funded projects:

- ANIPH - Avoiding the Negative Impacts Produced by Plastic Materials in Humanitarian Contexts (GA No. 101181943)
- Bio2PEs - Bio-based Polymers to Replace Conventional Plastics (GA No. 101221903)

These collaborations supported:

- exchange of knowledge and expertise
- identification of common challenges and research directions
- development of joint dissemination and communication activities

The collaboration with ANIPH resulted in the co-organisation of a joint webinar series, demonstrating active cooperation between the two projects. In addition, the collaboration with Bio2PEs contributed to increased visibility and networking opportunities within the field of bio-based and biodegradable materials.

3.5.2. Participation in EU-level platforms and initiatives

In addition to project-to-project collaboration, MAGICBIOMAT engaged with broader European initiatives and knowledge-sharing platforms. The project was featured on the EU-FarmBook platform (Figure 9). EU-FarmBook is a Horizon Europe knowledge-sharing platform that facilitates the exchange of agricultural and forestry knowledge across Europe. The inclusion of MAGICBIOMAT on this platform contributed to increasing the project's visibility among practitioners, researchers, and policymakers, and supported its integration into wider EU-level knowledge networks.

The project also engaged with industry-oriented platforms through its participation in the European Bioplastics "Touch Base" webinar series. This initiative brings together researchers, industry representatives, and stakeholders working on bio-based and biodegradable plastics.

MAGICBIOMAT was featured in the series with a dedicated session scheduled on 12 May 2026 (13:00–13:45 CET), during which the project's approach to the AI-guided development of biodegradable materials was presented. The presentation was delivered by the project coordinator, Dr Yuanyuan Chen (Technological University of the Shannon). The session attracted participants from both academia and industry, supporting knowledge exchange and visibility within the European bioplastics community. This participation contributed to positioning MAGICBIOMAT within an industry-relevant context and facilitated engagement with stakeholders active in the development and application of sustainable materials.

- Event link: https://www.european-bioplastics.org/research-and-innovation-projects-events/touch-base-with-ri-projects/

These activities supported the positioning of MAGICBIOMAT within the broader ecosystem of research and innovation initiatives related to sustainable materials.

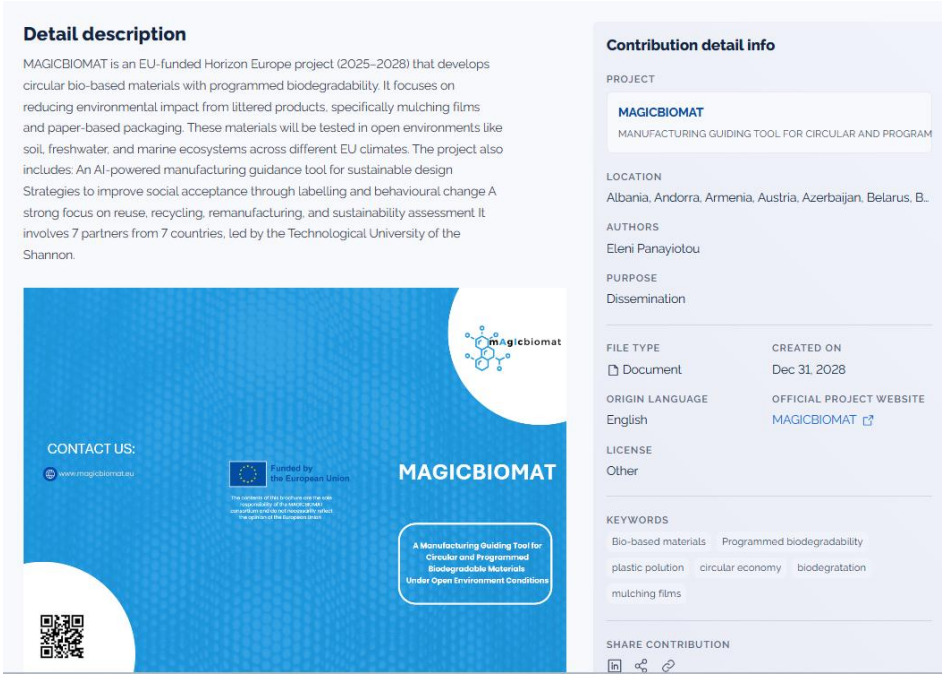


Figure 9. MAGICBIOMAT featured on EU-FarmBook platform.

The synergies and clustering activities described above are summarised in Table 7, providing a consolidated overview of EU project collaborations, EU-level platforms, and clustering initiatives relevant to MAGICBIOMAT.

Table 7. Synergies and clustering activities during period 1 (M1–M18).

Initiative / Project	Type of collaboration	Activity implemented	Outcome	Link
ANIPH	EU project collaboration	Joint webinar series	Knowledge exchange and joint dissemination	https://www.MAGICBIOMAT.eu/collaboration-between-MAGICBIOMAT-and-aniph/
Bio2PEs	EU project collaboration	Presentation of MAGICBIOMAT at Bio2PEs Kick-off Meeting (Athlone, Ireland, 17–18 October 2025	Increased visibility and knowledge exchange with a sister project addressing similar challenges in bio-based and biodegradable materials	https://www.MAGICBIOMAT.eu/MAGICBIOMAT-featured-at-the-bio2pes-kick-off-meeting/

EU-FarmBook	EU platform	Project featured on platform	Increased visibility within EU networks	https://eufarmbook.eu/en/projects/b0355ff50f7541abe49e61a0d3943c51a3839c16761a25b08c2edc9e2ba2fbe4/contributions
European Bioplastics	Industry platform initiative	Participation in Touch Base event	Engagement with industry stakeholders	https://www.european-bioplastics.org/research-and-innovation-projects-events/touch-base-with-ri-projects/
European Bioplastics – Coatings Cluster	European clustering initiative	Participation in thematic cluster	Networking and collaboration opportunities within the bioplastics sector	https://www.european-bioplastics.org/research-projects/coatings-cluster/
European Bioplastics – Agricultural Applications Cluster	European clustering initiative	Initiated participation process	Expected to strengthen visibility within the soil-biodegradable materials community	https://www.european-bioplastics.org/research-projects/biobased-materials-and-products-for-biodegradable-in-soil-applications/
European Bioplastics – Packaging Cluster	European clustering initiative	Initiated participation process	Expected to increase engagement with packaging-related bioplastics initiatives	https://www.european-bioplastics.org/research-projects/packaging-cluster/

4. Results and Impacts

During Period 1 (M1–M18), MAGICBIOMAT implemented a combination of communication and dissemination activities targeting different audiences and objectives. For the purposes of this report:

- communication activities refer to actions aimed at increasing public awareness, visibility, outreach, and engagement through channels such as social media, media outreach, newsletters, awareness campaigns, and the project website
- dissemination activities refer to actions supporting the transfer of project-related knowledge to scientific, technical, industrial, and professional audiences through publications, conferences, webinars, expert content, and knowledge exchange activities

The activities implemented during Period 1 contributed to:

- the establishment of the project's communication and dissemination presence
- visibility at national and European level
- dissemination of project-related scientific and technical knowledge
- stakeholder engagement and knowledge exchange
- collaboration with EU-funded projects and relevant initiatives

Importantly, several KPIs defined for the full project duration were already achieved or exceeded during the first reporting period. The following sections present the main results and impacts achieved during Period 1 according to these complementary dimensions.

4.1. Communication Impact

Communication activities implemented during Period 1 contributed significantly to increasing the visibility and awareness of the MAGICBIOMAT project among both specialised and non-specialised audiences. The communication activities achieved:

- establishment of four active social media platforms
- publication of 60 social media posts
- audience reach of approximately 438,000 people
- growth to 676 followers across platforms
- publication of 3 press releases and generation of 10 media articles
- strong website performance, reaching 9,741 users and 10,532 page views
- development of awareness-oriented multimedia campaigns and visual educational content
- growth of the project newsletter mailing list to 194 subscribers

These activities supported public outreach, strengthened the project's digital presence, and contributed to increasing awareness on topics related to bio-based materials, biodegradability, and circular design.

4.2. Dissemination Impact

Dissemination activities implemented during Period 1 focused on supporting the transfer of project-related knowledge to scientific, technical, industrial, and professional audiences. The dissemination activities achieved:

- publication of 4 peer-reviewed scientific articles
- delivery of 3 conference and event presentations

- organisation of 3 webinars supporting knowledge exchange and expert dialogue
- development of the “Asking the Hard Questions” expert video series, generating more than 200,000 views
- strengthening of collaboration with EU-funded projects and EU-level clustering initiatives

These activities contributed to increasing the visibility of MAGICBIOMAT within the research and innovation community while supporting knowledge exchange between academia, industry, and other relevant stakeholders.

4.3. Stakeholder Engagement

During Period 1, MAGICBIOMAT implemented stakeholder engagement activities targeting scientific, industrial, professional, and public audiences. Stakeholder engagement was supported through:

- webinars and online discussions
- participation in conferences and professional events
- direct communication through newsletters and digital communication channels
- awareness campaigns and multimedia dissemination activities
- collaboration with EU-funded projects and EU-level initiatives

These activities supported interaction with relevant stakeholders working in the fields of sustainable materials, biodegradability, circular design, packaging, coatings, and bio-based polymers. Stakeholder engagement activities implemented during Period 1 are summarised in Table 8.

Table 8. Stakeholder engagement during Period 1 (M1–M18).

Activity	Stakeholder group	Engagement type	KPI / Evidence	Implementation Period
Webinars	Academia, industry	Participation and knowledge exchange	120 participants	M14-M18
Conferences	Scientific and professional community	Presentation & networking	Estimated 500+ participants across conferences and events	M7-M18
Newsletter	Stakeholders	Direct communication	194 subscribers (target: ≥100 by M18)	M12

Social media	Public, stakeholders	Awareness and outreach	~438,000 reach; 676 followers (KPIs: ≥10,000 reach and ≥200 followers by M18)	M1-M18
Video series	Public, experts, industry	Engagement with expert perspectives	200,000+ views	M10-M18
Synergies and clustering	EU projects, industry platforms, EU-level initiatives	Collaboration and networking	2 EU project collaborations and engagement with EU-level clustering initiatives	M16-M18

Stakeholder engagement during Period 1 (M1-M18) was primarily indirect, achieved through communication and dissemination channels and it will be significantly strengthened in Period 2 (M19-M36) as more technical results become available and targeted stakeholder actions are implemented.

5. Future Plan (M19–M36)

During the next reporting period, the MAGICBIOMAT project will build on the communication and dissemination foundations established during Period 1 and progressively shift towards activities focused on dissemination of validated results, stakeholder engagement, exploitation, and knowledge transfer. As additional technical results become available, communication and dissemination activities will increasingly focus on supporting uptake, collaboration, training, and engagement with scientific, industrial, and policy-related stakeholders.

5.1. Strategic Direction

During the next reporting period, the project will transition from awareness-building activities to targeted dissemination, stakeholder engagement, and exploitation of results, in line with the objectives of WP11. While Period 1 focused on establishing communication channels and visibility, Period 2 will prioritise:

- dissemination of validated project results
- engagement with industry, end-users, and policymakers
- development and implementation of exploitation-related actions
- strengthening collaboration with EU-funded projects and initiatives

This shift reflects the increased availability of technical results and the need to promote their uptake and impact. This approach is aligned with the objectives of WP11, which focuses on the dissemination, exploitation, and uptake of project results.

5.2. Communication Activities

Communication activities will continue across the established channels to ensure consistency and sustained visibility. Planned actions include:

- regular publication of social media content
- continuous updates of the project website
- publication of blog posts presenting project results
- production and dissemination of newsletters
- preparation of press releases linked to key milestones
- production of multimedia content (videos, podcasts, interviews, visual materials)

These actions will support audience growth and maintain engagement with existing and new stakeholders.

5.3. Dissemination activities

Dissemination activities during Period 2 will increasingly focus on the communication of validated scientific and technical results.

Planned dissemination activities include:

- publication of peer-reviewed scientific articles
- participation in international conferences and scientific events
- presentation of project results to scientific and industrial audiences
- continued organisation of webinars, including collaborations with EU-funded projects
- dissemination of project outputs through online platforms and project resources

These activities will support knowledge transfer and strengthen the visibility of MAGICBIOMAT within the research and innovation ecosystem.

5.4. Stakeholder Engagement and Exploitation

Stakeholder engagement will become a central component of the project during Period 2. Planned activities include:

- organisation of stakeholder workshops and training sessions
- engagement with industry actors and end-users
- organisation of knowledge transfer and business-to-business (B2B) activities
- strengthening synergies with related EU-funded projects

These actions will support the uptake of project results, particularly in relation to bio-based and biodegradable materials and AI-supported material design.

5.5. Training and Knowledge Transfer

Training activities will be introduced to support wider dissemination of project knowledge. Planned actions include:

- development of a Massive Open Online Course (MOOC)
- preparation of structured training modules and educational content
- validation of training materials with stakeholders

These activities will contribute to capacity building and ensure that project knowledge is accessible beyond the consortium.

5.6. Policy Engagement and Standardisation

Policy engagement and standardisation activities will be strengthened during the next reporting period. Planned actions include:

- preparation of policy briefings
- engagement with policymakers and regulatory bodies
- contribution to standardisation activities (e.g. ISO, CEN)

These activities will support the integration of project results into policy frameworks and industry standards.

5.7. Overview of Planned Activities

The KPIs planned for implementation or further assessment in the next reporting periods are summarised in Table 9.

Table 9. KPIs planned for later stages of the project.

KPI	Target	Planned activities
MOOCs	5 modules / 12 lectures	Development and launch of online training modules (Task 11.3), including validation with stakeholders
Workshops	>3 workshops	Organisation of stakeholder workshops and technical sessions presenting project results
Policy briefings	2	Preparation of policy-oriented outputs and engagement with policymakers
Standardisation contributions	1–2	Contribution to standardisation bodies using project results
Podcasts	5–10	Development of expert discussion series on project topics
Blog posts	5–10	Continued publication of results-driven website content, building on the 9 posts already published during Period 1
Webinar	1	Organisation of webinar addressing specifically a topic that is relevant to industry stakeholders
Online lectures	Every 3 months (6 in total)	Organisation of online lectures every 3 months by inviting experts from areas of biopolymer development and production, AI in plastics, biodegradability, legal and policy aspect, marketing, and other EU projects.
Knowledge transfer activities	>3	Participation at industrial fairs, conferences, congresses and B2B events
Engagement with policymakers	5+	Participation in policy meetings, consultations, and stakeholder dialogues

6. Conclusions

During Period 1 (M1–M18), Task 10.3 successfully established the communication and dissemination foundations of the MAGICBIOMAT project and contributed significantly to project visibility, outreach,

stakeholder engagement, and dissemination of project-related knowledge. The activities implemented during the reporting period included:

- project launch and media outreach activities
- development of the project's digital presence
- awareness campaigns and multimedia communication activities
- scientific dissemination through publications, conferences, and webinars
- synergies and clustering activities with EU-funded initiatives and relevant stakeholder communities

The results achieved during Period 1 demonstrate strong performance across multiple communication and dissemination indicators. Several KPIs defined for the full project duration were already achieved or exceeded by M18, particularly in relation to:

- audience reach
- social media growth
- website performance
- newsletter subscribers
- digital engagement

The project also established a strong dissemination presence within the scientific and professional community through peer-reviewed publications, conference participation, webinars, and collaborative dissemination activities. A key achievement during Period 1 was the successful establishment of communication and dissemination channels that will support the wider dissemination, exploitation, and uptake of project results during the next reporting period.

The activities implemented under Task 10.3 also contributed to strengthening collaboration with EU-funded projects, scientific networks, industry stakeholders, and European-level initiatives working in related thematic areas. During the next reporting period, communication and dissemination activities will increasingly focus on dissemination of validated scientific and technical results, stakeholder engagement, exploitation-related activities, training, and knowledge transfer. Overall, Task 10.3 has successfully positioned MAGICBIOMAT within the European research and innovation landscape and created a strong foundation for increased impact during Period 2.