GREEN-LOOP

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GREEN-LOOP
Sustainable manufacture systems towards novel bio-based materials

WP 8 – Communication, Dissemination and Training

D8.7 Dissemination Kit

Document information

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Authors: Lucia Barbiero, Marisa Macrini, Riccardo Varotto	
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Contents

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Introduction

As a relevant “DEC deliverable” for WP8 “Communication, Dissemination and Training” activities, the Project Dissemination Kit based on project results is planned to be delivered by Month 30.

A key project deliverable, the Dissemination Kit, which presents the WP8 project's results, is scheduled for delivery by Month 30, February 2025.

The main aim of the dissemination and training activities (three external workshops) is to distribute project results among the key target groups and the wider stakeholder community. This will be achieved by facilitating knowledge transfer, engaging the community, and maximising opportunities for exploitation, in line with the Business Model, Replication and Exploitation work.

The Dissemination Kit contains essential tools developed by NSB, and information about the scheduled dissemination events in 2025, to maximise the project's impact.

The tools, as outlined in the Communication and Dissemination Plan, have been implemented as follows:

1. An updated leaflet, summarising the GREEN-LOOP value chains, was distributed at the EUBCE in Marseille, June 2024. This will continue to be distributed at conferences, industrial fairs, and in partners' everyday professional activities.
2. A full project presentation video published via YouTube, September 2024, and premiered at the S3 Congress in Alessandria, October 2024. The project presentation video has been officially presented at the next General Meeting, as well as to the project officer and the external reviewer.
3. A short promotional video, produced by NSB, has been provided for exhibition use was released in September 2024, with its initial screening taking place at the GREEN-LOOP General Assembly, hosted at the GIG Research Institute Headquarters in Katowice, in October 2024.
4. A poster research presentation was published in the ECOMONDO 2024 Acts for the Conference: "Technological solutions for resources recovery from end-of-life products and materials" held at ECOMONDO 2024 in Rimini (IT), on Tuesday 5th November 2024.

The dissemination events scheduled by the end of the project are:

A. BIO-MATTERS Cluster final Joint Event
B. GREEN-LOOP External Workshops
C. EUBCE 2025

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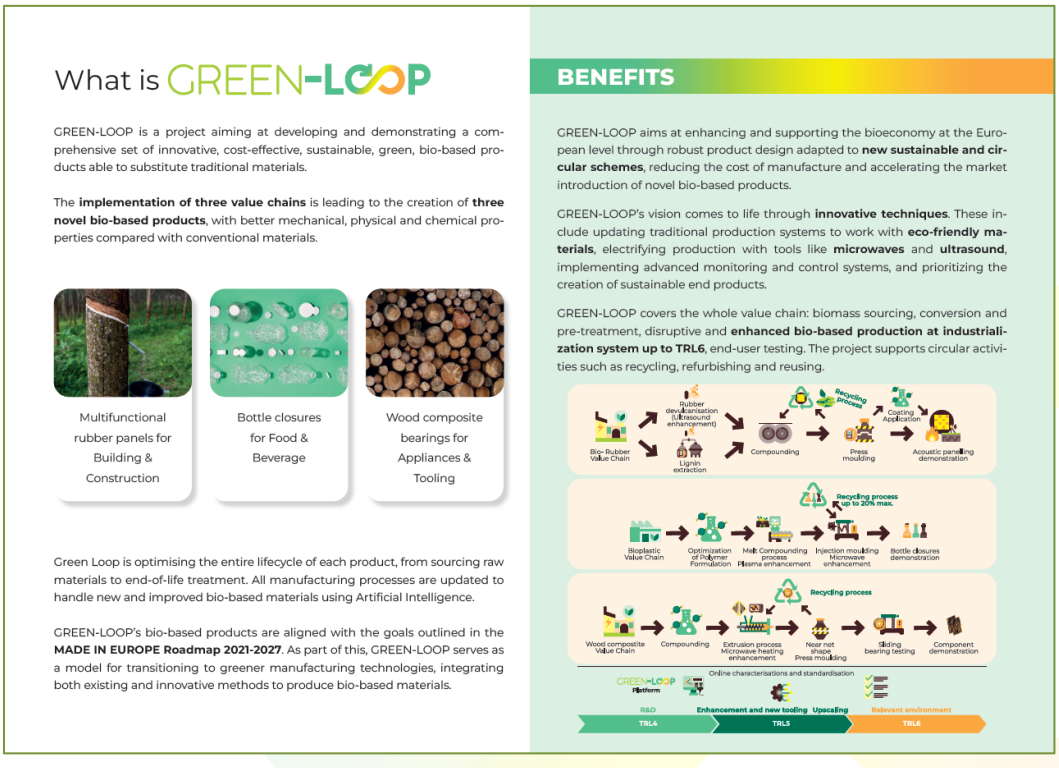
1. The updated leaflet

Available at the following link: [Communication Kit – Green Loop Project](#) – Flyer



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2. A full project presentation video

The Horizon EU Green-Loop full presentation video (5'51" long), includes interviews with some WP leaders and representatives of the three value chains. The project video has been published in the YouTube channel on 11 September 2024, with the following introduction to the project:

Our challenge?
Design and optimisation of **three innovative bio-based materials and products**:
Multifunctional rubber panels for vibro-acoustic transmission loss reduction and fire-retardant properties
Bioplastic bottle caps for olive oil and spirits like Limoncello
Wood composite bearings for the appliance and tool industry.

Join us on this exciting journey towards a cleaner, more resilient world.

Watch the video to see how we're making it happen!

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💪 **The Partners**: Kemijski inštitut ZAG Ljubljana Mixcycling Srl Società Benefit NSBproject Le Terre di zoè - Azienda Agricola Biologica e Agriturismo Główny Instytut Górnictwa - Państwowy Instytut Badawczy RWTH Aachen University ISQ Axia Innovation AIMEN Centro Tecnológico National Composites Centre University of Bristol, Idener, Fraunhofer, Guala Closures, IRIS Technology Solutions, Austrian Standards.

Available at the following link: GREEN-LOOP - YouTube

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3. A short promotional video

A short, non-speaking promotional video (2'05" long), intended for exhibition, was released in September 2024. It will be shown at the final scheduled GREEN-LOOP dissemination events.

Available at the following link: GREEN-LOOP Project

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4. A poster research presentation

A poster research presentation has been published in the ECOMONDO 2024 Acts (Poster Session, n. 33 “GREEN-LOOP: Sustainable Bio-based Materials and Circular Economy Solutions”).

More information at the following link: [Technological solutions for resources recovery from end-of-life products and materials]

GREEN-LOOP

Sustainable Bio-based Materials and Circular Economy Solutions

The Green-Loop project successfully demonstrates that **bio-based materials can significantly reduce environmental impact** across various industries.

Bio-rubber panels improve vibro-acoustic and fire-retardant performance by using recycled rubber and lignin.

Bioplastic caps provide a biodegradable alternative to traditional plastics and aluminum, aligning with EU circular economy goals.

Wood composites show potential for energy-efficient production with excellent tribological properties suitable for industrial applications.

Ongoing testing and refinement will enhance the scalability and market readiness of these innovations, advancing the circular economy and reducing dependence on non-renewable resources.

Bio-rubber:

The bio-rubber value chain aims to develop multifunctional panels using recycled rubber from end-of-life tires and lignin, a biopolymer derived from biomass.

The panels are designed to improve vibro-acoustic insulation and fire-retardant properties compared to conventional materials.

Ultrasound technology is employed to devulcanize the rubber, breaking down the cross-linked structures for reprocessing while maintaining the integrity of the polymer.

Lignin is added to enhance fire resistance. These panels undergo comprehensive testing, including fire resistance and acoustic performance assessments, ensuring their suitability for industrial applications.

Bioplastic:

Green-Loop is developing biodegradable bottle closures for olive oil and spirits.

These closures are made from a blend of PLA (polylactic acid), PHA (polyhydroxyalkanoates), and cork powder, a byproduct of cork production.

The goal is to reduce reliance on conventional plastics and aluminum.

Injection molding trials are conducted to test the material's mechanical properties, sealing capabilities, and compatibility with various bottle designs.

The formulation is continuously refined to improve flow and rigidity, ensuring that the closures meet performance standards while maintaining biodegradability.

Wood Composites:

This value chain focuses on creating sustainable materials for industrial slide bearings.

A microwave heating system is integrated into the extrusion and press-molding processes, improving energy efficiency.

The resulting wood composites are tested for mechanical strength and tribological properties, including wear resistance.

These materials are further evaluated in real-world industrial applications to validate their performance and scalability, particularly for use in injection molding machines.

Authors:
Marco Scatto, marco.scatto@mixcycling.com, Mixcycling, (ITA);
Jens Schmidt, jens.schmidt@isc.fraunhofer.de, Fraunhofer ISC (DE);
Adam Sparkes, adam.sparkes@nccuk.com, National Composites Centre (UK);
Luis Enrique Acevedo Galicia, luisenrique.acevedo@idener.ai, Idener AI (ES);
Riccardo Varotto, r.varotto@nsbproject.com, NSBproject (ITA).

Partners:

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Member of:

Biomatters
Manufacturing technologies for bio-based materials

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UK Research and Innovation

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A. BIO-MATTERS Cluster Joint Final Event

The GREEN-LOOP's sister project WASTE2BIOCOMP is organizing the final cluster event alongside with their final event in Brussels (Belgium) scheduled on 29th April 2025. The event will feature a dedicated cluster session with project presentations and a roundtable with industry and bio-material experts.

The GREEN-LOOP project will be presented at the "BIOMATTERS Cluster Session: Spotlight on Collaborating Projects. 13:55 – 14:05" with a Project Green-Loop Presentation to be performed by Alfonso Hernández Bustos from IDENER.

NSB will attend during the full day to represent the GREEN-LOOP project in a dedicated Exhibition "BIOMATTERS Corner". A project stand will consist of a roll-up banner, flyers, A3 poster, samples from the three value chains (to be provided by the partners concerned).

Input for the key messages, for the "Project Green-Loop Presentation" and for the Exhibition "BIOMATTERS Corner", will be gathered at the Dissemination Workshop scheduled for 4 March during the GREEN-LOOP General Assembly in Bristol.

Registration form with additional information at the following link: Beyond Waste: Shaping the Future with Bio-Based Materials

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B. GREEN-LOOP External Workshops

Three GREEN-LOOP external workshops will be conducted online by the end of May 2025 to reach relevant stakeholders for each value chain.

To ensure we reach the relevant audience and maximise engagement, the NSB team will support the external workshops with a social media campaign in April and on-site promotion during the BIO-MATTERS Cluster Joint Event on 29 April.

Workshop	Main outcomes	Date	Leading partner	Target groups
1	Disseminating process and product innovations for the bio-rubber value chain	TBC	NCC	Industry, business partners, and Research communities
2	Disseminating process and product innovations for the bio-plastic value chain	TBC	GUALA	Industry, business partners, and Research communities
3	Disseminating process and product innovations for the wood-based composites value chain	TBC	FHF	Industry, business partners, and Research communities

Input for the key messages for the external workshops will be gathered at the Dissemination Workshop scheduled for 4 March during the GREEN-LOOP General Assembly in Bristol.

Additional information will be available at the following link: https://www.greenloop-project.eu/external-workshops/

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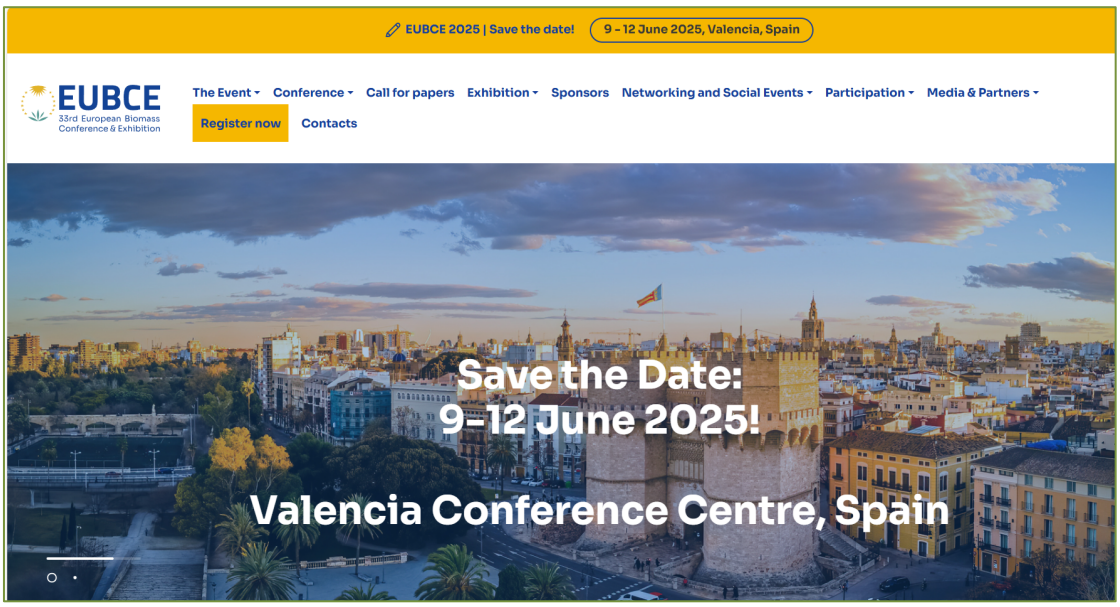
C. EUBCE 2025: EU Project Visibility Package

NSB will exhibit the GREEN-LOOP project with a booth involving a roll-up banner, flyers, and prototypes from the three value chains (to be provided by the concerned partners) and the NSB team will attend at least with two members during the four days.

AIMEN will present a poster at the Conference.

NSB also booked a one speaking slot opportunity in the exhibition forum to present the GREEN-LOOP project.

Key messages to be disseminated in the Project booth and the speaking slot opportunity will be inspired by the output of the Dissemination workshop scheduled for March 4th during the GREEN-LOOP GA in Bristol.



Link for Registration here: https://www.eubce.com/registration-2025/

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