




BIOMATTERS

Manufacturing technologies
for bio-based materials

**We are
stronger
together**

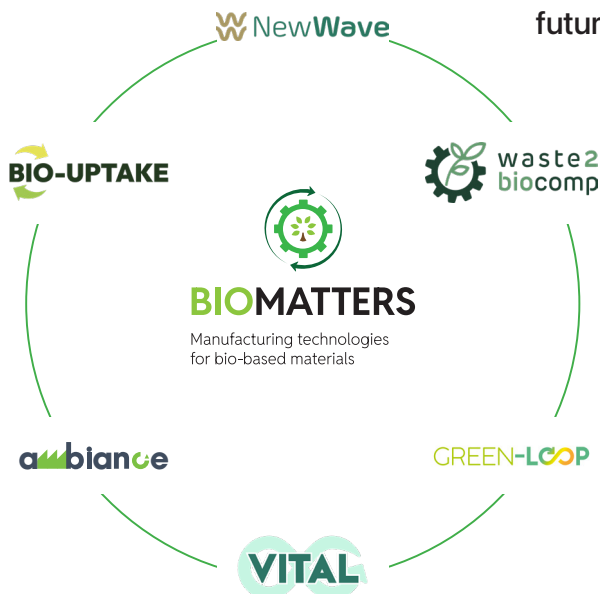
A close-up photograph of a person wearing a white lab coat and blue nitrile gloves, holding a clump of dark brown soil in their right hand. The background is a blurred outdoor setting with a field and a bright sky, suggesting a field or laboratory environment. The lighting is warm, likely from the sun being low in the sky.

The BIOMATTERS Cluster is more than its projects: It is a driving force for European bio-based manufacturing innovation, building a bridge between research, industry, and society.

AMBIANCE, BIO-UPTAKE, GREEN-LOOP, NEW WAVE, VITAL and Waste2BioComp have united under a shared goal: making sustainable processes and products a norm in the EU. Teaming up their resources and expertise, the six Horizon Europe projects form an awareness powerhouse that engages stakeholders and the public in the journey toward sustainable manufacturing.

Together, they aim to spotlight and address today's pressing challenges, utilising bio-based materials to generate innovative solutions.

Beyond individual achievements, the BIOMATTERS Cluster strengthens cooperation among EU-funded initiatives, amplifying research impact and driving collective progress toward a more sustainable and innovative future.



2023

Cluster Agreement signature

BIO-MATTER COLLABORATION AGREEMENT
Annexion

amibiance BIO-UPTAKE
GREEN-LOOP NewWave
VITAL waste2 biocomp

The Collaboration Agreement, opportunities

1. **OBJECTIVE:** Mutual benefit Maximization of the Best Practice for 1500 tonnes application through bio-based intermediates, digital intelligence and climate approach of 1500 tonnes per year total biomass (planting) supported by the cluster (France, EU).
2. **SCOPE:** The agreement is about plants bio-valorisation process to give the way for the future use of biomass for the product of 1500 tonnes per year total biomass (planting) supported by the project of using the Collaborative Agreement (France, EU).
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Collaboration Agreement between AMIBIANCE, BIO-UPTAKE, GREEN-LOOP, NEW WAVE, VITAL, and WASTE2 BIOCOMP.

2024

Joint participation

EUBCE 2024
Eurasian Bioeconomy Conference & Exhibition
Marseille France | 26-27 June 2024

Plastic congress
3 | 26-27 June 2024

2025

Final Event

BIOMATTERS
Manufacturing technologies for the bio-based economy

Contributing to a better Bioeconomy
The contribution of the Bioeconomy Strategy to the Bioeconomy Strategy of 2020

More details: <https://www.biomatters.eu>

1. Economic obstacles

One of the most significant barriers to cost competitiveness. Bio-based materials are generally more expensive than fossil-based or recycled alternatives. This is due to higher raw material costs, limited availability, and the need for additional government support, all of which increase overall production costs. In many cases, manufacturing equipment used in bio-based operations must be custom-developed, increasing costs. Furthermore, farm-based equipment and activities for production are costly, regardless of the industrial origin.

Cost Competitiveness Compared to Fossil-Based Alternatives: This is arguably the most pressing obstacle. Bio-based products often face higher costs due to smaller production scales, higher input costs, and often more complex processing requirements. Industry needs a higher production cost gap alignment pathway to overcome fossil-based products. For this, the strategy impacts their ability to compete in price with established petrochemical goods, even when offering superior environmental profiles. This clearly offers better long-term price stability, making it interesting to pursue a higher volume market.

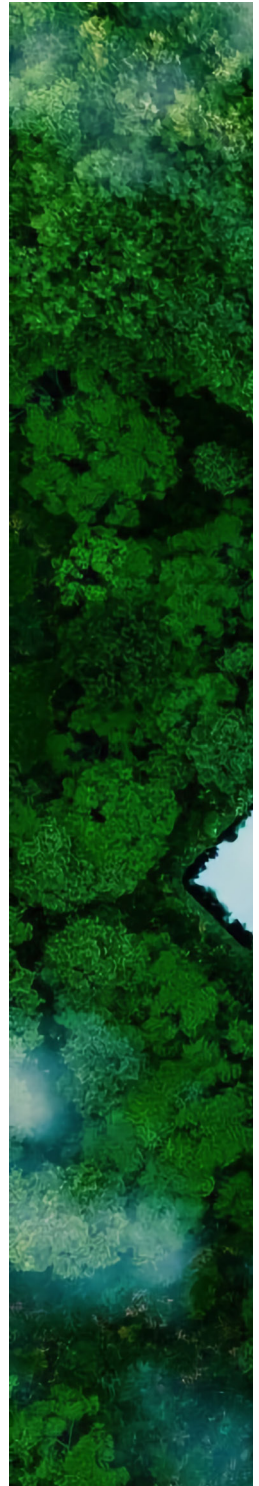
Availability: While Europe has agricultural resources and potential to produce, raw materials, are harvested, and supplied via the transport and logistics. EU-based infrastructure, reliance on specific agricultural waste creates market fluctuations availability based on harvest cycles and local competition for biomass.

Consumer Awareness and Performance Perception: There is often confusion among consumers about what is based on sustainable or sustainable. This means, the transition to bio-based products, have achieved significantly, some who users still hold on fossil alternatives about their performance, leading them to be reluctant to commercialize plants.

2026

Projects' End

Position Paper





6

EU-funded projects

3

Joint event participations

1

Final event

1

Position paper for EU Public Consultation

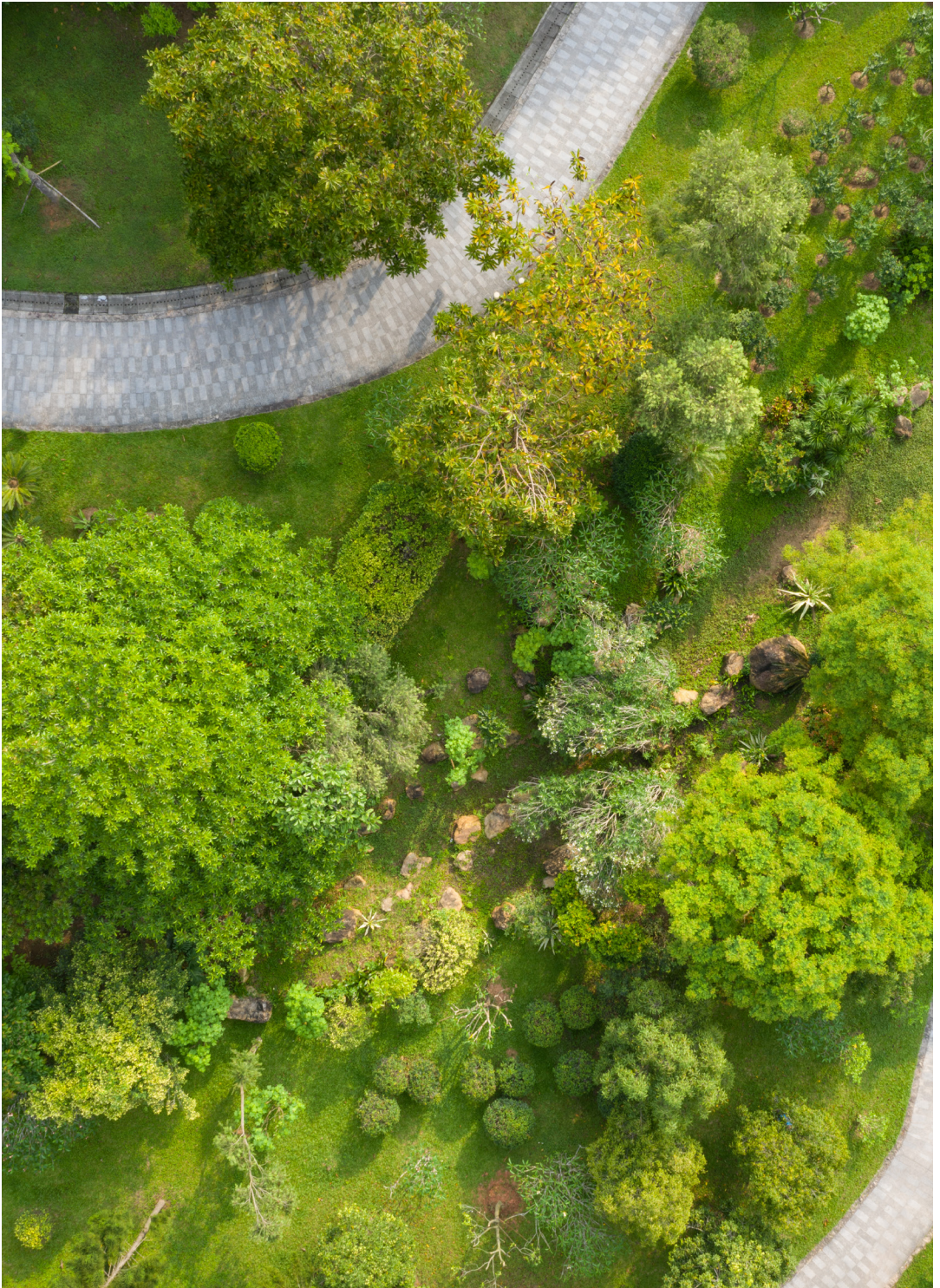


9

General meetings

1

HRBooster joint activity



Key aggregated outcomes

AMBIANCE

Up to 70% footprint reduction

GREEN-LOOP

Up to -60% production waste

VITAL

75,000 t CO₂ eq/year mitigation
potential

BIO-UPTAKE

-30% CO₂ emissions and energy
consumption compared to replaced
materials

Waste2BioComp

>20 PHA types and 100% bio-based
films, composites, and pigments





Funded by
the European Union

**Together, the six projects of the
BIOMATTERS Cluster represent a
complete bio-based manufacturing
ecosystem:**

From feedstock valorisation

NEW WAVE, Waste2BioComp, AMBIANCE

To process and technology innovation

BIO-UPTAKE, VITAL, GREEN-LOOP

To end-products and industrial
demonstrations in construction,
packaging, automotive, machinery,
textiles, appliances, and marine
sectors.

