



# **BioShoes4All** – Innovation and empowerment of the footwear industry for a sustainable bioeconomy

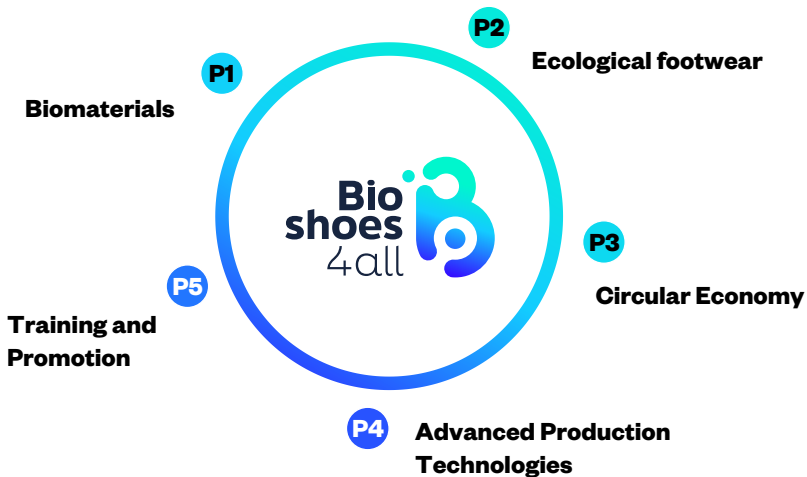


## OBJECTIVES

- Promoting the footwear industry's transition to the bioeconomy and sustainable circular economy
- New bio and eco materials, components and production processes
- Footwear and leather goods: functional, durable, circular, with lower environmental footprint
- Advanced and digital production technologies (automation, robotisation, in-situ recycling, etc.)
- Solutions for the valorisation of production waste and post-consumer products
- Reducing the environmental footprint of the sector/ products (carbon, water, fossil, chemicals).
- Implementation of industrial pilot lines, dissemination and demonstration of innovations
- Promotion of the sector's capacity building, development of contents and implementation actions
- Consumer engagement and awareness, promoting sustainable consumption
- Promotion of the footwear industry in the bioeconomy and circular economy (national and international)

## PROJECT DESCRIPTION AND STRUCTURE

The integrated project “BioShoes4All - Innovation and empowerment of the footwear industry for a sustainable bioeconomy” envisaged 5 Pillars of intervention (P) organised around specific objectives, targeting new bio and eco materials, products, processes, technologies, or services, structured into 11 Initiatives (I) and 23 Measures (M), ensuring the intrinsic coherence and complementarity of the proposed interventions.



The project has been organized in such a way as to ensure that each of the Pillars is multidisciplinary but coherent, integrating well-linked Initiatives and Measures, culminating in the development of products and solutions with high technological content, innovation and the potential for adoption and economic valorisation by the Cluster’s companies, contributing to increasing their productivity and international competitiveness. The project structure is presented in more detail below, including the Initiatives and Measures by Pillar.

## **P1 Biomaterials**

### **I1.1 Bioleather for footwear and leather goods**

- M1.1.1 Bioproducts for tanning and bioleathers
- M1.1.2 Functionalized bioleathers

### **I1.2 Biomaterials and composites for the footwear cluster**

- M1.2.1 Biofibres for footwear components
- M1.2.2 New biomaterials with a lower environmental footprint
- M1.2.3 Biopolymers and components
- M1.2.4 Biocomposites for footwear and leather goods

## **P2 Ecological footwear**

### **I2.1 Ecological and sustainable footwear**

- M2.1.1 Ecodesign of footwear and leather goods
- M2.1.2 Footwear environmental footprint

### **I2.2 Tools for sustainability**

- M2.2.1 Sustainable Footwear and Fashion Cluster” Platform
- M2.2.2 Database of sustainable technologies

## **P3 Circular Economy**

### **I3.1 Recycling and industrial symbiosis**

- M3.1.1 Recycled thermoplastics and thermosets
- M3.1.2 Recycled composites

### **I3.2 Recycling post-consumer footwear**

- M3.2.1 Management and recycling models for the circular economy
- M3.2.2 Recycling post-consumer footwear

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## **P4** Advanced Production Technologies

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| <b>I4.1</b> Traceability and logistics | M4.1.1 | Traceability tools                      |
|  | M4.1.2 | Planning and internal logistics systems |
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|---|--------|--|
| <b>I4.2</b> Advanced Production Systems | M4.2.1 | Automation and robotisation for the production of eco-products |
|   | M4.2.2 | Solutions for eco-production                                   |

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## **P5** Training and Promotion

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| <b>I5.1</b> Advanced training and capacity building | M5.1.1 | Awareness-raising actions and digital content   |
|   | M5.1.2 | Collaborative actions for knowledge transfer    |
|   | M5.1.3 | Action-based training in a business environment |
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|--|--------|--------------------|
| <b>I5.2</b> Cluster communication and internationalisation programme | M5.2.1 | Communication plan |
|--|--------|--------------------|
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| <b>I5.3</b> Coordination | M5.3.1 | Global technical-scientific and administrative-financial coordination |
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## THE CONSORCIUM

The complete BioShoes4All consortium includes 70 partners:

- 12 footwear and leather goods companies
- 12 leather companies
- 12 materials and components companies
- 1 bio-resources company
- 6 chemical product companies
- 5 production technology and software companies
- 1 retail company
- 1 association/SME
- 20 ENESII (18 ESCTN + 1 colab + 1 association)

### Leader

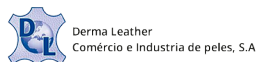
### Coordinator



### Footwear, leather goods and retail



### Leather



## Chemicals and Bioresources



## Materials and components



## Production technologies and software



## ENESII



## Association/PME



## TOTAL PROJECT INVESTMENT

72.715.508,31 €

## TOTAL PROJECT FUNDING

41.000.000 €

## PROJECT DURATION

**Start Date:** 01 July 2022

**Conclusion Date:** 31 December 2025