

HORIZON-JU-CBE-2026-RIA-02: Industrial end-users and brand owners sought to validate Safe and Sustainable by Design (SSbD) bio-based polymers for circular packaging

Summary

Profile type

Research & Development Request Spain

Company's country

POD reference

RDRES20260818020

Profile status

PUBLISHED

Type of partnership

**Research and development
cooperation agreement**

Targeted countries

• All countries

Contact Person

[Enrico FRANZIN](#)

Term of validity

18 Aug 2026**18 Aug 2027**

Last update

18 Aug 2026

General Information

Short summary

A Spanish Research and Technology Organisation is coordinating a Horizon Europe CBE JU proposal (HORIZON-JU-CBE-2026-RIA-02) to develop next-generation Safe and Sustainable by Design (SSbD) bio-based polymers for circular packaging, made from agro-food residue streams. The consortium is seeking industrial end-users, packaging converters and brand owners in cosmetics, healthcare, retail and consumer goods to co-define requirements, validate demonstrators and drive market uptake.

Full description

A Spanish Research and Technology Organisation (RTO) is coordinating the preparation of a Horizon Europe Circular Bio-based Europe Joint Undertaking (CBE JU) proposal under call HORIZON-JU-CBE-2026-RIA-02 – SSbD bio-based polymers from alternative sources.

Problem addressed: conventional plastic packaging relies heavily on fossil-based polymers and struggles to meet tightening EU circularity and chemical-safety requirements (Packaging and Packaging Waste Regulation, REACH). There is a lack of aromatic, biodegradable, bio-based polymer platforms that are simultaneously cost-competitive, safe by design and validated under real industrial packaging conditions.

The project, Biobased4Pack, aims to develop next-generation aromatic and biodegradable bio-based polymer platforms using alternative agro-food residue streams generated through industrial operations and supermarket reverse logistics. The project combines biomass valorisation, renewable monomer production, bio-based polymer synthesis, packaging development, circularity assessment (LCA) and Safe and Sustainable by Design (SSbD) methodologies, targeting TRL progression from lab to pilot/demonstrator scale.

The consortium currently includes technology centres, universities, industrial technology providers, circularity and regulatory specialists, feedstock owners and retail actors from Spain, Germany and France, and is now completing its industrial validation base ahead of submission.

The project will develop and validate innovative packaging solutions for different market sectors through the production and validation of representative demonstrators. To strengthen the market validation activities, the consortium is seeking additional industrial end-users, packaging converters and brand owners interested in testing, validating and assessing novel bio-based packaging solutions under real operational conditions, including their recyclability and end-of-life performance.

Partners sought should be willing to:

- Define application requirements and acceptance criteria for packaging demonstrators.
- Support demonstrator validation under real industrial conditions.
- Provide feedback regarding functionality, usability, recyclability and market requirements.
- Contribute to exploitation, replication and market uptake activities.

The proposal is expected to be submitted to the CBE JU 2026 call (Research and Innovation Action). The planned project duration is 48 months and the expected total project budget is approximately €3 million.

Potential target sectors include:

- Cosmetics and personal care packaging
- Healthcare and medical packaging
- Retail packaging
- Consumer goods packaging

Advantages and innovations

The project addresses key European priorities related to circular economy, climate neutrality, sustainable materials and bioeconomy development, and directly supports compliance with the EU Packaging and Packaging Waste Regulation (PPWR) and the Safe and Sustainable by Design (SSbD) framework.

Biobased4Pack will develop innovative bio-based polymer platforms from alternative agro-food residues while integrating Safe and Sustainable by Design principles throughout the entire value chain. The project will validate packaging demonstrators in several industrial sectors and evaluate recycling, circularity and end-of-life performance, benchmarking results against fossil-based incumbents through life-cycle assessment (LCA).

Participating end-users will have early access to innovative packaging materials, the possibility to influence the development process according to market needs, and the opportunity to position themselves at the forefront of sustainable packaging innovation in Europe. Partners also benefit from shared R&D costs through EU co-funding, reducing the cost and risk of exploring alternatives to fossil-based packaging while strengthening their regulatory compliance readiness.

Technical specification or expertise sought

The consortium is looking for:

End-users / Brand Owners

Companies interested in validating packaging solutions for commercial products.

Packaging Users

Manufacturers, retailers and companies using primary, secondary or tertiary packaging.

Sector-specific Industrial Partners

Preferably active in:

- Cosmetics and personal care
- Healthcare and medical products
- Retail and consumer products

Expected contribution:

- Definition of technical and market requirements (e.g. barrier properties, mechanical performance, shelf-life, regulatory constraints).
- Validation of packaging demonstrators under real operating conditions.
- Assessment of user acceptance, recyclability and market readiness.
- Participation in exploitation, replication and dissemination activities.

Previous participation in European projects is considered an advantage but is not mandatory.

Stage of development

Concept stage

Sustainable Development goals

- **Goal 12: Responsible Consumption and Production**
- **Goal 17: Partnerships to achieve the Goal**
- **Goal 13: Climate Action**
- **Goal 9: Industry, Innovation and Infrastructure**

IPR Status

No IPR applied

IPR Notes

Partner Sought

Expected role of the partner

The partner will act as an industrial end-user participating in the co-definition, validation and assessment of innovative bio-based packaging demonstrators, across the requirements definition, validation and exploitation phases of the project.

The selected organisation will:

- Define application-specific packaging requirements and acceptance criteria.
- Support demonstrator testing under representative industrial conditions.
- Contribute to market acceptance and recyclability studies.
- Participate in stakeholder engagement activities.
- Contribute to exploitation and future deployment strategies.

The partner is expected to become a consortium member of the Horizon Europe proposal.

Type of partnership

Research and development cooperation agreement

Type and size of the partner

- **Big company**
- **Other**
- **SME 50 - 249**
- **SME 11-49**

Call Details

Framework program

Horizon Europe

Call title and identifier

HORIZON-JU-CBE-2026-RIA-02 – SSbD bio-based polymers from alternative sources

Submission and evaluation scheme

Research and Innovation Action (RIA)

Anticipated project budget

3M€

Coordinator required

No

Deadline for EoI

1 Sep 2026

Deadline of the call

22 Sep 2026

Project duration in weeks

192

Web link to the call

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/HORIZON-JU-CBE-2026-RIA-02>

Project title and acronym

BioBased4Pack

Dissemination

Technology keywords

- **02007020 - Biobased materials**
- **10002013 - Clean Production / Green Technologies**
- **02005004 - Packaging for materials**
- **10002015 - Life Cycle Assessment**
- **10003007 - Waste to Energy /Resource**

Targeted countries

- **All countries**

Market keywords

- **04005 - Biochemistry / Biophysics**
- **05008002 - Food and feed ingredients**
- **08004002 - Chemical and solid material recycling**
- **08001023 - Other chemicals and materials (not elsewhere classified)**

Sector groups involved