

Group photo, SUEZ/CIRSEE October 2026

PROSPER halfway: progress, results and the road ahead

Welcome to the latest newsletter from the PROSPER research partnership.

To remind readers, PROSPER is a collaborative research and innovation project funded by the CBE JU, led by the University of Ghent, Belgium. The project brings together 17 partners from across the EU with a budget

of around €10 million of which 75% is covered by grant funding; PROSPER started in September 2024, and will end in September 2028.

For more information, visit www.prosperbioplastics.eu

For progress made in the first year of the project, September 2024-September 2025, please see our 2025 newsletter which can be read on our website here.

This newsletter looks at progress since the end of 2025 and what the future brings. Video interviews with partners telling you about how each task has progressed can be found on the project YouTube.



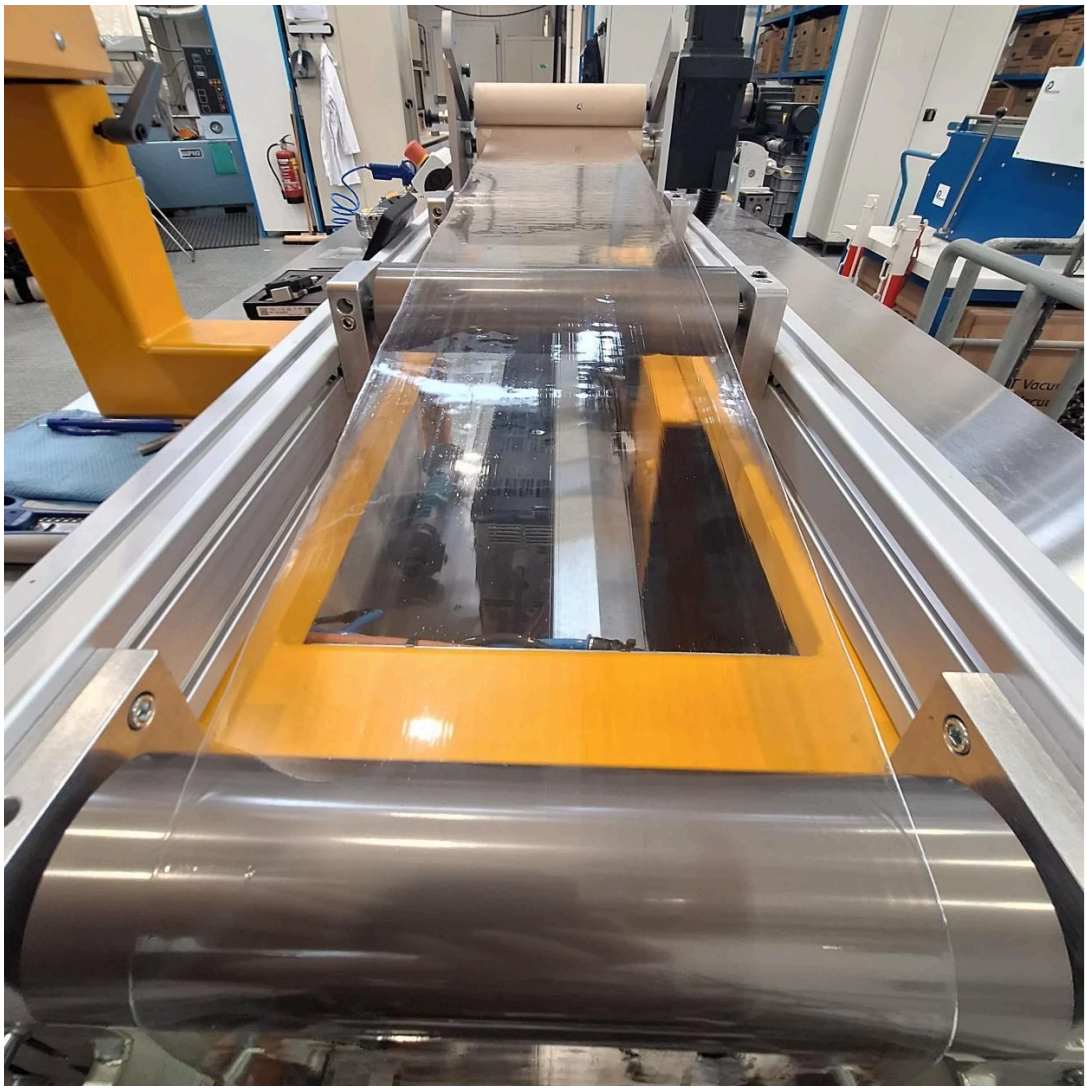
2026 in a nutshell

1. Two consortium meetings were held: in March in the Netherlands at the site of partner NTCP, and in October in Paris at the site of CIRSEE (SUEZ).
2. Major progress on sorting of bioplastics from mixed waste and other plastics has been made at NTCP site and, following work by POLYPERCEPTION, further improved.
3. Tests have been made by UGENT on washing bioplastics prior to recycling to understand the optimal temperature and time needed to enhance recycling quality.

4. More recycling tests have been undertaken by WUR showing that PLA can be mechanically recycled at least twice without major deterioration.
5. An in-depth analysis has been made (and a paper published) illustrating the cost/benefits of PLA recycling - current market penetration needs to increase by over 100% (from about 1% to about 2.4%) for PLA recycling to be economically feasible. UGENT presented the data behind this analysis, which of course much depends upon market access, legislation and EPR fees.
6. AIJU presented preliminary findings on the public perception of bioplastics with almost 3.000 interviews conducted across 5 European countries. Further data analysis and interviews are ongoing.
7. Partners and PROSPER'S Advisory Board met with EXPRA, the European body representing the packaging PROs, to illustrate relevant project findings and practical considerations regarding the identification and sorting of bioplastics, the preliminary results of mechanical recycling of PLA, the costs and conditions required to support viable sorting and recycling solutions, and to discuss EPR fees. PROSPER presentations were accompanied by presentations from similar projects MoeBIOS and ReBioCycle, all financed by the CBE JU and all aiming to discover new routes for the recycling of bio-based and biodegradable plastics, where organic recycling is unavailable. Interestingly, the Netherlands PRO Verpact stated that it will introduce discounts from 2027 on EPR fees for certain biobased plastics, in recognition of their lower GHG footprint. A welcome sign!
8. At the Paris consortium meeting, HILO IMPACT explained and illustrated the next stages which will complete the building of the pilot chemical recycling plants at FUTERRO and NOVAMONT, a delicate and complex piece of engineering - which intends to illustrate that bioplastics can be recovered as polymers through chemical as well as mechanical recycling.
9. Meanwhile, lab tests on this chemical recycling phase have been initiated by FUTERRO and NOVAMONT.
10. Several peer-reviewed papers have been published or are in the process of review as we write, the website will be updated with them

as they progress.

11. Public dissemination on issues such as policy has been driven by EBB with the publication of very detailed policy papers and shorter policy bulletins relative to EU policies impacting the bioeconomy.
12. Over this past year, we have met in person with our Advisory Board members in the Netherlands and online with some of them during the Paris meeting. We want to thank those members who have contributed with questions and suggestions to our project so far. We will meet again in person in 2027.



Looking ahead to 2027

This critical period for the project sees the building of the chemical recycling pilot plants plus other sorting tests involving industrial waste plants. Further experiments will be undertaken on mechanical recycling and washing to perfect the processes.

On the policy side, we eagerly await the Circular Economy Act, the BIOTECH II Act, and the further implementation of policies which will impact the market for bioplastics.

PROSPER brochure now in Italian, Spanish, and French

The PROSPER brochure, translated into Italian, Spanish and French, is now available on our website: https://prosperbioplastics.eu/resources/.

An updated version featuring the project's latest progress will be available soon.

Latest from the blog



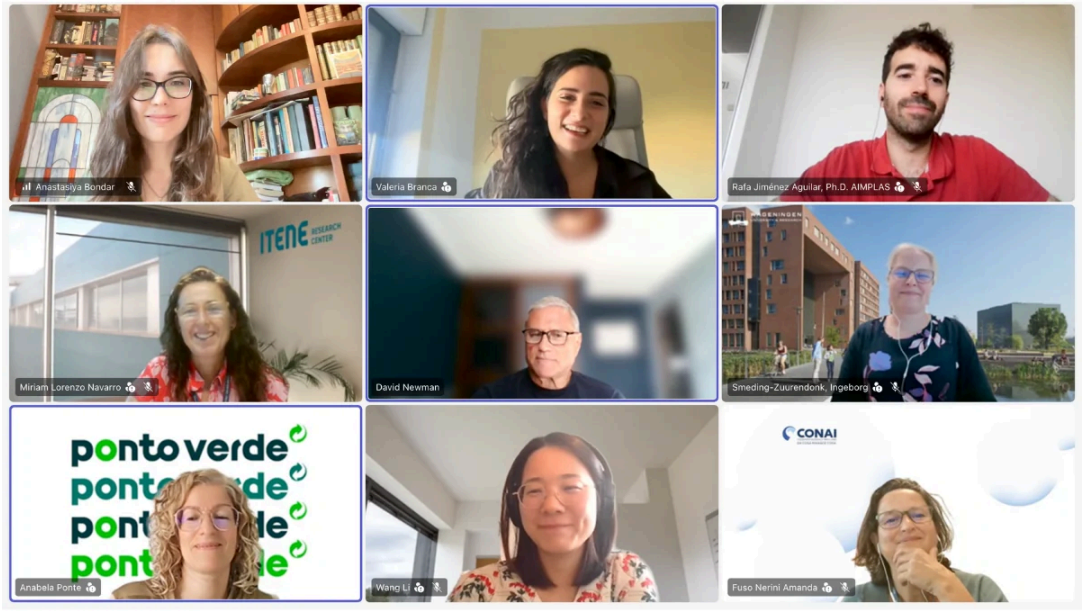
Closing the loop: can PLA be recycled multiple times?

By Ingeborg Smeding, Project Manager Recycling, Wageningen Food & Biobased Research (part of Wageningen University & Research).

As the world transitions towards a circular bio-based economy, the question is no longer whether we can replace fossil-based plastics with bio-based alternatives, but how we can keep these materials in the loop for as long as possible. Polylactic acid (PLA) has become the most widely used bio-based polymer, with applications in packaging, food trays, disposable products and consumer goods. To fully realise its sustainability potential, however, effective recycling strategies are essential.

Within PROSPER, Wageningen Food & Biobased Research investigated the mechanical recycling of PLA at laboratory scale, to evaluate how well the material withstands repeated processing cycles and whether recycled PLA can still meet application requirements. The PLA tested was supplied by consortium partner Futerro.

Read the full article



Webinar with EXPRA on bioplastics

The feedback from the PROs during our webinar with EXPRA was interesting and mixed. CONAI explained the Italian situation, where a dedicated PRO, Biorepack, collects fees from producers and uses them to stimulate the household collection of compostable bioplastics together with food waste, for treatment through the organic waste system. The Portuguese PRO Ponto Verde stated that bioplastics are present in volumes too small to justify separate collection: they are therefore treated as conventional plastics, paying a non-recyclable fee, and citizens are advised to dispose of them in residual waste rather than recycling.

A particularly interesting contribution came from the Dutch PRO Verpact: from 2027, bio-based packaging materials that meet certain criteria will be able to apply a 50% discount on their EPR fees. More details are available (in Dutch) at https://www.verpact.nl/nl/tariefdifferentiatie-plastic-2027.

Read the full article



Consultation

A public consultation was launched by the European Commission on the role of bio-based feedstock in plastic packaging.

The results will support the Commission's assessment of the technological development and environmental performance of bio-based plastic packaging to support the bioeconomy.

The consultation will remain open until 13 January 2027.

Public consultation

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