

NEWSLETTER

ISSUE 3January 2025





SAFE-, SUSTAINABLE- AND RECYCLABLE-BY DESIGN POLYMERIC SYSTEMS A GUIDANCE TOWARDS NEXT GENERATION OF PLASTICS



MESSAGE FROM THE COORDINATOR

Dear Readers,

Welcome to the first issue of the SURPASS newsletter for 2025.

Plastic waste outlives us as it takes centuries to break down. The hazard of endocrine disruption by leached substances, fast growing and pollution of land, air, and water as well as greenhouse gas emissions are only some of the adverse effects of plastic waste on public and environmental health. Still, 70% of plastic waste collected in Europe is landfilled or incinerated. The overall objective of SURPASS project is to lead by example the transition towards more Safe, Sustainable and Recyclable by Design (SSRbD) polymeric materials

Project Coordinator

Simon Clavaguera

Commissariat à l'Energie Atomique et aux Energies Alternatives (CEA)

€ 4.98 Million

Consortium
13 Partners
5 Countries

3 MAIN SECTORS







Construction

Transport

Packagin9







The project has received funding from the European Union's Horizon 2021 research and innovation program, under grant agreement no 101057901.

KEY UPDATES FROM 2024

6th Consortium Meeting

November 2024

The SURPASS project is pleased to announce the successful conclusion of its 6th Consortium Meeting, held in Spain. This event marked a significant milestone in our ongoing efforts to develop Safe, Sustainable, and Recyclable by Design

(SSRbD) polymeric materials.

During the meeting, partners from across Europe convened to discuss progress, share insights, and plan the next phases of the project. Key topics included advancements in our three case studies targeting the packaging, building, and transport sectors, which collectively represent 70% of European plastic demand.



The consortium also focused on optimizing reprocessing technologies and developing a scoring-based system to assist designers, formulators, and recyclers throughout the entire plastic life cycle. These discussions are crucial as we work towards creating an open-access, user-friendly digital infrastructure to support stakeholders in adopting SSRbD principles.

We extend our gratitude to all partners for their active participation and to our hosts in Spain for their exceptional hospitality. As we move forward, the SURPASS team remains dedicated to pioneering innovations that will lead to a more sustainable future for polymeric materials.

For more information about the SURPASS project and our ongoing initiatives, please visit our website.

Visit our website



Click to watch the SURPASS team and our volunteers in action, cleaning up Brussels and raising recycling awareness!





Attended Events

Be sure to attend all upcoming events and please find 2024 events where SURPASS was presented.

Nanotox Conference 2024 **Venice, Italy**

SETAC 2024-SSbD IRISS worskshop Seville, Spain

SSbD Conference 2024 **Monte Veritá, Switzerland**

Essencia SSbD Event Brussels, Belgium

Fire and Polymers 2024 New Orleans, United States



SURPASS held its first workshop collection last March in Brussels, the heart of the European Union!

KEY UPDATES FROM 2024

SURPASS Breakthrough in Sustainable Packaging

Our packaging team has made exciting progress with Recyclable MultiNanoLayer (MNL) films—an eco-friendly alternative to traditional multi-layer packaging. Using a continuous coextrusion process and less compatibilizer, these films can reach up to 1,000 layers, boosting recyclability and sustainability.



CURIOUS TO LEARN MORE?

Read our latest findings here or check it out on Plastics Insights in English and German!

Read more

Safe and Sustainable by Design Stakeholder Workshop

December 2024

The SURPASS project is represented at the Safe and Sustainable by Design Stakeholders Workshop, organized by the European Commission on December 5th & 6th in Brussels. Dr Socorro Vázquez-Campos from LEITAT will present key insights about the "Identification of release hotspots along the lifecycle of SURPASS case studies to guide the exposure assessment as a key step in the SSbD implementation"





The Fakuma International Trade Fair for **Plastics Processing** December 2024

At a major plastics industry event with over 1,800 exhibitors from 30+ countries, the Fraunhofer ICT team, alongside its Material Development and Compounding department, highlighted the SURPASS Project. Key Highlights:

- Sustainable food packaging tray demonstrators
- Purified material granules for polymer recovery
- Overview of SURPASS innovations in recyclable polymers

SURPASS was also featured in industrial magazines and press releases during the event.

This success was made through collaboration with IPC Centre Technique Industriel de la Plasturgie et des Composites and the Fraunhofer ICT team.



Attended Events

Be sure to attend find 2024 events was presented.

SSbD chemicals and materials Paris, France

SSbD Framework Multinano Films food packaging Lyon, France

Fakuma Fai<u>r 2024</u> Friedrichshafen, Germany



SURPASS held its first workshop March in Brussels, the heart of the European Union!



THE FUTURE: 3 MAIN STRATEGIC SECTORS



THANK YOU FOR READING!
STAY TUNED FOR WHAT'S COMING



Upcoming Events

Join us at these mustattend events in the coming months!

Don't miss out on the opportunity to connect, collaborate, and revolutionize the world of plastics. See you there!

SETAC 2025, Vienna, Austria

MATCOMP national conference Barcelona, Spain

MATCOMP national conference Barcelona, Spain

7th consortium meeting **Budapest, Hungary**

Workshop collection for Global Recycling Day March 2024

