

EDITO

WhiteCycle began 30 months ago, the dynamic and motivated team has made great strides toward the project's goal. It is with great pride that we welcome the WhiteCycle community to discover the consortium's latest results in this newsletter.

SUCCESS STORY
WhiteCycle consortium members presented key project results at major European events in 2024

The WhiteCycle project continues to make significant strides in the realm of sustainability and circular economy, with several recent events showcasing its progress and impact.

One of the major highlights was the participation of WhiteCycle at the Green Deal, Industrial Ecology, and Circular Economy symposium in Clermont-Ferrand, France, on December 5th-6th, 2024. This symposium brought together experts to discuss innovative approaches in industrial ecology, with a special focus on circular economy strategies. Members of the WhiteCycle consortium contributed to discussions, including presentations on the project's advancements in processing and recycling PET from complex waste. Notable speakers included Thibaud Herbst from Michelin, who shared insights into the project's PET recycling efforts, and Tipawan Durand and Henri Sourgou from UCA, who presented research on Life Cycle Sustainability Assessment and its impacts within the project.

Another key moment for WhiteCycle was its involvement in the ECOSYSTEM Insights Series #11, held online on November 29th, 2024. Pauline Langbehn from iPoint Systems presented how Life Cycle Assessment (LCA) tools are being used to support recycling decisions within the WhiteCycle project.

This session highlighted how the project's methodologies could play a pivotal role in shaping sustainable practices within the textile industry. The event was a great platform for discussing innovative solutions in circular textiles, with several EU-funded projects contributing their findings.

WhiteCycle's engagement also extended to the Advanced Recycling Conference on November 20–21, 2024 in Cologne, Germany, where industry leaders gathered to explore the latest advancements in recycling technologies. The conference offered a unique opportunity to discuss key topics like renewable chemicals, recycling for plastics, and the environmental impacts of various recycling processes. This event allowed the WhiteCycle team to connect with experts and potential collaborators, further solidifying the project's place within the larger recycling ecosystem.

Additionally, WhiteCycle showcased its progress at the National Polymer Recycling Conference on November 5th, 2024, in France. Thomas Simonelli and Axelle Champion delivered an impactful presentation to a large audience, detailing the significant progress made during the first 18 months of the project. They highlighted advances in the identification of PET in clothing, the separation of fibers and rubber from tires, and the scaling up of key technologies. Their presentation emphasized how these innovations are positioning the project for future phases of development.

These events demonstrate WhiteCycle's ongoing commitment to advancing circular economy practices and sustainable recycling technologies. As the project moves forward, it continues to play an important role in shaping the future of textile recycling and contributing to the broader goal of a sustainable, circular economy.


LET'S DISCOVER THE DIFFERENT PROJECT'S PARTNERS !

The consortium is composed of 16 european partners and their different fields of


Focus on CARBIOS

Carbios is a French company pioneer in the development and industrialization of biorecycling technologies for plastics and textiles. It has developed a unique enzymatic process that breaks down PET polymers of waste materials. Unlike current recycling methods, this process goes back to the basic constituents of PET, generating high-purity monomers that are used to produce virgin-like plastics and polyester fibers. Carbios' disruptive innovation can recycle all types of waste, whether clear, colored, opaque, complex, and polyester textiles. Hence it brings PET, the second most widely used plastic in the world, into the circular economy.

The demonstration plant has proven the process performance at industrial scale, and Carbios will operate in 2025 the world's first PET biorecycling plant.

Role in the project

Leader of WP3, Carbios will harness its core technology for the depolymerization of complex feedstocks such as tyres and hoses.

[learn more](#)

Focus on Kordsa

With 49 years of experience in reinforcement technologies, Kordsa is the leading player in the advanced materials market with its tire, construction, and composite reinforcement products. The company provides reinforcement technologies and has a production network extending across a vast geography from the Americas to the Asia-Pacific. By providing services in 13 production facilities in 6 countries located on 4 different continents with over 5000 employees globally, Kordsa continues to reinforce life while expanding its global footprint every day.

Role in the project

As a WP leader, KORDSA is responsible for production of r-PET-based tyre-cord fabrics, lay-flat hose grade and clothing grade yarns. The main objectives of this WP are to produce and process r-PET from WP3 monomers that are compliant with the technical requirements of the reinforcement frame of tyres, hoses, and technical garments

[learn more](#)


ABOUT WHITECYCLE

A great news for WhiteCycle Project!

This November, IFTH successfully validated the spinning feasibility of rPET produced from CARBIOS' monomers, biorecycled from packaging waste with no end-of-life solution.

These spinnability tests have been done on the IFTH semi-industrial melt spinning facilities. The yarn was produced at industrial speed of 3 000 m/min to obtain a 80 dTex multifilament for Clothing application.

The mechanical yarn properties are comparable to commercial virgin PET yarn with a tenacity comprises between 2,5 and 3 cN/dTex and an elongation at break between 30 and 45%.

This is a great news for WhiteCycle project and this highlight the relevance of the industrial scale up step.

[learn more](#)

AGENDA

- 15th-16th January 2025 - Bio-based Textiles in Clothing: Europe 2025, Helsinki, Finland

[Find out more](#)

- 4th – 6th March 2025 – Tire Technology Expo 2025, Hannover, Germany

[Find out more](#)

- 26th and 27th March 2025 – 7th Forum Plastic Recycles, Darmstadt, Germany

[Find out more](#)

- 27th March 2025 - EuRIC Textiles : Threading up Europe's textile circularity: Bridging policy and industry through trade, Brussels Belgium

[Find out more](#)

- 1st -2nd April 2025 - Plastics Recycling Show Europe 2025, Amsterdam, Netherlands

[Find out more](#)

- 5th and 9th May 2025 - IFAT Solutions for water, recycling and circularity, Munich, Germany

[Find out more](#)

- 22th -23rd - Europe Chemical Recycling Innovation Summit 2025, Frankfurt, Germany

[Find out more](#)

- 4th-5th June 2025 - Textiles Recycling Expo 2025, Burssets, Belgium

[Find out more](#)

Stay tuned in 2025 to keep up with the progress of the project

www.whitecycle-project.eu/

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