Fraunhofer CCPE

Fraunhofer Cluster Circular Plastics Economy CCPE
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CCPE Newsletter 1/2025

Bridge the Gap to Circularity

We are pleased to present our latest developments and research results at the Circular Valley Convention from March 12-13, 2025 in Düsseldorf!
Under the motto “Bridge the Gap to Circularity”, the Fraunhofer CCPE will present innovative solutions for a successful transformation towards a circular plastics economy.

You can look forward to interesting presentations on the latest developments in the areas of business models, product development, and high-quality material development, such as geotextiles or roofing membranes. Topics such as odor avoidance in recyclates, lightweight materials based on polylactic acid (PLA), and the design of logistics networks and digitalization will also be covered.

In our master class “Environmental Assessment of Circular Plastics”, participants learn about methods that are suitable for the transparent and comparable evaluation of recycling technologies. We invite all participants to bring their questions and learn more about what to look for in the comparative environmental assessment of plastics in the circular economy.

Please also visit us at our booth B1. A special highlight here is our interactive “Miniature Wonderland”, which demonstrates how circular innovations can be implemented in the day-to-day operations of the plastics industry. Here, visitors will have the opportunity to discover roofing membranes made of biodegradable plastics, innovative circular logistics solutions, and a newly designed, modular child seat made of sustainable materials. Further topics that we will present at the fair can be found in “News from CCPE research”.

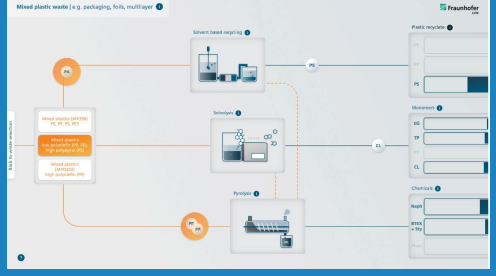
Perhaps you would like to visit us in Düsseldorf at the Circular Valley Convention? We would be delighted to meet you!

PROGRAMM OF THE CVC 2025

News from the CCPE research

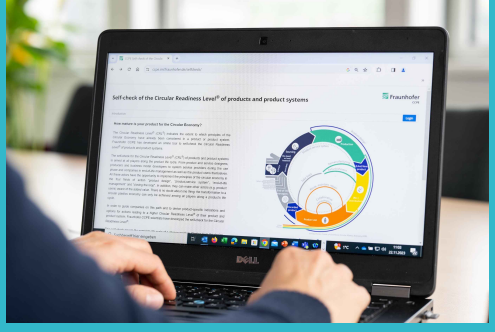
Recycling cascade - The perfect technology combination for your waste

Assessment - Self-check of the Circular Readiness Level®



With the CCPE recycling cascade, we can show you how your plastic waste can be turned back into high-quality recycled plastics with an optimised product yield. The recycling cascade is based on a combination of three Fraunhofer recycling technologies: solvent-based recycling, solvolysis and the iCycle® process. In addition, we are further developing the mechanical pre-treatment for process-orientated material feeding.

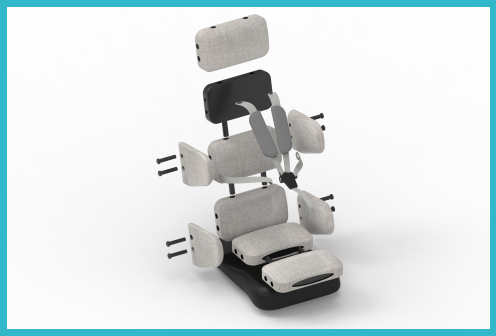
MORE INFO



We further develop and refine existing life cycle assessment methods with the aim of integrating the circularity of products and materials into the assessment. We use scientifically sound assessment models to precisely map the use and recycling of products. A proven tool is our online self-check Circular Readiness Level®, where companies can check how ready their product is for the circular economy.

MORE INFO

Circular design for the future of your products



Our expertise includes extensive methodological knowledge of the design and construction of products as well as the selection of suitable materials and manufacturing processes. Specific approaches include mono-material design and lightweight design. In a circular economy, products are kept in the cycle for as long as possible and used as intensively as possible by consumers. We illustrate this scenario in our “child seat” demonstrator.

MORE INFO

Recyclates - Giving plastics a second life

We optimize the quality of recycled plastics. From the evaluation of recyclate quality using suitable analytical methods to the post-stabilization of recyclates with effective additive compositions – our range of available tools enhances the value of your recyclates. You can also see these materials on the CVC 2025 at our “child seat” demonstrator.

MORE INFO

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