RECYCLING WEEK 2025 POST EVENT REPORT

3RD WORLD RECYCLING CONVENTION
29-30 OCTOBER, 2025
BARCELONA, SPAIN

The 3rd World Recycling Convention (Recycling Week 2025), held on 29–30 October 2025 in Barcelona, Spain, successfully continued its mission of advancing global dialogue and innovation within the recycling and circular economy sectors. Building on the achievements of previous editions, the convention offered an in-depth exploration of emerging technologies, industry challenges, and practical solutions shaping the future of sustainable resource management

Key highlights of the conference included insightful sessions on e-waste innovations, circular electronics, and sustainable materials management. The exhibition brought together leading companies showcasing advanced recycling machinery, urban mining technologies, and sustainable product design solutions that support circular value chains. Participants also benefited from interactive networking and panel discussions addressing waste-reduction policies, breakthroughs in plastic recycling, and responsible supply-chain practices. The event further highlighted practical advancements such as AI and robotics in recycling operations, along with the growing use of renewable, bio-based materials and waste-derived biofuels.

The first day began with a formal registration session and the distribution of badges. Participants gathered in Room 1, ready for the exciting opening of the Keynote Forum.

The Keynote Forum opened with Anthony Peyton of PREP Design Pty Ltd, Australia, who presented "How do brands PREP their packaging for the recyclers," illustrating how PREP tools guide brands in designing packaging that aligns with recycling infrastructure, resulting in measurable improvements in sortability and material recovery.

The second keynote was delivered by Vivek Tandon of Revalyu Resources GmbH, UK, who presented "Revolutionary technology to recycle PET plastic using glycolysis." He outlined an advanced glycolysis process that transforms post-consumer PET into high-quality rPET, emphasizing its superior efficiency, elevated purity levels, and strong contribution to circular plastic production.

The third keynote, "How to transition successfully from a linear to a circular?" was presented by Anne Raudaskoski of Re-Generous Unlimited, Finland. She highlighted actionable strategies and proven implementation pathways that help organizations embed circular thinking, enhance resource optimization, and build long-term resilient sustainability practices.

Coffee Break: Attendees took a break from the morning's sessions to network and engage in informal discussions in the foyer.

Morning Session: Recycling – Reduce, Reuse, and Recovery

The morning session explored innovative approaches to material recovery, packaging sustainability, and textile recycling through practical, research-driven presentations.

• Jorge Felipe Espeso of Spain delivered “REGEN Project: Recycling High-Performance Materials for Sustainable Defence,” showcasing innovative recovery methods for advanced defence materials and revealing new opportunities for sustainable resource use in critical applications.

• Jan Niklas Lünig of IBB – TU Braunschweig, Germany, addressed “Packaging Waste in the Construction Sector,” presenting analytical findings on environmental impacts and spotlighting practical measures to streamline packaging consumption across construction projects.

• Ronald Bernstein of Bergi-Plast GmbH, Germany, presented “2K Sandwich Injection Molding: PCR Use and Process Control,” demonstrating how precise molding techniques and PCR integration can achieve high-quality performance in thin-walled closure systems.

• Ana Catarina Santos Leite Silva of Minho’s University, Portugal, delivered Reinforcing Cotton Recycled Fibers,” showing upgraded processing approaches that enhance the strength and usability of recycled cotton for premium textile applications.

The session concluded with a panel discussion that allowed for further interaction among speakers and participants, providing an opportunity to delve deeper into the issues raised during the talks.

Lunch Break:

Attendees enjoyed a break from the discussions to network over lunch at the hotel's restaurants.

Afternoon Session: Circularity in Action

The afternoon segment focused on advancing circularity through chemical recycling, eco-design, and digital product passports. Presenters showcased breakthrough methods that enhance resource efficiency and enable traceable circular value chains.

- Mendil-Jakani of SyMMES Laboratory, France, presented "Ionic Liquids for Sustainable Recycling of Nafion," introducing a novel solvent approach for reclaiming materials from fuel-cell membranes, revealing efficient routes to recover valuable constituents.
- Peter Palmer of Circular Flow, UK, shared "Sustainable Global Circular Economy for Neoprene Waste," describing new systems for diverting neoprene from disposal and transforming it into recyclable material streams on a global scale.
- Duarte Rodrigues Brás of the University of Minho, Portugal, presented "Transforming Textile Cutting Waste into Circular Garments," demonstrating how design-driven processes can convert cutting scraps into new apparel, supporting a closed-loop textile model.
- Rik Holvoet of Tripler.io, Belgium, introduced "CIRPASS-2: Digital Product Passports," outlining how digital identity tools enable transparent tracking of materials and products, creating verifiable circular value chains across industries.

Following these presentations, a second panel discussion took place, further deepening the conversations around the future of plastics and their recycling potential.

Coffee Break:
Attendees took a brief pause to refresh and engage in informal conversations.

Evening Session: Energy from waste| Sustainable Recycling

The evening session emphasized sustainable waste solutions, including medical waste sterilization, improved electrical insulation materials, and water-positive strategies. Industry specialists demonstrated actionable technologies to strengthen responsible waste and resource management.

Francesco Crotti of Cisa Production srl, Italy, delivered "Medical Waste Treatment: On-site Sterilization System," showcasing a compact sterilization technology that elevates hospital waste handling by reducing external transport and emissions.

Robert Płatek of Hitachi Energy Poland, Poland, presented "Towards improved sustainability of high voltage electrical insulation," detailing refined material compositions that improve environmental compatibility

• Alejandro Sturniolo of Aqua Positive, Spain, presented “From Reuse to Recharge: Wastewater as a Strategic Enabler of Water Stewardship,” highlighting wastewater’s role in corporate water-positive strategies and outlining pathways for circular water use.

• Pascal Gallo of Composite Recycling, Switzerland, delivered “Scaling Circularity: Industrial Pathways for Composite Recycling,” revealing thermal separation techniques that recover fibers and resins at industry scale, pushing composite circularity forward.

The day ended with a final panel discussion, where speakers and attendees reflected on the insights shared throughout the day.

Day 2 of the 3rd World Recycling Convention

Day 2 of the 3rd World Recycling Convention showcased an inspiring lineup of presentations and discussions focused on advancing recycling technologies and circular economy practices.

The Keynote Forum featured three distinguished speakers:

1. Gunnar Schomaker of Universität Paderborn, Germany, presented “FAIR 4 Sustainability,” introducing a consistency-driven data model that enhances transparency and traceability across sustainability reporting frameworks.

2. Victor van den Heuvel of Green Eco Furnace, Netherlands, spoke on “Sustainable Production of Waste Wood,” showcasing efficient conversion technologies that turn discarded wood into high-value materials using low-emission processes.

3. Marc Marín-Genesca of Universitat Rovira i Virgili, Spain, presented “Recycling Polymeric Blends with GTR Particles, "demonstrating how rubber-enhanced polymer blends can be engineered into durable, performance-grade materials through targeted recycling.

Following the Keynote Forum, participants engaged in a networking coffee break, enjoying delicious snacks and discussions on the morning’s insights.

Morning Session: Revolutionizing Plastic Recycling| Textile Reuse and Recycling

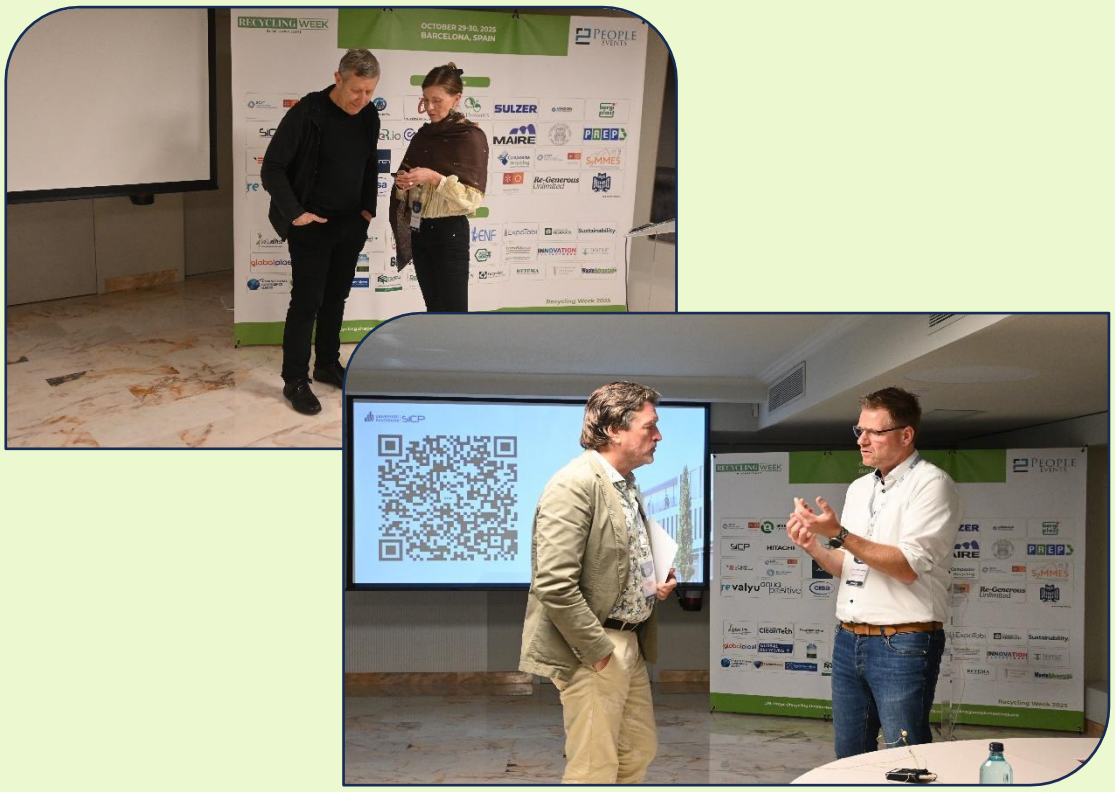
Day 2 began with sessions dedicated to transforming plastic waste, elevating textile circularity, and scaling low-carbon recycling solutions. Speakers introduced new materials, upgraded processes, and policy-driven models enabling circular transformation.

- Diana I. Alves of the University of Minho, Portugal, delivered “Upcycling Post-consumer Footwear Waste,” unveiling functional nonwovens made from discarded footwear and illustrating new product streams enabled by innovative processing.
- Joeri Dieltjens of Sulzer, Belgium, presented “Defossilization Through Advanced Plastic Waste Conversion,” explaining catalytic and thermal processes that convert plastic waste into petrochemical feedstocks, supporting major reductions in fossil dependency.
- Tom Voege of GRS Service, Germany, shared “EPR in Action: Unlocking Circularity in EU Textiles,” offering insights into how EPR frameworks strengthen collection, sorting, and recycling performance across textile markets.
- Simone Tirelli of Faerch Italy S.r.l., Italy, presented “Pet Food Tray Recycling and Circularity,” showing technical solutions that enable PET trays to return to tray-to-tray systems, reinforcing a functional closed loop.
- Tiago Jorge Mendonça Pinto Azevedo of the University of Minho, Portugal, presented “Technical Yarns with Recycled Fibers,” revealing upgraded yarn technologies that utilize recycled residues for high-end textile and industrial applications.
- Sander Vester of AEB Amsterdam, Netherlands, delivered “Leading the energy transition: WTE and CO_2 capture and storage,” demonstrating integrated

Afternoon Session: Digital Recycling Revolution

The afternoon program centered on digitalization, investment pathways, and circular business models. Presentations highlighted how digital tools, blockchain, and strategic financing accelerate scalable recycling and reduce greenwashing.

- Irene M. of Entzimatiko, Spain, presented “Digital and Enzymatic Solutions for Recycling,” illustrating how enzyme-assisted and digitally monitored processes enhance recovery efficiencies and material purity.
- Maurizio Rigolio of MAIRE, Italy, presented “Make to Inspire – The Circular Way,” showing how circular design principles reshape industrial frameworks and encourage innovation-led sustainable transformation.
- Xandra Weinbeck of Invest-NL, Netherlands, presented “Scaling the Industry,” discussing investment mechanisms and strategic partnerships that propel circular ventures from pilot stage to industrial scale.
- André Vanyi-Robin of Plastiks, Spain, presented “Fighting Greenwashing with the power of blockchain,” revealing blockchain-based verification tools that authenticate recycling efforts and counter misleading environmental claims.
- Arjun Srihari of S2S Dynamics, Germany, delivered “Making E-Waste Work,” outlining circular business models that unlock value from electronic waste and improve recovery ecosystems.
- The day concluded with a final panel discussion summarizing key insights and a vote of thanks to the presenters and participants for their invaluable contributions.
- Day 2 was a testament to the power of collaborative innovation in addressing global recycling challenges, paving the way for more sustainable practices across industries.



Evening Session: Recycling Science & Engineering

The final session covered advanced scientific developments in polymer repair, polyurethane recycling, and waste-derived materials. Researchers showcased innovative pathways that convert challenging waste streams into high-performance, usable products.

- Renato Filipe da Costa Rodrigues Guimarães of the University of Minho, Portugal, presented "Closing the Loop: Recycling of Post-Industrial Footwear Polyurethane Waste," showcasing processes that convert polyurethane waste into functional cushioning insoles.
- Christer Svanberg of Nexam Chemicals, Sweden, presented "Repairing and Restoring Recycled Plastics," explaining how reactive additives restore strength and performance in recycled polymers.
- Shahrzad Safinazlou of Saarland University, Germany, shared "From spa waters to spoiled milk: Sustainable pathways for recycling resources into selenium sulfide," showing how diverse waste streams can be transformed into specialty chemical products.

Rosa Amarelle of Hundgen Entsorgung, Germany, presented "International waste and the cultural impact of waste," examining global cultural attitudes toward waste and illustrating their influence on waste-management behavior.

Valeria Corinaldesi of Università Politecnica delle Marche, Italy, presented "Mechanical characterization of concrete with artificial aggregates from waste pelletization," showcasing concrete formulations using waste-derived aggregates with strong mechanical performance.

Conclusion:

The 3rd World Recycling Convention marked a pivotal moment in uniting diverse voices across the global recycling and circular economy landscape. Over two days, the event became a vibrant forum where scientific insight met real-world innovation, and where emerging technologies stood alongside forward-thinking policy and industry practice. The discussions, demonstrations, and exchanges that unfolded illustrated not only how far the sector has come, but also how much potential remains untapped. From redefining material recovery to advancing digital traceability, from scaling circular manufacturing to reimagining waste as a valuable resource, the convention showcased a future built on collaboration, ingenuity, and shared purpose. As the event drew to a close, it left participants with renewed momentum and a clear message: meaningful progress toward a sustainable, circular world is not merely possible—it is already taking shape, powered by the collective commitment and leadership displayed throughout the convention.

Invitation to the 4th World Recycling Convention – Basel, Switzerland, June 22- 23, 2026

After the successful completion of the 3rd World Recycling Convention 2025 in Barcelona, Spain, we are thrilled to announce the upcoming 4th World Recycling Convention, scheduled to be held on June 22–23, 2026, in Basel, Switzerland. Building on the impactful discussions, influential keynote presentations, and innovative technologies showcased at this year's event, the 2026 edition will further strengthen global collaboration and accelerate progress in recycling, circular economy, and sustainable resource management.

The 4th World Recycling Convention will introduce several upgraded features, including:

Global Visionary Speakers: An expanded lineup of world-renowned experts, industry leaders, and policymakers addressing the future of circularity and advanced recycling technologies.

Advanced Technical Workshops: Practical, solution-oriented sessions designed to equip participants with actionable strategies for implementing circular systems across industries.

Innovation & Start-Up Pavilion: A platform spotlighting breakthrough technologies, emerging recycling solutions, and early-stage companies shaping the next generation of sustainability..

Enhanced Networking Experiences: Curated B2B meetings, interactive lounges, and structured networking programs to foster meaningful partnerships and cross-sector collaboration.

Expanded Exhibitor Showcase: A larger exhibition floor featuring cutting-edge recycling machinery, digital solutions, and sustainable product innovations from leading global organizations.

The venue in Basel, Switzerland, will provide a vibrant and forward-thinking setting for global leaders, innovators, and sustainability professionals to connect and collaborate. We look forward to building on the impactful discussions and progress achieved in Barcelona as we continue driving collective action toward a more circular and sustainable future

For further details on the event, including the agenda and exhibition highlights, visit the official conference page: https://recycling.thepeopleevents.com/ or write recycling@thepeopleevents.com