Abstract

At Econic, we are pioneering a carbon-to-value transition, turning captured CO_2 into safe, cost-effective, high-performance materials that enhance people's lives. That mission requires not just breakthrough science, but deep collaboration across the value chain.

This is an exciting moment for Econic as we accelerate our commercial growth in the coming months. We are focused on supporting our licensees in bringing polycarbonate ether (PCE) polyols to market. We also recently introduced technology for a new product category, Recreaire carbonate ethoxylates, a family of surfactants.

On the polyols front, licensees in US and Asia will be producing polyols from ${\rm CO_2}$ at an industrial scale in 2025. We're working closely with both customers as they begin delivering these new materials into the polyurethane industry, providing applications expertise to help their customers in markets like paints and coatings, automotive, furniture and mattresses, and other.

In parallel, we've launched Recreaire, a new class of surfactants made with renewable carbon. Our priority now is building the right partnerships to scale production and bring products to market.

Recreaire is our new platform of carbonate ethoxylate surfactants made using captured CO_2 instead of fossil-based or oleo-based carbon. It represents a fundamental shift in surfactant chemistry, allowing molecular design to deliver both high-volume workhorse surfactants and tailored molecules across a broad range of formulations, including nonionic, and ionic systems.

Incorporating CO₂ as a plentiful source of renewable carbon, into the backbone of the molecule in polymers and surfactants doesn't just reduce the Global Warming Potential (GWP) it enhances the properties and cost effectiveness of the product itself.

About Econic Technologies

Econic Technologies is a UK-based deep tech company focused on renewable carbon. Its innovative catalyst and process technology allows manufacturers to produce polymers based on CO_2 instead of petrochemicals. The use of CO_2 enhances sustainability while creating more cost-effective, higherperforming end products. Econic licenses its technology to polyols and surfactant manufacturers that supply some of the world's most iconic consumer brands. Econic was founded in 2011 by Dr. Charlotte Williams at Imperial College London. The company is part of Cleantech Group's Global Cleantech 100. Its global headquarters are in Alderley Park, UK just outside of Manchester.