PURECAP

rHDPE by SACT

SACMI PURECAP™

The circular economy project for a sustainable beverage packaging future

«Close the circle with SACMI»

SACMI PURECAP™ is a circular economy project that aims to create a sustainable supply chain based on the use of certified food-grade rHDPE (recycled high-density polyethylene).

SACMI PURECAP™ is SACMI's response to regulatory developments that, as is already the case with PET, might require beverage closures to have a minimum recycled resin content* by 2030.

*Source PPWR - Packaging & Packaging Waste Regulation.

From recycled HDPE to finished cap

Thanks to the expertise of its Lab team and the new dedicated line, SACMI is leading this change. The goal? To deliver a complete industrial supply chain, from the provision of recycled resin to the design and technology needed to produce the market-ready cap.

The process will involve mechanical recycling, which is less impactful than chemical recycling, both economically and in terms of CO₂ emissions. On the new SACMI line, HDPE PCR flakes from the PET supply chain are selected, separated by color, decontaminated, and pelletized. The material undergoes functional and mechanical testing, in both pellet and cap form, to ensure optimal performance.

From consultancy to industrialization

PURECAP™ expands the SACMI value proposition. In addition to the material, the machine, the mold and cap design, the SACMI Lab provides a complete production recipe: this includes an optimal balance between virgin and recycled plastic, upstream color selection and technical specifications to ensure the required performance.

Beyond the virgin plastic savings (proportional to the amount of rHDPE in the recipe), this process also reduces emissions by up to 50% per kg of recycled resin.









PROJECT PARTNERS







