PLASTIC INGENUITY

IMPACTS OF EPR LEGISLATION ON THERMOFORMS

EPR legislation has significant impacts on thermoformed packaging, driving advancements in sustainable practices. EPR policies hold producers accountable for the lifecycle of their products, promoting recyclable packaging designs, plastic source reduction, and increased post-consumer recycled (PCR) content. These policies encourage manufacturers to innovate, creating materials and packaging systems that are easier to recycle and integrate PCR. By incentivizing sustainable production, EPR supports a shift towards a circular economy, aiming to minimize waste and reduce reliance on virgin plastics, thus reshaping the future of thermoform packaging.

Key EPR Tenet	Description	Current State for Thermoforms	Pathway to Compliance
Recyclable Packaging	In California, all covered packaging must meet recyclability standards, or producers lose the ability to make recyclability claims by 2025. Stricter requirements are set for 2032; non-compliance by then could result in sales bans and civil penalties. California has ambitious recycling rate targets for covered materials: • 30% by 2028 • 40% by 2030 • 65% by 2032	Non-bottle PET and Polypropylene containers, like thermoforms, both have a national residential recycling rate of 8%. In California, non-bottle PET containers have a residential recycling rate of 14% and Polypropylene containers have a residential recycling rate of 13%. Residential recycling rate data is derived from The Recycling Partnership's 2024 State of Recycling Report.	Transition to recyclable materials. For example, shift from PVC or PS to PET. Follow design for recyclability guidelines such as the Association of Plastic Recycler's Design Guide or How2Recycle label framework. To aid in design for recycling mandates, Plastic Ingenuity evaluates every thermoform design for recyclability requirements.

Key EPR Tenet	Description	Current State for Thermoforms	Pathway to Compliance
Plastic Source Reduction	California mandates a reduction in plastic use by: • 10% by 2027 • 20% by 2030 • 25% by 2032 Only 8% of the source reduction can come from post-consumer recycled content. At least 10% of the source reduction must come by shifting to reuse or refill by 2032. These reduction targets aim to decrease unnecessary packaging and limit the use of virgin materials.	The baseline year for source reduction reporting is 2023. However, brands may receive credit for down-gauging efforts dating back to 2013 with proper evidence. Brands are gathering part weight data and legacy evidence of downgauging efforts.	Maximize post-consumer recycled materials when possible. Plastic Ingenuity offers PCR options for PET, PP, and HDPE. Identify down-gauging opportunities to reduce material usage. Document PCR and minimization efforts for reporting. Plastic Ingenuity's Sustainable Packaging Assessment provides impact data related to increases in PCR and down-gauging efforts.

Key EPR Tenet	Description	Current State for Thermoforms	Pathway to Compliance
PCR Usage	States and countries with active PCR mandates for non-bottle rigids are New Jersey, California, and Canada. New Jersey's minimum PCR content law came into effect in 2024: • 10% PCR content in 2024 • 50% PCR by 2036 California will begin requiring PCR in 2027: • 10% by 2027 • 20% by 2030 • 25% by 2032 Canada will begin requiring PCR starting in 2025: • 20% PCR starting in 2025 • Increases to 50% by 2030	Sources for PCR PET are readily available. Sources for PCR polypropylene are growing. However, there is concern from brands about the availability of PCR supply to meet escalating demand. Due to stagnant domestic recycling rates, imports of recycled materials have increased to meet rising demand, but concerns remain about the credibility of PCR coming from offshore sources.	Evaluate opportunities to maximize PCR wherever possible. Plastic Ingenuity provides a range of recycled material options for PET, HDPE, and polypropylene packaging. Our materials portfolio includes FDA No Objection Letter (NOL) status for food-grade applications, with sources from both mechanically and advanced recycled processes, supported by ISCC PLUS mass balance allocation. Third-party certifications for PCR materials are available to ensure credibility and transparency of recycled material sources.