Alliance to End Plastic Waste Report Demonstrates Feasibility of Producing High-Quality Film from Household Flexible Plastic Waste

Descrizione

COMUNICATO STAMPA â?? CONTENUTO PROMOZIONALE

SINGAPORE, June 25, 2026 /PRNewswire/ â?? The Alliance to End Plastic Waste today published The Quest for Quality: Scaling Advanced Mechanical Recycling to Meet Recycled Content Targets for Flexibles, which provides a comprehensive technical and economic assessment of a 50,000-tonne-per-year advanced mechanical recycling plant for flexible plastics.â?¯The report demonstrates how high-quality recyclates can be produced from post-consumer household flexible plastics and identifies the conditions needed to scale these solutions commercially. It also underscores the importance of systemic enablers, including robust Extended Producer Responsibility (EPR) schemes, mandated recycled content targets, and concessionary capital, alongside a market-driven approach focused on premium recyclates and strong end-market demand.

More than an assessment, The Quest for Quality provides industry stakeholders with open-source resources to support the development of advanced mechanical recycling capabilities for producing premium recyclates from flexible plastic waste streams. It comes at a critical moment as brands, retailers and packaging producers prepare for the EUâ??s Packaging and Packaging Waste Regulation (PPWR), which mandates 35% post-consumer recycled content in non-food packaging by 2030. Flexible plastic packaging, which accounts for more than half of the global plastic packaging market, remains one of the most difficult packaging formats to recycle into high-value applications, underscoring the need for scalable recycling pathways.

Key findings from the report include:

1. Advanced mechanical recycling can deliver high-quality outputs

Post-consumer household flexibles can be processed into recyclates suitable for 30%+ use in demanding film applications such as shrink films, labels and pouches. This is possible using existing advanced, sensor-based sorting, hot-washing, and double-melt filtration systems.

2. Chemical recycling will be complementary to advanced mechanical recycling

Both can produce high-quality recyclates but each will focus on different fractions of the flexibles waste stream and target different applications. For example, chemical recycling will focus on multi-material films targeting food-contact applications.

3. Achieving high-quality recyclates necessitates a shift in operational philosophy

Recyclers must deprioritise traditional low-cost, mixed commodity processing and adopt a â??market-pullâ?? approach focused on producing premium recyclates that meet converter and brand requirements for demanding film applications.

4. Systemic enablers remain vital for the business case

To bridge the economic gap between high-quality recycling and virgin polymers, companies in the recycling value chain must leverage enablers such as Extended Producer Responsibility (EPR) policies to fund collection and sorting, mandated recycled content targets to drive demand, and access concessionary capital to reduce costs.

5. Optimise capital via brownfield expansion and upstream sorting

Greenfield civil works (31% of CAPEX) and complex sorting equipment (25%) strain project economics. To create a viable business case, operators should leverage brownfield site upgrades and shift the heavy sorting burden upstream to centralised Plastics Recovery Facilities (PRFs).

â??Flexible plastic packaging is one of the most challenging packaging formats to recycle at scale, but it is also one of the most important to get right. The technology needed to produce high-quality recyclates already exists. The challenge now is scaling these solutions commercially through stronger alignment across the value chain, supported by the policy and financial enablers needed to unlock investment. At the Alliance, our role is to bring together stakeholders and accelerate the adoption of scalable solutions. The Quest for Quality is an important step in that effort, providing practical insights to help advance circularity for flexible plastics,â?• said Jacob Duer, President and CEO, Alliance to End Plastic Waste.

The Quest for Quality builds on key learnings from the ValueFlex project, an initiative launched in 2022 by the Alliance to End Plastic Waste, CEFLEX, Roland Berger and HTP Engineering to develop a commercially viable 50,000-tonne-per-year advanced mechanical recycling solution for household flexible plastic packaging waste. Although the facility was ultimately not built due to changing macroeconomic and policy conditions, the project generated valuable technical, operational and economic insights. The report makes these learnings publicly available through detailed plant design, engineering and economic assessments, providing a blueprint for future projects and highlighting the policy, financing, and market enablers needed to scale advanced mechanical recycling.

About the Alliance to End Plastic Waste

The Alliance to End Plastic Waste is an independent, global non-profit organisation that strives to lead the creation of a circular economy for plastic and end plastic waste and pollution. We partner with stakeholders across the value chain including the private sector, governments, other financers, and NGOs, to advance this vision.

This involves developing, deploying, de-risking, and supporting solutions related to the design, collection, sorting, processing, recycling, and reuse of plastic. We foster innovation, collaboration, and knowledge-transfer among different stakeholders around the world, and we mobilise funding from development and private sources to support initiatives at scale.

Together with our members and partners, we are progressing economically viable, environmentally beneficial, and socially responsible solutions to create a circular economy for plastic. Find out more at endplasticwaste.org

View original content:https://www.prnewswire.co.uk/news-releases/alliance-to-end-plastic-waste-report-demonstrates-feasibility-of-producing-high-quality-film-from-household-flexible-plastic-waste-302810496.html

â??

immediapress/pr-newswire

Categoria

1. Comunicati

Tag

1. ImmediaPress

Data di creazione
Giugno 25, 2026
Autore
redazione