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DownToEarth

FORTNIGHTLY ON POLITICS, ECONOMY, ENVIRONMENT AND HEALTH

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WORLD ENVIRONMENT DAY SPECIAL



PLAN BEE

As the population of natural pollinators dwindles, farmers pick up the brush to hand-pollinate crops or turn to beekeepers for assisted pollination



SEED BANKS

Native crop varieties need support to thrive

P38

LIFE EXPECTANCY

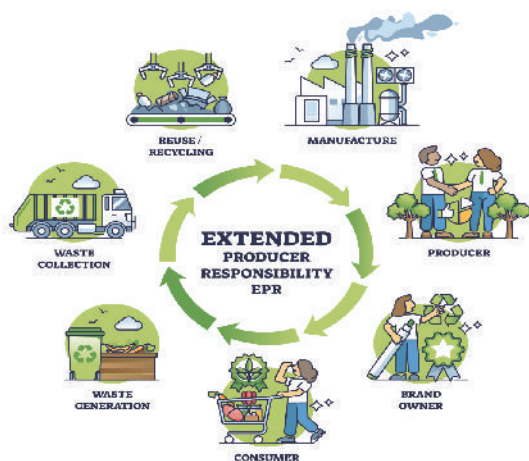
Five decades of steady rise interrupted

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At dawn in Noida, a truck unloads bags filled with snack wrappers, PET bottles, and laminated cartons. For years, this kind of mixed plastic waste—used in everyday packaging—has overwhelmed landfills and waterways. But here at UFlex's recycling facility, this waste is not the end of the story. It's the beginning of a new one.

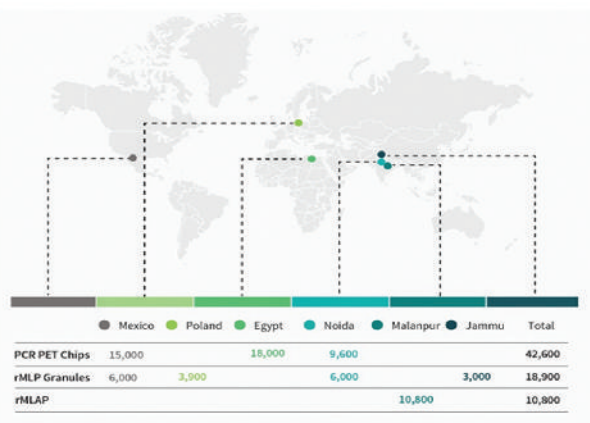
On June 5, World Environment Day, the focus is on genuine, effective efforts toward sustainability—where sincere commitment meets tangible action. With the global packaging industry facing increasing pressure over its environmental footprint, India's Extended Producer Responsibility (EPR) framework has become a catalyst for real change. Among the companies leading this transformation is **UFlex Limited**—India's largest multinational flexible packaging and solutions company.



Together for a greener future – EPR connects every stakeholder in the packaging value chain

The EPR guidelines in India have ushered in a new era of accountability for producers, importers and brand owners, setting year-wise targets for recycled content and enforcing strict traceability norms. These policies are accelerating the shift toward sustainable practices. UFlex has embraced this transformation and is setting new benchmarks through foresight, innovation, and robust execution.

UFlex has built one of the most comprehensive recycling ecosystems in the packaging sector, with a current global recycling capacity exceeding 72,300 metric tonnes per annum (MTPA) and an additional 39,600 MTPA capacity scheduled to be commissioned soon. To date, the company has **recycled more than 5 billion post-consumer PET bottles**, converting them into valuable raw materials for food-grade packaging.



UFlex's Global Recycling Facilities and Capacities (MTPA)

** Two new recycling facilities with a capacity to recycle 39,600 MTPA of MLP and PET will be operational in FY26*

In FY25 alone, UFlex recycled **8,200 metric tonnes of multi-layer plastic (MLP) waste**—further reinforcing its commitment to circularity. This end-to-end process—from collection and decontamination to reuse—underscores UFlex's strong dedication to environmental stewardship and EPR compliance.

Innovation lies at the core of UFlex's recycling strategy. The company is the **first in the world to recycle complex multi-layer mixed plastic (MLP) waste** with inks, adhesives, and metallised layers, polyethylene terephthalate (PET), polypropylene (PP), and polyethylene (PE). UFlex's **enzyme-based solution for recycling multi-layer aseptic packaging (MLAP)** is another revolutionary innovation, addressing a category long considered "non-recyclable" due to its composite structure of paper, polyethylene, and aluminum foil.

These cartons—used widely for milk, juice, and liquid foods—typically end up in landfills. **UFlex, however, has rewritten this narrative through an advanced Enzymatic Delamination Technology.**

This breakthrough uses enzymes to gently dissolve the bonding between layers, allowing clean separation of paper and the polyethylene/foil laminate. The recovered materials are repurposed into a wide array of useful products. The high-quality recovered paper pulp is used to produce printable paper, effectively closing the circular loop. The separated aluminium foil is transformed into value-added items such as metalized corrugated roof sheets, partition boards, alu-poly granules, laptop and glass covers, tray plates, and card bags. Unlike conventional metal roof sheets, these alternatives offer excellent insulation properties, helping reduce electricity consumption by lowering heat load. They are not only durable and weather-resistant but offer **cost-effective, sustainable alternatives** for construction and infrastructure—demonstrating how other industries too can adopt waste-to-resource models beyond packaging.

UFlex produces FDA and FSSAI approved food-contact-grade recycled PET (rPET) films, addressing India's growing demand for certified rPET, which is estimated at approximately 124,000 tonnes annually.

Another milestone is UFlex's "**single-pellet solution**"—a product that integrates 30% or more recycled PET with virgin PET to create food-grade packaging that retains high clarity, strength, and reduced acetaldehyde content. Importantly, it works seamlessly with existing PET manufacturing lines, allowing brands to shift to circular packaging without additional infrastructure costs.

UFlex is the first Indian company to receive U.S. FDA approval for food-contact recycled polyethylene (rPE) and recycled polypropylene (rPP). It stands as the only Indian flexible packaging company with food-grade recycling certifications across PET, PE, and PP, reinforcing its leadership in sustainable packaging solutions.

Transparency is equally crucial in this journey. UFlex invests in **Plastic Material Passports (PMPs), blockchain traceability platforms, and digital watermarking** to track recycled content, and reuse cycles.



Mr. Anantshree Chaturvedi, Vice Chairman, Flex Films International; Mr. Apoorvshree Chaturvedi, Director – Global Operations, UFlex Group, and Mr. Jeevaraj Pillai, Director - Sustainability, UFlex Limited, at the Alliance to End Plastic Waste (AEPW) Board Meeting in New York



Mr. Ashok Chaturvedi, Founder and CMD, UFlex Limited, during the inaugural session at the 21st Indo-US Economic Summit 2024

These tools ensure regulatory compliance and build trust with consumers and brands—mitigating greenwashing concerns.

Beyond environmental benefits, UFlex's recycling initiatives generate employment for skilled and semi-skilled workers and provide upskilling opportunities for informal waste collectors—aligning with India's broader development goals.

As India's EPR mandates come into full force, the packaging industry stands at a crossroads. Companies must now strike a balance between performance, compliance, and sustainability. UFlex is already demonstrating how this balance can be achieved at scale by advocating scientific methods to estimate recycled content and assess material properties—bringing greater rigor and credibility to India's evolving recycling ecosystem.



Flex Films UAE recognized as "The Economic Times Sustainable Organization 2023" for its contribution to sustainable development in the GCC region

The journey toward a circular economy is complex but achievable. With the right mix of policy, infrastructure, and innovation, companies like UFlex are proving that sustainable packaging is not just a future ambition—it is today's reality.

This **World Environment Day**, it's time to look beyond promises and celebrate real progress. Supporting transformative efforts like those of UFlex reminds us that **plastic isn't the problem—waste is**. And when we rethink how we use and reuse it, plastic can become a valuable resource for generations to come.