

Business India

THE MAGAZINE OF THE CORPORATE WORLD

December 11-24, 2023

A hand is shown holding a small globe of the Earth. A green tree is growing out of the top of the globe. The background is a soft-focus landscape with green hills and a blue sky. The text 'INNOVATION AND INDIA' is overlaid in large green letters.

INNOVATION AND INDIA

**How to keep climate change within
livable temperature bands**



GLOBE: VECTEZY.COM

This issue has been brought out by:

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COMMITTED TO BUILDING A CIRCULAR ECONOMY



“At UFlex, our sustainability vision includes adopting sustainable business practices that deliver on our ‘people’, ‘planet’, and ‘profit’ goals while promoting a world of coexistence. We are committed to becoming net zero by 2035 or earlier.”

Ashok Chaturvedi
Chairman and Managing Director



Pioneers in Recycling Multi-Layer Mixed Plastic Waste since 1990's

We are driven by our purpose to contribute toward building a circular plastics economy by ‘keeping plastic in the economy and out of the environment’.

UFlex is the first company in the world to invest in an advanced Enzymatic Delamination Technology to enable aseptic packaging recycling. Enzymatic delamination utilizes enzymes to break down the bonding between different layers of the packaging materials, separating the individual layers such as paper and polyethylene/foil laminate, which is reused in packaging and the production of new products.

FY23 Sustainability Highlights

35.41%
Increase in recycled/reused raw materials/inputs in our production processes, from the previous year

55.95%
Reduction in Scope 1 emissions from the previous year

14.99%
Reduction in total waste generated from the previous year

Our Sustainability Pillars

Our sustainability strategy focuses on 4 Rs: Reduce, Recycle, Reuse and Return.



REDUCE

Up to 100%
post-consumer recycled content (PCR) packaging film to reduce the use of virgin plastic at source



RECYCLE

Converting **Multi-Layer Mixed Plastic (MLP) Waste** into granules to make household and industrial products



REUSE

Converting **plastic waste into fuel**



RETURN

100% super earth-friendly **biodegradable packaging** that breaks down under ambient conditions

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.

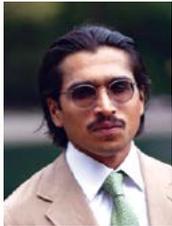


Awards and Accolades

FICCI Chemicals & Petrochemicals Award for Efficiency in Water Use
Outstanding Work in Circularity Award by the Indian Circularity Forum
Silver Award for Technical Innovation by the Flexible Packaging Association, USA
The Economic Times Sustainable Organization 2023

Let us not lose sight

Our objective is not merely to recycle plastic waste, but to redefine our relationship with this material



APOORVSHREE
CHATURVEDI

Waste generation in India continues to grow at a rapid rate primarily due to urbanisation. Our cities are witnessing a steady rise in population and as a result, also in waste generation. According to a report by TERI (The Energy and Resources Institute), India generates over 62 million tonnes of waste annually; 43 million tonnes get collected, and only 12 million tonnes are dumped. The remaining 31 million tonnes are dumped.

According to projections, Municipal Solid Waste (MSW) is slated to reach 165 million tonnes by 2030. However, waste collection remains mired in a quagmire with cities lacking adequate garbage collection infrastructure. Due to a lack of source segregation practices, organic and recyclables (plastic, paper, metal) are mixed in MSW and only 30 per cent of collected waste is sorted correctly. If this practice goes unabated, by 2047, our country will need 3,40,000 cubic meters of landfill space every day (1,240 hectares per year).

The ground reality: Waste collection and recycling in India face formidable challenges, on one hand, it is marked by the stark reality of poor or absent waste collection infrastructure in many parts of the country, and on the other hand, 72-78 per cent of the municipal solid waste generated is indiscriminately dumped or subjected to unregulated disposal. One of the critical shortcomings lies in the absence of a widespread practice of sorting at source due to which a significant portion of the recyclable waste ends up in ill-equipped landfills, causing environmental degradation and health hazards.

It is critical to recognize that it is not the process of recycling that presents the most significant hurdle in addressing plastic pollution. Rather, it is the efficient and holistic collection and management of plastic waste that emerges as the cornerstone of our battle.

Harnessing technology for a viable ecosystem: In a country like India, in the absence of the practice of source segregation as a habit and culture, the segregation of plastic waste at the destination is the only path forward. The present way of using waste workers and the use of informal sectors for segregation will certainly fall short of our endeavor to eliminate plastic waste from the environment.

Technology can play a pivotal role in optimizing recycling by integrating volumetric and weight-based sorting with optical differentiators, artificial intelligence, and the use of robotics to enhance waste recycling efficiency by automating precise material categorization based on size, weight, and visual characteristics. AI algorithms control robotic arms, optimizing the process, and adapting to diverse waste items through Machine Learning to facilitate this advanced sorting.

A sustainable and accountable waste management system reduces contamination, improves recycled material quality, establishes a traceable supply chain, and most importantly, helps extract the maximum value out of waste, which today is one of the biggest challenges.

Sustainability in packaging: The flexible packaging industry has been at the forefront of innovation, creating not just increasingly sustainable materials, but also researching effective mechanisms for recycling various plastic and plastic-based materials like multi-layered plastics and aseptic liquid packaging.

Over the last three decades, UFlex has dedicated substantial investments to industrial and MLP recycling facilities worldwide and was credited as the first company in the world to be recognised by the 'Davos Recycling Forum' in 1995, for recycling mixed plastic waste.

The country consumes approximately 2,00,000 MT of flexible packaging material a month. To recycle these quantities, we would need at least 2,000 to 2,500 mechanical recycling plants. Though, not difficult to achieve a policy to encourage entrepreneurs to set up recycling facilities will go a long way in managing waste.

Building the future: A collective endeavour: As we navigate the complexities of plastic waste recycling, let us not lose sight of the overarching goal. Our objective is not merely to recycle plastic waste, but to redefine our relationship with this material. By acknowledging its inherent value while mitigating its negative impacts, we can pave the way for a circular economy that fosters both sustainability and innovation.

As we stand at the precipice of transformation, let us wield the power of collective action to reshape our trajectory. ♦

The author is
Director – Global
Operations, UFlex
Group