

# WhatPackaging?

**PrintWeek**

[www.whatpackaging.co.in](http://www.whatpackaging.co.in)

## PROFILE

What DCGpac is upto  
after funding round

Page 38

## TECHNOLOGY

Erhardt + Leimer's plant in  
Ahmedabad, and India plans

Page 42

## CASE STUDY

How EPL manufactures  
eight billion tubes in a year

Page 16





## Charting the course for sustainability in print and packaging

**A**t the Asia Coat + Ink Show Conference, a panel of industry leaders convened to discuss sustainability.

Moderated by Ramu Ramanathan, the session featured insights from Andrew Huang of Eternal Materials; Prashant Atre of Toyo Ink Arets India; Manas Sarkar of UFlex; and Christian Biecker of BYK.

### Sustainability – a complex landscape

Prashant Atre, managing director of Toyo Arets India, highlighted the seriousness of sustainability in the printing and packaging industry. He noted, "This momentum has led to the emergence of responsible and responsive leadership," emphasising the need to take responsibility towards the environment.

Atre pointed out that around 80% of printed materials consist of minerals and pigments, which



The panel sought a solid foundation and how working with the government could create a long-term sustainable scene

has increased pressure on ink and coating manufacturers to adopt sustainable practices. He acknowledged we are still in the early stages of discussions on sustainability: "We need to establish a unified approach through which we can collectively work towards these goals."

He stressed the importance of developing environmentally friendly products and improving recycling processes, and recognised the economic challenges: "We've seen that virgin materials are cheaper than recycling collected materials."

For Eternal Material, sustainability is a core principle, not

merely a slogan. As a public company on the Taiwan Stock Exchange, it must publish an annual ESG report. "Since 2020, we've been active in our sustainability initiatives, setting benchmarks with goals for 2030 and an ultimate aim for 2050," said Andrew Huang, deputy manager – specialty

materials, Eternal Materials.

A focus for Eternal is local water sustainability, as Taiwan's mountainous landscape poses challenges in managing water resources. "We've invested in water reuse, achieving an average utilisation rate of 1.02 times in 2020. By 2031, we aim for a reuse rate of 1.60 times and have reached 1.48 times this year. This progress demonstrates our commitment to minimising material use and enhancing sustainability," he said. Huang said, "Sustainability is essential to our operations, both in Taiwan and globally."

#### A closer look at the challenges

Manas Sarkar – business head and sustainability officer – UFlex highlighted the urgency for regions, including India, to close the gap in their commitment to Net Zero targets, as agreed by 197 countries. He emphasises a three-pronged approach: legislative enforcement, community awareness, and core research funding to drive innovative solutions.

Sarkar pointed to India's Plastic Waste Management Rules, particularly the Extended Producer Responsibility (EPR), as a progressive framework that several countries are keen to emulate. "The EPR is comprehensive, setting short-, medium-, and long-term targets essential for meeting Net Zero commitments. A collective understanding of EPR within the business ecosystem will significantly advance their objectives."

Sarkar noted that the EPR, introduced about a year and a half ago, is complex and still evolving, grasping its details is critical to dispelling confusion among stakeholders.



Christian Biecker – global key account manager within the printing inks and inkjet market – BYK said, "BYK is determined to find a clear definition, inspired by insights from the European Union. With a scientific background, the company favours quantifiable metrics. For instance, if sustainability were rated on a scale of one to ten, Biecker said, it would simplify decision-making: "If one additive scores an eight and another only one, the choice is clear."

This demand for numerical data is widespread, with customers increasingly seeking specific metrics, such as carbon footprints, to assess alignment with their CO2 reduction goals. While the journey toward transparency may be lengthy, Biecker reminded that "Sustainability is here to stay". It's evident that this will remain a crucial focus for the future.

Atre pointed out the importance of a tailored approach in India. He said, "What has been implemented in Germany cannot be directly applied in the Indian context. We need to

develop our own approach." He emphasised the importance of a singular agency to oversee collaborative efforts, as most companies operate in isolation.

Atre highlighted the challenge of recycling in India, mentioning, "One major challenge is the collection of used packaging materials. Often, this waste ends up in landfills." He encouraged individuals to collect plastic packaging from grocery stores rather than discarding it, sharing, "Over the course of a year, my family has gathered several bags and sent them to the Uflex recycling unit in Noida." He concluded that while individual contributions may seem small, they can create a meaningful impact over time.

Expanding on Atre's explanation, Ramanathan asked Sarkar of UFlex, if the process can be scaled up. "With evolving technology, we can digitalise tracking and trace every material to facilitate recovery. Is there a way to ensure all materials are traceable in India?"

Sarkar informed that the main challenge lies in collection and segregation. "Industry

bodies often state that the responsibility lies with urban local bodies. We need to enhance their capability through investment or a PPP model. This is crucial for achieving Net Zero. We're engaging with the government, seeking guidance on scalability, which may involve either privatisation or a blended model."

Sarkar informed that top companies now disclose their ESG scores, which will soon require audits, helping to reduce greenwashing, hence the focus should be on collection and recycling to ensure targets are met. He said, "While initial production costs may be high, we need to view this as an investment for societal benefit. As we scale, technology, including blockchain for collection and segregation, can play a role in reducing costs."

#### Recycling practices

Ramanathan noted that the plastic bag was produced in a second, yet it took around 1,000 years to decompose. Ramanathan said, it would be interesting in understanding





the recycling aspects from the pyrolysis case studies, particularly how many times materials could be recycled, highlighting the limitations of polyurethane for reuse.

Sarkar pointed out that "currently, mechanical recycling and biodegradation were still developing." He explained that pyrolysis, or chemical recycling, appeared promising but would require more time to scale up due to various regulations. He shared insights about the UFlex Noida plant, mentioning, "We processed about six to seven tonnes and utilised byproducts within a linear process." However, he emphasised that significant development time was still needed for pyrolysis to fulfil its potential.

Huang highlighted his company Eternal's role as a raw material partner and the complexities of navigating regulations in different territories. He said, "When sourcing or delivering raw materials, we aim to reduce single-use plastics and optimise packaging. There is a growing global awareness of plastic waste, and consumers

are increasingly informed. Our role in the supply chain is to share our experiences to help minimise waste."

### Rethinking packaging

Ramanathan pointed out that some packaging designs seem over-engineered. He raised questions about the potential to re-examine design in terms of structure and materials while acknowledging microbiological considerations. He asked if we can rethink design in terms of structure and materials? Are there fundamental aspects we can revisit beyond microbiological considerations?

Sarkar emphasised the importance of designing for functionality and purpose, steering clear of unnecessary aesthetics that do not contribute to true design. "There is need for all stakeholders, including converters, brand owners, recyclers, and legislators, to work together to define packaging standards." He pointed out the necessity of standardising sizes and establishing regulations that support the environment and the

industry, recognising that past views on standards may have shifted. "With ESG scores influencing financial evaluations, he noted the growing scrutiny on commercial organisations regarding their environmental practices, which could impact funding opportunities." He also stressed the importance of integrating the unorganised sector into the legislative framework.

Biecker mentioned an additive which could aid the source design. The challenge was for customers who are seeking sustainability: how can we contribute without initiating a product development project that might take five to twenty years? "We have demonstrated that this is possible by selecting the right raw materials.

### Minister of Sustainability

Finally to round up the discussion, Ramanathan asked the panellists, what their first act would be if they were appointed Minister of Sustainability?

Sarkar emphasised the importance of implementing existing legislation rather than

creating new laws. "While the framework exists to address pressing sustainability issues, the real challenge lies in effective implementation," he acknowledged. Sarkar was keen to advocate actionable steps in line with current policies to protect the planet.

Atre highlighted education and awareness as key factors in fostering a sustainable future. "Equipping the populace with knowledge about sustainability practices is crucial for driving change." Atre stated that education is vital. "Informed citizens are better prepared to engage in sustainability efforts and make environmentally conscious decisions."

Biecker pointed out the alarming levels of plastic waste observed during his travels in India. He argued that immediate action must focus on waste management systems. Biecker suggested, "Awareness serves as the starting point for education regarding waste management." He proposed, "The first step should involve cleaning public spaces of waste, setting the stage for implementing effective recycling programmes." He emphasised the necessity of restoring the environment before considering larger systemic changes.

Huang recognised the merits of the suggestions made by his peers and stressed the importance of collaborative efforts. "A leader's role encompasses engaging with legislators and promoting best practices across various sectors. Supporting programmes that encourage positive actions among all stakeholders, from producers to consumers, can foster meaningful change." ■