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Vol. 24, Issue 2 • June - July 2023 • Rs 75

"REMODELLED SUPPLY CHAIN CONTRIBUTED TO OUR GROWTH STORY IN FY23"

In a candid conversation, Dilip Piramal, Chairman of the world's second-largest luggage company – VIP Industries, talks about how leveraging some of the sectoral tailwinds, amplified by - internal operational efficiencies, strong brand activations, attractive designs and strong customer communications, helped the company witnessed an all-rounded growth across brands, segments and channels.

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Mr. Pankaj Kumar Jha - Mobile 9717744260 Email: jha.pankaj@ma.mc-india.co.in

- Mr. Basheer Ahmed Mobile 8291 854027 Email: ahmed.basheer@ma.mc-india.co.in Mr. Sachin Phadke
 - Mobile 8291 854026 Email: phadke.sachin@ma.mc-india.co.in
- Ms. Winita Dsouza Mobile 8291 854028 Email: dsouza.winita@ma.mc-india.co.in

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Mr. Prashant Mandewal Mobile: 9987183330 Email: mm.y@2m2.net.in prashant_mandewal@yahoo.com CHIEF EXECUTIVE OFFICER Deepak Lamba

CHIEF FINANCIAL OFFICER Subramaniam S

HEAD HUMAN RESOURCE Meghna Puthawala

VICE PRESIDENT MARKETING Vidyut Patara

CORPORATE STRATEGY AND SUBSCRIPTIONS LEAD | Ritika Masand ritika.masand@wwm.co.in

> EDITOR | Rahul Kamat rahul.kamat@wwm.co.in

ASSISTANT EDITOR | Nisha Shukla nisha.shukla@wwm.co.in

ASSOCIATE ART DIRECTOR | Sanjay Dalvi sanjay.dalvi@wwm.co.in

EXECUTIVE DELEGATE ACQUISITION | Shruti Nair shruti.nair@wwm.co.in

ADVERTISING

WEST & NORTH Ranjan Haldar ranjan.haldar@wwm.co.in +91 9167267474

SOUTH Mahadev B mahadev.b@wwm.co.in +91 9448483475

OVERSEAS PARTNER Mike Hay Ringier Trade Media China Taiwan Hongkong & South East Asia mcchay@ringier.com.hk +852 2369 - 8788

> CAREERS careers@wwm.co.in

SUBSCRIPTIONS subscriptions.wwm@wwm.co.in



Printed and published by Sunil Dad for and on behalf of owners Worldwide Media Pvt Ltd (CIN:U22120MH2003PTC142239), The Times of India Building, Dr DN Road, Mumbai 400001. Printed at Print Plus Pvt Ltd, 212, Swastik Chambers, S T Road, Chembur, Mumbai- 400 071. Published for June - July 2023

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Volume 24 Issue 2 June - July 2023



The Killer Move?

lectric two-wheelers are driving the EV revolution in India. Take a look: during the year 2022-23, the total sales of EVs in the country crossed the one million milestone
for the first time. What's more? The two-wheelers accounted for 60 per cent of all EV sales with an increase of 183 per cent over 2021-22. Importantly, one of the biggest contributors to EV sales growth was subsidies by the government.

However, New Delhi's timing couldn't have been worse, both for India's fledgling electric vehicle (EV) sector and prospective electric bike buyers. Now the government is slashing these subsidies and the makers of electric two-wheelers see it as a regressive step which will drag India's EV revolution, which is led by two-wheelers.

The industry is not happy! The sudden reduction in the subsidies may lead to a major decline in the adoption of EVs. This would impact the entire ecosystem of the EV chain. The government should understand that the Indian market is price-sensitive, and the total cost of the owner is not firmly established in consumers' minds! My question to the government is, the majority of the petrol two-wheelers cost less than Rs 1 lakh, hence, why would the consumer spend Rs 1.5 lakh on EVs?

The share of electric vehicles in total vehicle sales in India is currently around 5 per cent. The government target for EV sales by 2030 is 30 per cent for private cars, 70 per cent for commercial vehicles and 80 per cent for two- and three-wheelers. But with slashing the subsidies, the chances of achieving 30 per cent look grim.

Meanwhile, the slashing of subsidies has received a mixed response. Though the subsidy is being slashed a higher outlay will increase the proliferation of EV two-wheelers as the government would be able to support more vehicles with the funds available. It could lead to a rise in per-unit cost for consumers, but a larger number of buyers would benefit.

Also, several experts feel that there is no need to further subsidise EVs, especially twowheelers, as already more than a million EVs have been subsidised. Also with most state governments having incentives and with prices of cells below the 2021-22 levels, subsidies need to be tapered down for electric two-wheelers and new categories such as quadricycles, e-cycles, commercial vehicles and private buses need to be added.

More than subsidies, what is now needed is an ecosystem of EVs.

Vcormal Editor







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Describing the plastics industry as one of the fastest growing sectors, Union Minister of State for Commerce, Hon'ble Anupriya Patel, recently said India has emerged as a major hub for the world to source their requirements.

Inaugurating Plexconnect, India's first even export-focused plastics exposition organised by Plastics Exports Promotion Council (Plexconcil) in Mumbai, Patel expressed the confidence that the country would achieve the target of 2 billion-dollar exports as the nation turns into a 5 trillion-dollar economy.

She noted that India has today become the supplier of good quality raw material and the finished products while the new foreign trade policy allows exporters to expand their global footprint.

Santosh Sarangi (IAS), Additional Secretary and Director General of Foreign Trade, who was the guest of honour, said, "India focuses on the concept of recycling and reusing to drive sustainable development and become a major circular economy." "The FTA negotiations, which are in progress with several countries, should help boost exports," he said.

The expo witnessed 4,000 footfalls on day 1 itself with traders and exporters showing an excellent response. The State Pavilions included those from Tamil Nadu, Telangana, and Madhya Pradesh.

Over 400 global buyers from 51 countries have been invited under the Department of Commerce MAI



scheme to network and conduct business at a dedicated Reverse Buyer Seller Meet that were held during the 3-day event. The buyers have been shortlisted from nearly 800 registrations received, and this vast interest is testimony to the world's increasing attention on India as an alternate sourcing hub. From India, leading plastics processors are participating at PLEXCONNECT 2023, and the event is expected to receive 10,000 footfalls over the three days, PLEXCONCIL said.

"With the government's push for free trade agreements with several countries and the new Foreign Trade Policy, the MSMEs will witness a new era of exports," said Hemant Minocha, Chairman of PLEXCONCIL Nearly 90 per cent of the Plastics companies fall under MSMEs and they are bound to take advantage of the new business opportunities, he said.

"I am sure the global plastics industry will prove that they are look-



ing beyond China Plus One opportunity and play a big role in making India a major MSME hub," added Minocha.

Trade delegations from several countries, such as Uzbekistan, South Korea, Israel, Kyrgyzstan, Indonesia, and Brazil, explored business opportunities by interacting with Indian exporters.

The recent signing of the Economic Cooperation and Trade Agreement (ECTA) with Australia and the Comprehensive Economic Cooperation Agreement (CEPA) with the UAE, are bound to be harbingers of increased role for the Indian plastics industry in international trade.

The Council has been in contact with over 100 foreign missions, coordinating with the Ministry of External Affairs (MEA), to create buyer interest from their respective countries.

Plexconnect 2023 is also hosting participation of State Pavilions from Tamil Nadu, Telangana, Madhya Pradesh, and Himachal Pradesh.

India's plastics export has grown at a CAGR of 6.1 per cent in the last five years and PLEXCONCIL plans to double exports to reach USD 25 billion by 2027. India currently exports plastics goods to over 200 countries globally, including the United States, China, United Arab Emirates, the United Kingdom, Germany, Nepal, Italy, Bangladesh, the Netherlands, and Saudi Arabia.

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Covestro bestowed with Best Polymer Producers Award

Ovestro received the Best Polymer Producers Award 2022 for their high-performance plastic polycarbonate. The annual competition on these coveted awards for plastics suppliers was organised by the Polymers for Europe Alliance. Covestro received top ratings from plastics converters across Europe in the categories of quality, delivery reliability, circularity, communication, innovation, and commitment to the European market over the past twelve months.

The award was handed over during the conference "A Circular Future with Plastics" of the European Plastics Converters (EuPC) Association at a gala dinner held at Palais de la Bourse in Lyon. The conference, organised by the EuPC, the French Association Polyvia and the Plastics Producers' Association Plastics Europe, was attended by more than 250 industry representatives.

Covestro scored well in all categories, including circularity and it is rightly said 'a full circular economy is the company's most impor-



tant goal for the future.' To achieve this goal, Covestro has developed a whole portfolio of sustainable products made with renewable raw materials, including the Makrolon[®] RE and Bayblend[®] RE polycarbonate ranges.

"The Best Polymer Producers Awards was introduced in 2016 to re-establish a constructive dialogue and good communication between suppliers and users of polymers in Europe. The fact that we organised the 7th edition with a growing number of voters, every year is a clear indicator of the awards' success," said Ron Marsh, Chair of the Polymers for Europe Alliance.

The Polymers for Europe Alliance was initiated by the EuPC association in 2015. Each year, Best Polymer Producers Awards for Europe are granted for several major polymer types –including polycarbonates. In addition, an overarching prize on the commitment to the European market, covering all polymer types, has been awarded this year.

Constantia Flexibles and SB Packagings form JV

Constantia Flexibles, Premji Invest and Amit Banga, Managing Director, SB Packagings, have entered a joint venture (JV) which will create one of the largest sustainable packaging platforms in India and South Asia, following the regulatory approval from Competition Commission of India.

The joint venture (SB-Constantia Flexibles), between two flexible packaging industry leaders and Premji Invest as shareholders, will leverage each company's unique strengths and resources to achieve greater success in the Indian market.

"I have confidence in the partnership's ability to be an effective solution provider to its customers in India through innovation and excellence. We will drive growth and profitability for all stakeholders," said Pim Vervaat, Global CEO, Constantia Flexibles. "The joint venture positions us as a clear leader to drive the sustainable packaging agenda in India and beyond with a unique product offering," noted Amit Banga, Managing Director, SB Packagings.

Strong synergy potential with a focus on sustainability

SB-Constantia Flexibles will operate in the food and hygiene markets, offering medium to high-barrier packaging solutions, with nearly 2,700 employees across nine plants spread across the country.

Deepak Ganjoo, ex-President, AMESA (India, Middle East and Africa) region, Essel Propack Limited has been appointed as the CEO of the joint venture. Deepak and the management team will focus on delivering sustainable and innovative solutions to customers in India and South Asia under the guidance and mentorship of the Board of Directors. Pim Vervaat, Amit Banga and Rajesh Ramaiah from Premji Invest, the key shareholder representatives on the Board will focus on driving the strategic imperatives and inorganic growth of the JV.

The JV will pursue organic and inorganic growth opportunities in higher value-added market segments, continuing its strong growth trajectory in the hygiene, food and HPC segment even as it further develops the sustainable mono-material EcoLam product range. It will bring together the mono-material capabilities of both Constantia Flexibles India and SB Packagings and offer medium to high-barrier packaging solutions to food and hygiene markets.

KPMG in India acted as exclusive financial advisor to Constantia Flexibles for the transaction.



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INDUSTRY 4.0

"It's time for SMEs to leverage Industry 4.0"

The production cost of the Indian manufacturing industry is still not very competitive and that's the key reason we need to bring in digitisation to improve efficiency and productivity in the operations feels Amit Saluja, Senior Director and Head, Nasscom Centre, Gandhinagar. Edited excerpts:

How could technology he employed to carry out the government's plan to boost the manufacturing sector's GDP contribution in the years to come? Manufacturing is contributing 17 per cent to the Indian GDP and has the potential to become 25 per cent by 2025 thereby being the most important growth sector for the country. From an employability point of view also there are around 2.75 crore workers engaged in manufacturing. Realising the big potential the Indian manufacturing sector has in the world, the government has taken multiple steps in building a strong digital and physical infrastructure to boost production. PLI scheme in last few years across key sectors has given a big push to make in India program.

While government schemes are providing incentives to grow, this cannot sustain for the long term without technology adoption. The production cost of the Indian manufacturing industry is still not very competitive and that's the key reason we need to bring in digitisation to improve efficiency and productivity in the operations. This aspect is most critical for the Indian manufacturing SMEs as these companies have very few applications of digitisation in the plants. SMEs still depend on standalone machines operated by workers to produce and that's where there is big potential to bring in digital solutions to increase the production volumes.

By Rahul Kamat



| Amit Saluja, Senior Director and Head, Nasscom Centre, Gandhinagar

WHILE GOVERNMENT SCHEMES ARE PROVIDING INCENTIVES TO GROW, THIS CANNOT SUSTAIN FOR THE LONG TERM WITHOUT TECHNOLOGY ADOPTION.

According to you how does technology assist Indian companies in overcoming the obstacles they would face in boosting manufacturing?

While global demand and our domestic consumption are

favouring the growth of the Indian manufacturing sector, at the same time, there are multiple challenges impacting the volume growth. In the last few years, in post covid era, the demand uncertainty has remained high thereby preventing







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Corp. Off.: Plot No. 5402 - 5403, Phase-IV, GIDC Vatva, Ahmedabad - 382 445. Gujarat, (INDIA). Phone: +91 79 2584 1591/2/3, 3500 2700 | info@windsormachines.com | www.windsormachines.com manufacturers to produce at full capacity. Worker availability, especially skilled ones, has become a challenge to match the level of growth: raw material costs have gone through the roof, with the cost of some key materials increasing by 30 per cent in the last 1-2 years. Operational costs have also increased due to frequent machine breakdowns and high energy consumption. Logistics costs, especially for the export market have seen a big jump. All these factors have further impacted the competitive levels of Indian manufacturers.

This is why smart manufacturing solution adoption has become a must to improve process efficiencies and resource productivity. Supply chain solutions like AI-based demand forecasting, inventory planning and logistics management can help a lot to manage uncertainties. AI & analytics solutions are helping to optimise the processes thereby reducing material wastage and improving quality. Machine breakdowns can be reduced by predictive maintenance/ condition monitoring solutions and monitoring critical electrical parameters can enable finding reasons for high energy consumption.

How can automation and Industry 4.0 outreach help in increasing output and effectiveness?

World has moved beyond automation, and Industry 4.0 is the current norm to manufacture. Automation means replacing manual physical work with machines and aims to produce more with limited resources. However, the challenges remain that operations still happen in silos. On the other hand, Industry 4.0 integrates manufacturing with machines and workers connect through data exchange.

Many Indian companies, especially the larges ones have already deployed these solutions and are seeing the benefits. But the bulk of them, mainly SMEs, are still thinking about it. One of the prime

THE PRODUCTION COST OF THE INDIAN MANUFACTURING INDUSTRY IS STILL NOT VERY COMPETITIVE AND THAT'S THE KEY REASON WE NEED TO BRING IN DIGITISATION TO IMPROVE EFFICIENCY AND PRODUCTIVITY IN THE OPERATIONS. THIS ASPECT IS MOST CRITICAL FOR THE INDIAN MANUFACTURING SMES AS THESE COMPANIES HAVE VERY FEW APPLICATIONS OF DIGITISATION IN THE PLANTS.

reasons for SMEs not leveraging digital is the lack of understanding of the applications of technology to address productivity challenges. Several events and workshops are happening on Industry 4.0, but it lacks awareness at a high level. SMEs need a thorough understanding of where, when and how to start their digital journey. These aspects need attention and should be covered indepth in such informative sessions.

We should relook at the outreach approach and make it more handson, small format roundtables and workshops will help SMEs much more than the large format events.

What technological barriers can Indian companies encounter along the way to increasing production, and how might they be overcome?

Technological barriers are real as even though companies plan to adopt digital applications but face infrastructure-related challenges on the ground hindering deployment plans. Every manufacturing plant has legacy systems and old machines that bring in integration issues. Many of the machines are not even equipped to export data and do not support connectivity. This makes the deployment very difficult as applications need machine connectivity to acquire data for decision-making. Hence it is extremely important to build a digital roadmap and not look for deploying ad-hoc individual solutions. The first phase in the deployment process should be making infrastructure ready for digital projects.

Digital capabilities, especially the workforce's digital skills is another barrier as people working in plants are from core engineering backgrounds. Not having an understanding of the technology prevents them to adopt solutions as they are not able to properly judge the value and keep doubting the return on investment.

In what ways can Nasscom utilise technology to help boost the Indian manufacturing sector, especially SMEs?

Nasscom, through its centre of excellence (CoE) established at Gandhinagar with support from the Ministry of Electronics & Information Technology and the Gujarat Government, is leading the effort of building collaborative for manufacturing ecosystem digitisation. As part of this initiative, the central government does regular awareness sessions on Industry 4.0 with a focus on low-cost and easy-to-deploy digital solutions. Manufacturing Innovation Challenge is a flagship program where large manufacturing enterprises share their complex challenges with deep-tech startups across the country to find innovative solutions. CoE also has a dedicated program for SMEs, Smart Manufacturing Forum that is aimed at building digital capabilities in SMEs and handhold them in their adoption process. Till now CoE team has engaged with 1,000+ manufacturing enterprises, 600+ startups and 100+ researchers to create opportunities for cocreation. (2)

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"We are focusing on providing paper-based innovations in the flexible packaging space"

As the demand for sustainable and flexible packaging continues to grow across industries, the need for innovative solutions that address environmental challenges has become more important than ever. While businesses are accelerating their efforts to embrace sustainability, Huhtamaki India too is striving to make packaging more circular with a smaller carbon footprint. Ashwinikumar Singh, Head of Innovation and Product Development at Huhtamaki India and MEA, shares insights on innovative packaging solutions, alternative materials, and new technology his company would be launching to achieve 100 per cent recyclability. He also opened up about sustainable strategies his company is implementing to stay ahead of the curve in an interview with Nisha Shukla.

Pressure to reduce packaging waste has risen sharply in India and the global market; what initiatives is Huhtamaki taking to address this challenge?

In India, rapid economic growth has increased demand for single-use plastic items, contributing to plastic waste pollution. Despite only half of the country's 3.5 million tonnes

of plastic produced in 2020-21 being recycled, India has banned the production, import, and use of certain low-value and highly littered single-use plastic items starting July 1, 2022. Therefore, businesses across verticals are accelerating efforts towards embracing sustainable packaging solutions, closing their doors to non-recyclable waste generation.

At Huhtamaki, we firmly believe that tackling the waste challenge includes managing both - production waste and the product's end-of-life. We are applying science to develop ground-breaking monomaterial technology under our Blueloop[™] Flexibles brand. Our innovations are redefining the possible, as they are a unique combination of protection, recyclability, and affordability. Our solutions in Paper, Polyethylene (PE) and Polypropylene (PP) Retort are transformational and meet the demands of both customers and their consumer base. The combination of >90 per cent mono-material content for Paper and Polypropylene (PP) Retort structures, as well as up to 95 per cent for Polyethylene



(PE), are the major technological innovations in our state-of-the-art solutions. These solutions support circularity and are a sustainable alternative to conventional laminates that use aluminium as a barrier or base package functionality on polyolefin structures. Blueloop[™] PE reduces material usage and achieves an industry-leading mono-

material share of 95 per cent, even for high barrier levels, whereas Blueloop[™] Paper achieves high to ultra-high barrier performance without lamination or polymer film. Huhtamaki is accelerating efforts towards offering these solutions at scale on a global level.

Tell us in detail about Huhtamaki's sustainable strategy for India.

We are committed to making packaging more circular with a smaller carbon footprint and are embedding sustainability into everything we do to become an industry leader in sustainable packaging solutions. By optimising the use of materials, we ensure that our packaging has a low





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or granules, that can substitute virgin plastic. This initiative is part of Huhtamaki's #CloseTheLoop initiative.

What are the trends you are witnessing in flexible and sustainable packaging segments?

The sustainable packaging industry is driven by changing consumer preferences and growing environmental concerns. Flexible packaging is gaining popularity due to its convenience and ability to reduce shipping costs. Digital printing is also becoming a major trend, allowing on-demand printing in any dimension. Additionally, sustainable packaging is at the core of green growth strategies, and brands are investing in smarter waste reduction techniques, reusable packaging, biodegradable and compostable

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environmental impact without compromising functional properties, such as hygiene and safety. We have been working on several sustainability initiatives in India - from developing recyclable products to decreasing our operating environmental footprint at our manufacturing facilities. We are also addressing gaps in today's recycling infrastructure, as postconsumer packaging is a crucial secondary resource.

One of the examples of our recycling efforts was to sponsor a trust (Huhtamaki Foundation) last year that recycles about 100 kg of postconsumer flexible plastic per hour. The foundation has been working to collect post-consumer waste from nearby cities like Pune and recycle it into value-added products materials, and recyclable packaging. Consumer preference for ready-toeat meals is also a rising trend, and brands are responding with flexible packaging and pouches, convenient for busy schedules. I also strongly feel designing for a product's end-oflife is crucial for successful recycling, making sustainable packaging an essential part of the circular economy.

Tell us about the innovative solutions your company would launch to address sustainability challenges.

By using our global scientific expertise, we launched three unique and effective sustainable solutions in mono-material flexible packaging. They are designed for recycling and use fewer materials as compared to the conventional complex and multi-layered materials they will replace. What makes the innovations unique is the power of three, the powerful combination of protection, recyclability, and affordability.

Our flagship offering has the highest percentage of monomaterial in the market today and is delivered without compromising product protection or affordability. Additionally, by increasing the percentage of mono-material in each of our solutions, both - the technical and economic viability of recycling has increased.

We showcased these innovations exclusively to our customers at Interpack 2023, the world's biggest trade fair for the packaging industry.

What kind of demand are you witnessing for flexible packaging? Which sectors do you cater to, and which other sectors have approached you for flexible packaging solutions?

Rapidly changing living standards, rising disposable incomes, and an increase in the size of the middleclass population are driving demand for high-quality items, offering significant potential for Huhtamaki India. While demand for flexible packaging remained stable through 2022, we also encountered continuous competition in many countries. Furthermore, the cost of production increased, including raw materials, transportation, and energy expenses. Our cutting-edge packaging solutions are adopted by several industries, including food and beverages, pet food, tube laminates, healthcare, and personal care, to name a few.

Many customers, particularly from the pharma sector, are approaching us for our new innovative and recyclable solutions, such as Blueloop[™] Push Tab for blisters and Blueloop[™] mono PE bulk bags to pack sensitive polymer or resins. Further, our mono-barrier paper solution allows us to promote paper-



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based thermoforming applications for personal care segments.

What are the major drivers for creating a circular economy for a sustainable future in India?

A circular economy can feasibly be an effective tool for addressing the current triple planetary problems of climate, biodiversity, and pollution. India is anticipated to emerge as the world's third-largest economy by 2030, accounting for roughly 8.5 per cent of global GDP. The circular economy can drive India's growth whilst bringing crucial environmental advantages, resulting in a sustainable and resilient framework.

The ambitious long-term vision of a circular economy depends on the current Indian market's capabilities and the integration of multiple stakeholders, which has the potential to pave the way for rapid, sustainable, and resilient development. Advances in the circular economy will not improve the resilience of urban and rural economies but also deliver benefits such as climate mitigation, food and water security, substantial biodiversity, job development, and empowerment of underprivileged groups.

Food packaging helps protect and preserve food for billions of people daily but also contributes to the global solid waste problem. Hence, there is an urgent need for the packaging industry to increase investments in sustainable solutions rooted in circularity.

At Huhtamaki, we are driven by our ambition of being the first choice of sustainable packaging solutions worldwide and by the larger purpose of safeguarding food, people, and the planet. Our 2030 sustainability ambitions focus on two key topics: transitioning to a circular economy and taking climate action whilst not forgetting other environmental and social aspects of sustainability.

What are the key driving factors and challenges in recycling packaging materials and achieving sustainability?

The key driving factors for sustainable packaging include environmental concerns, innovation by companies, government policies, economic benefits, and corporate social responsibilities. Lack of recycling infrastructure and postuse packaging waste management are some of the critical challenges in India. For instance, less than 95 per cent of flexible packaging for biscuits in India is designed to be recyclable but doesn't get recycled due to a lack of proper recycling infrastructure. Huhtamaki collaborates with partners across the value chain to create circular solutions and meet EPR objectives.

Our innovations are driven

by both implicit as well as explicit consumer demands, and, in recent years, we have developed an array of sustainable products such as simple peel retortable lidding for food trays, recyclable aluminium foil-free lamination for coffee, insulated packaging for food delivery applications as well as thermoformable articles.

What are the alternative materials or technology you are considering for achieving 100 per cent recyclability?

At Huhtamaki, we aim to supply consistently responsible and cuttingedge packaging choices to our consumers. Our strategy focuses on leadership in sustainable packaging in three key technologies: fibre, paperboard, and flexible packaging.

By 2030, over 80 per cent of the materials we use will be renewable and recyclable, and 100 per cent of the fibre we use will be recycled or sourced from certified sustainably managed or recycled sources, in contrast to the 98 per cent fibre used in our packaging.

Currently, we are working towards expanding our 'mono material' packaging options that will help reduce the complexity of the packaging process, increase yield in the current recycling procedures and are in alignment with our net zero ambitions. We are also focusing on providing paper-based innovations in the flexible packaging space. We are immensely excited about our new ultra-high barrier paper innovation in the pipeline, which combines higher performance and recyclability while being more accessible and inexpensive. As a global player, we have established industry standards and always strive to ensure that there is no trade-off between quality and sustainability.

Where does India stand in terms of taking steps to achieve a circular economy?

Today, one-third of India's 1.2

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OUR STRATEGY FOCUSES ON LEADERSHIP IN SUSTAINABLE PACKAGING IN THREE KEY TECHNOLOGIES: FIBRE, PAPERBOARD, AND FLEXIBLE PACKAGING. BY 2030, OVER 80 PER CENT OF THE MATERIALS WE USE WILL BE RENEWABLE AND RECYCLABLE, AND 100 PER CENT OF THE FIBRE WE USE WILL BE RECYCLED OR SOURCED FROM CERTIFIED SUSTAINABLY MANAGED OR RECYCLED SOURCES, IN CONTRAST TO THE 98 PER CENT FIBRE USED IN OUR PACKAGING.

billion inhabitants live in cities, producing around 62 million tonnes of municipal solid waste (MSW) per year. According to NITI Aayog, this figure may skyrocket to 125 million tonnes per year by 2031.

The Government of India has been drafting policies and incentivising projects to drive the nation towards a circular economy. They have laid down rules and policies favourable for achieving sustainable economic growth like Plastic Waste Management Rules, e-Waste Management Rules, Construction and Demolition Waste Management Rules and Metals Recycling Policies. Though India's circular economy is still in its early stages, most industries have stepped up to accelerate their efforts to implement it.

How are you transforming the value chain and bringing a net positive impact to the global food chain?

Global disruptions like climate change, price inflation, COVID and the war in Ukraine are reinforcing the need for sustainable and resilient food chains. Adding in the sustainability targets that food chain players have committed to, we see corporations fundamentally rethinking how we source, produce, process, and consume food.

We are committed to sustainability and bringing a net positive impact to the global food chain through our following initiatives:

- Sustainable materials: We design packaging with simplified material structures and use these materials efficiently without compromising on protecting the contents. We offer paperbased flexible packaging as an alternative to plastic, while for plastic-based structures we offer options with PCR content.
- Circular economy: We design recyclable products and provide a better yield in existing largescale recycling technology that drives circularity, supporting the building of a resilient recycling infrastructure.
- *Waste reduction:* We are working towards reducing waste across our operations and supply chain, designing products wherein the material use is minimum.



• *Food safety:* We are committed to ensuring that our packaging solutions maintain the quality and safety of food products.

Tell us in detail about your climate change mitigation targets.

As a global packaging manufacturer, we are undertaking a few initiatives to combat climate change. We intend to cut our greenhouse gas emissions to half by 2030, compared to the baseline year of 2019, inclusive of both Scope 1 and Scope 2 emissions. We have also increased our use of renewable energy, with the goal of expanding this number to 70 per cent of our overall energy use by 2030. Also, we are also investing in sustainable energy initiatives that support circularity, with the goal of using 100 per cent renewable or recycled resources in our products by 2030. Furthermore, we source all our raw materials ethically.

Tell us in detail about your expansion plans.

Huhtamaki envisions itself as a leader in developing sustainable packaging solutions and is harnessing the power of innovation to implement a circular and sustainable economy. We are focussing on carrying our operations sustainably, which in a way, is strategically aligned with our 2030 ambitions. We hope to collaborate with our clients and other stakeholders in our value chain to create ground-breaking solutions that will set the industry standard for sustainable packaging. We are also extensively working towards creating a positive social impact through our products and operations, way beyond our footprint. We will also focus on the growth of our labelling business in India and have lined up investments to open a new site at Ambernath. The new modern plant will continue catering to pharma customers and other segments such as lube oil, FMCG, and alcoholic beverages. (2)



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"The Indian chemical market is showing good consumption against other countries"

In the midst of a turbulent chemical market, Vipul Organics has not only showcased resilience in the face of a sluggish global economy but has also strengthened its presence in India. An interaction with Mihir V. Shah, Executive Director, Vipul Organics Limited., provided an insight into the company's decision to transform from a solely export oriented company to a prominent supplier in the domestic market. This shift was accompanied with the delivery of quality products to each customer, regardless of whether it is a multinational corporation or a small company in the SME sector. He further shared the company's vision to become an integrated colour solution manufacturing company in an interview with Dipika Lalwani.

How would you describe the overall financial performance of Vipul Organics Limited for the fiscal year 2022-2023?

If we look at the financial performance of the year 2022 - 2023, we have seen a marginally improved growth as compared to the previous fiscal year (2021 - 2022), despite the considerable challenges which the chemical sector has witnessed during this period.

Notably, there were various global events during this period which posed as obstacles to our growth objectives. Nevertheless, Vipul Organics has managed to showcase satisfactory outcomes consistent with our performance in the previous year.

Despite facing multiple headwinds, the total revenues of Vipul Organics

ADDITIONALLY, WE HAVE ACQUIRED MORE THAN 5 ACRES OF INDUSTRIAL LAND IN GUJARAT, WITH AN AIM TO PLAN FOR FURTHER BACKWARD INTEGRATION OF OUR PRODUCTS.



Limited marginally increased. What were the key factors that contributed to this growth?

Firstly, Vipul Organics was a solely export oriented company until 2017. Over the years we have developed a robust strategy to strengthen our domestic presence. Today, we have a strong network of over 22 distributors in India, which allows us to reach customers in every corner of the country. This strategic shift aligns with our enhanced production capacity. Consequently, our domestic business has witnessed a year-on-year growth of over 35 per cent, which played a major role in our growth during a sluggish global market environment.

The Chemicals Industry faced serious challenges in the export market, owing to economic and political issues on a global scale. Our strategic decision to focus on India as a means of de-risking proved to be fruitful. We believe that consumption in India is poised for rapid growth, and this allowed us to achieve fairly decent results our topline.

Your company has focused on value-added products and experienced increased sales in the domestic market. What specific measures were taken to achieve these results?

We have been mindful about the intense competition from unorganised players with respect to the colour industry. This is especially true in the case of dyes and pigments as a commodities business. At Vipul Organics, we have actively undertaken several research and development projects to upgrade and enhance our value chain. The introduction of our high value products has made us difficult to compete with, and we have created a distinguished name for ourselves.

For instance, with respect to the textile sector, our SunPrint pigment dispersion range offers a high pigment loading, ensuring performance for textile printing application. We have OVER THE YEARS WE HAVE DEVELOPED A ROBUST STRATEGY TO STRENGTHEN OUR DOMESTIC PRESENCE. TODAY, WE HAVE A STRONG NETWORK OF OVER 22 DISTRIBUTORS IN INDIA, WHICH ALLOWS US TO REACH CUSTOMERS IN EVERY CORNER OF THE COUNTRY.

developed pigments with a low filter pressure value for the masterbatches employed in fibre application.

In regards to the paper industry, we have emerged as the second largest supplier of pigments and dyes and our customers comprise of prominent players in the industry.

How would you describe the challenging macroeconomic environment in the export markets? What were the major factors impacting the company's exports?

There were some serious headwinds impacting the export business of Chemicals.

The global economy experienced a significant downturn in this sector, affecting various countries worldwide.

Firstly, The United States witnessed high inflation rates, which resulted in a sluggish uptake of products. This reduced consumer purchasing power and dampened demand for chemical exports.

Secondly, Europe saw the emergence of an energy crisis, leading to critical low consumption levels in the European Union region.

Africa faced a shortage of foreign exchange, resulting in a substantial decline in exports to this region. The lack of currency availability hindered trade and negatively impacted the export business.

Lastly, China, being the largest export market, experienced a prolonged shutdown until February 2023 owing to the COVID-19 pandemic.

Collectively, these challenges exerted considerable pressure on the export business of chemicals.

How are the finished products tested to ensure compliance with quality standards?

At Vipul Organics Limited, we prioritise good quality and service. We are committed to attaining the highest levels of excellence in delivering quality products to all our customers, regardless of whether they are multinational corporations or SMEs. To ensure this, we have established robust application laboratories at all our manufacturing sites.

For the plastics segment, we have a dedicated application lab to test products, which is equipped with machinery imported from Germany. This state-of-the-art equipment includes two roll mills, filter pressure value machine, hydraulic press, injection molding machine, extruders, and more.

In the realm of paint and printing ink, we have a specialised laboratory devoted to testing the pigments used in these applications. Furthermore, we have one of the finest textile labs, which is equipped to test the application of colours, intermediates, and base materials on textiles.

Our organisation places a strong emphasis on manufacturing environmentally compliant products. This commitment has enabled us to obtain globally recognised certifications such as Oeko-Tex, REACH, ISO 9001, ISO 14001, and ISO 45001. These certifications validate our dedication to producing sustainable and high-quality products.

How does Vipul Organics maintain consistency in the quality and performance of its products across different batches? At Vipul Organics Limited, we adhere

DYES AND CHEMICALS



FOR THE PLASTICS SEGMENT, WE HAVE A DEDICATED APPLICATION LAB TO TEST PRODUCTS, WHICH IS EQUIPPED WITH MACHINERY IMPORTED FROM GERMANY. THIS STATE-OF-THE-ART EQUIPMENT INCLUDES TWO ROLL MILLS, FILTER PRESSURE VALUE MACHINE, HYDRAULIC PRESS, INJECTION MOLDING MACHINE, EXTRUDERS, AND MORE.

to stringent quality control measures at every stage of our production process. This enables us to ensure consistency and deliver quality products with superior value to our customers. We operate two research and development (R&D) centres located at our Tarapur and Ambernath plants. These laboratories serve as the driving force behind our ongoing efforts to enhance the performance of our products. Additionally, we are supported by a skilled technical team that brings years of expertise to our organisation. Their insights enable us to constantly upgrade our products and expand our know-how in various applications of our offerings.

How does Vipul Organics Limited prioritise sustainability in its operations? Are there any specific initiatives or practices implemented to minimise the company's environmental footprint? Vipul Organics Limited has established itself as an early adopter of sustainable manufacturing practices across all our locations within our industry. Notably, our Tarapur and Palghar plants boast a Zero Liquid Discharge (ZLD) system, which enables us to recycle and reuse approximately 98 per cent of water. This achievement is particularly noteworthy within a water-intensive industry.

Sustainable operations provide us with a competitive advantage and has garnered recognition from reputable companies that understand and acknowledge the intricacies associated with operating a zero liquid discharge plant. In recognition of our commitment to sustainable manufacturing, we have been awarded the ISO 14001 certificate.

Considering the current market, what are the major opportunities and challenges that you anticipate in the coming years? How does

the company plan to address these challenges and capitalise on the opportunities?

We believe that the current global consumption levels are going to remain slow and it would probably take atleast two more quarters to show recovery. We are going to continue focusing on domestic supply as the Indian chemical Indian market is showing good consumption against other countries.

Further, we will continue increasing our research and development efforts in producing high value products to sustain our revenue and enhance profit margins.

We are also going to focus on sensitive applications such as cosmetics and automobiles and widen our basket of product offerings to cater to the evolving needs of our existing customers.

Are there any new product launches or expansions planned by Vipul Organics Limited in the near future? Can you provide an overview of the company's growth strategy and expansion plans?

We have recently announced a preferential issue amounting to approximately Rs 7.5 crore, wherein the entire capital will be infused by the promoters. The amount obtained will be allocated towards expanding our manufacturing capacity and developing high-performance products.

Additionally, we have acquired more than 5 acres of industrial land in Gujarat, with an aim to plan for further backward integration of our products. This will not only enhance our value chain but also contribute to the realisation of our vision to create an integrated colour complex, wherein we will produce colouring solutions by leveraging our in-house produced basic intermediates. This will position us as a one-of-a-kind colour solution manufacturing company in the world, wherein we add significant value across all our product offerings. ()

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Why will Corrugated Packaging be the Future of the Packaging Industry?

The article talks about why Corrugated Packaging remains a preferred choice amongst several industries and how it will play a pivotal role in shaping the packaging industry's future.

By Gaurav Jalan, Founder, Packman Packaging

orrugated packaging has been there since the 19th century, more than 2 centuries ago. Since then, known with various names, this cardboard box has covered a long journey from being first used as proper packaging for cereal boxes.

Corrugated packaging is surely on a path to becoming the future of the packaging industry due to its numerous advantages and growing demand for sustainable packaging solutions. As businesses and consumers increasingly prioritise environmental consciousness and efficient packaging solutions, corrugated packaging stands out as a frontrunner in meeting these demands.

Sustainability and recycling: One of the important reasons for the rise

of corrugated packaging is its sustainability. It is made from renewable resources such as recycled paper and cardboard. Corrugated packaging is easily recyclable, contributing to a circular economy and reducing waste. With a growing emphasis on reducing environmental impact, the recyclability and sustainability of corrugated packaging make it an attractive choice.

Strength and protection: Corrugated packaging offers exceptional strength and protection for a wide range of products. Its unique structure of fluted layers between flat liner boards provides durability and rigidity. This makes it CORRUGATED PACKAGING PROVIDES AMPLE SPACE FOR BRANDING AND MARKETING MESSAGES. ITS LARGE SURFACE AREA ALLOWS FOR CREATIVE DESIGNS, PRINTING, AND BRANDING OPPORTUNITIES, ENABLING BUSINESSES TO EFFECTIVELY PROMOTE THEIR PRODUCTS AND ENHANCE BRAND VISIBILITY. WITH INCREASING COMPETITION IN THE MARKET, CORRUGATED PACKAGING OFFERS A PLATFORM FOR COMPANIES TO DIFFERENTIATE THEMSELVES AND ATTRACT CONSUMERS.

suitable for protecting fragile items during transportation and handling. Corrugated packaging's ability to withstand external pressures and absorb shocks makes it a reliable choice for ensuring product safety.



Customisability and Versatility: Corrugated packaging can be easily customised to meet specific packaging requirements. It is available in various sizes, shapes, and designs, making it adaptable to different products and industries. From ecommerce to food and beverage, electronics, and more, corrugated packaging offers versatility to cater to diverse packaging needs.

Cost-effectiveness and Efficiency: Corrugated packaging is lightweight, reducing transportation costs and energy consumption during shipping. Its low weight-tovolume ratio allows businesses to optimise their logistics and storage capacities. Moreover, advancements in manufacturing techniques have made corrugated packaging more cost-effective, ensuring its affordability for businesses of all sizes.

Branding and Marketing opportunities: Corrugated packaging provides ample space for branding and marketing messages. Its large

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surface area allows for creative designs, printing, and branding opportunities, enabling businesses to effectively promote their products and enhance brand visibility. With increasing competition in the market, corrugated packaging offers a platform for companies to differentiate themselves and attract consumers.

Innovation and Technology: The corrugated packaging industry continues to innovate and adopt advanced technologies. This includes the development of lightweight yet sturdy materials, efficient manufacturing processes, and digital printing capabilities. These advancements enhance the functionality and visual appeal of corrugated packaging, making it an attractive choice for businesses and consumers alike.

Consumer Preference and Regulations: Consumer preferences are shifting towards sustainable packaging options. People are actively seeking out environmentally friendly choices and supporting brands that align with their values. Additionally, governments and regulatory bodies are implementing stricter regulations on packaging materials, encouraging the use of sustainable alternatives like corrugated packaging.

E-commerce Growth: With the rapid growth of e-commerce, the demand for reliable and efficient packaging solutions has increased. Corrugated packaging is well-suited for the e-commerce sector due to its protective qualities, customisation options, and ease of transportation. As online shopping continues to expand, corrugated packaging is expected to play a significant role in meeting the packaging needs of e-commerce businesses.

Consumer Safety and Hygiene: Corrugated packaging is hygienic and safe for consumer use. It is free from chemicals that may pose health risks, ensuring the safety of packaged products. Moreover, corrugated packaging can be easily sealed to maintain product freshness and preTHE CORRUGATED PACKAGING INDUSTRY CONTINUES TO INNOVATE AND ADOPT ADVANCED TECHNOLOGIES. THIS INCLUDES THE DEVELOPMENT OF LIGHTWEIGHT YET STURDY MATERIALS, EFFICIENT MANUFACTURING PROCESSES, AND DIGITAL PRINTING CAPABILITIES. THESE ADVANCEMENTS ENHANCE THE FUNCTIONALITY AND VISUAL APPEAL OF CORRUGATED PACKAGING, MAKING IT AN ATTRACTIVE CHOICE FOR BUSINESSES AND CONSUMERS ALIKE.

vent contamination, making it suitable for food, pharmaceuticals, and other sensitive items.

Waste Reduction and Circular Economy: Corrugated packaging aligns with the principles of the circular economy by promoting recycling and waste reduction. The recyclability and recoverability of corrugated packaging materials contribute to a sustainable supply chain. Manufacturers are increasingly using recycled content in corrugated packaging, reducing the demand for virgin materials, and minimising environmental impact.

Supply Chain Efficiency: Corrugated packaging offers advantages in the supply chain, including efficient storage, easy handling, and optimised stacking capabilities. Its flatpack nature allows for space-saving during storage and transportation. The lightweight characteristics of corrugated packaging also help reduce fuel consumption and carbon emissions in logistics operations.

Innovation in Design: Corrugated packaging continues to evolve with innovative design features that enhance functionality and user experience. This includes easy-open features, tamper-evident closures, interlocking systems, and integrated handles. These design innovations improve convenience for endusers and provide added value to businesses.

International level trade and shipping: Corrugated packaging's

compatibility with international shipping standards makes it a preferred choice for global trade. It meets the requirements of shipping regulations and ensures product integrity during long-distance transportation. The strength and durability of corrugated packaging make it well-suited for protecting goods across different climates and handling conditions.

Collaboration with other sectors: Corrugated packaging is not limited to traditional packaging applications. It has found innovative uses in sectors such as construction, furniture, and automotive industries. Collaborations between packaging manufacturers and these industries have led to the development of specialised corrugated products that offer structural strength, insulation, and sustainable alternatives to traditional materials.

In short, the future of the packaging industry depends on corrugated packaging because of its sustainability, strength, versatility, cost-effectiveness, and branding opportunities. As businesses and consumers continue to prioritise environmental consciousness, corrugated packaging emerges as a leading solution that combines functionality, aesthetics, and sustainability. With ongoing innovation and technological advancements, corrugated packaging will play a pivotal role in shaping the future of the packaging industry. 🕑







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COVER STORY

"Remodelled Supply Chain contributed to our Growth Story in FY23"

In a candid conversation, Dilip Piramal, Chairman of the world's second-largest luggage company – VIP Industries, talks to Rahul Kamat about how leveraging some of the sectoral tailwinds, amplified by - internal operational efficiencies, strong brand activations, attractive designs and strong customer communications, helped the company to witness an all-rounded growth across brands, segments and channels.

Post two challenging years owing to Covid-led disruptions, VIP recorded healthy sales in FY23 with revenues crossing Rs 2,000 crore mark for the first time. What factors contributed to this growth in sales?

There are a few factors that contributed to our overall growth story. To begin with, fundamental demand came back very strong post Covid, it was not a pent-up one-time demand but seemingly more fundamental; people possibly have started valuing travel more and have increased frequency than before. That said, key demand indicators remained consistently high throughout the year and fueled growth. Airline passenger traffic through the year increased to come back to pre-pandemic levels. Hotel occupancy levels recorded the highest level and have remained consistently high throughout the year.

In addition to the overall consumption growth of the industry, there was a sharp shift from the unorganised sector to the organised. Almost half of the luggage industry was expected to be a part of an unorganised sector but it has been yielding to the organised sector gradually over the VIP INDUSTRIES HAS BEEN ONE OF THE EARLY IMPLEMENTERS OF THE CHINA PLUS 1 STRATEGY— EVEN BEFORE THE PANDEMIC.

years. The shift accelerated with GST implementation and further during the pandemic, there was a complete breakdown of the supply chain of the unorganised sector. This was also a key factor adding to the tailwind and is expected to continue, though with lower intensity in the forthcoming years.

We, in fact, leveraged these sectoral tailwinds, amplified by internal operational efficiencies achieved by increasing upstream control, strong brand activations, attractive designs and strong customer communications. We witnessed an all-rounded growth across brands, segments and channels.

Is demand on the ground strong enough?

The growth in the value segment not only resulted in a high growth rate overall but also helped in gaining market share. This was backed with a hard luggage strategy based on poly-propylene-made moulded luggage and significant investment in ramping up own manufacturing that led to competitively superior cost efficiencies.

What's more? Cutting-edge innovations in Skybags and VIP brand – tech-enabled, FIFA cobranded and several such themed innovations caught the eye of the consumers. Further, aggressive investment in brand advertisements and activations added to the growth impetus. In addition, our international business also saw a significant shift with the doubling of our revenues in FY 23 compared to pre Covid.

During our previous conversation, we engaged In a discussion concerning your reliance on China for sourcing a significant portion of your luggage. It is interesting to see a gradual reduction of this



COVER STORY



on the significant transition of reducing dependence on China? Our impressive growth story during the year was on the back of a completely remodelled supply chain. During our initial conversation, I always talked about how VIP Industries has been one of the early implementers of the China Plus 1 strategy — even before the pandemic. One of the important decisions that we have taken to see beyond the China Plus 1 strategy was starting our Bangladesh operations in 2013. In fact, we have expanded it exponentially post-pandemic. In the two years post the pandemic outbreak and lockdowns, (FY22 and FY 23) we have scaled up production more than 2.5 times. Today, with a workforce of approx. 6,000. and ~800,000 sqft spread over 8 factories, VIP Bangladesh is one of the single largest multi-category bag-producing facilities in the world. 70 per cent of our revenue is manufactured inhouse between India and Bangladesh. Due to this strategy, that we adopted earlier, our China dependency is down to only 7 per cent compared to ~ 50 per cent pre-pandemic.

Meanwhile, a major fire incident happened at your Bangladesh factory which contributes nearly 10 per cent of consolidated revenue. How is the factory now getting back in shape?

It was disheartening! The fire incident was at one of the eight factories in Bangladesh. However, the Bangladesh factory had full insurance coverage. While the operations completely ceased at this facility – we quickly covered the supplies with outsourcing stopgaps and accelerated activation of pipeline capacities that were earmarked for coming months.

In addition to the pandemic, there was also the Future Group episode that occurred, significantly impacting a substantial portion of your sales and potentially affecting revenue. Considering VIP's these circumstances, have you successfully overcome the hump? Initially, the Future Group alone contributed to around ~ 15 per cent of our revenues. The sudden closure of ~ 450 stores across the Future Group banner posed a huge challenge for us at the beginning of FY 23. Our teams were quick to recalibrate and found alternatives to catch the demand in the catchment areas of these stores through other Moder Trade (MT) chain stores, EBO's and MBO's along with promotional fests (kiosks) within malls. We were successful in tapping into the demand quickly through the alternatives and the MT channel grew by 60 per cent against the odds over the pre-pandemic base. Now with most of the erstwhile Future Group stores functional under the Reliance banner and doing well, we have emerged stronger from the setback.

Is it true that VIP Industries, as a part of its strategy, is focusing on the mass category, a sector in which Safari has been slowly gaining

COVER STORY

market share. Additionally, do you contemplate venturing into new markets or proactively engaging with customers who express a desire to minimise reliance on China, thereby expanding your export basket significantly?

The value segment, as mentioned before, was a strategic focus and a major growth driver for volumes as well as share gain for the year. The segment had accentuated tail wind and VIP's play in the segment pre-pandemic was not to its full potential. Unorganised players - mainly operating in the value segment - have been yielding to branded players since even before the pandemic, which was a major tailwind for the organised sector. Our competitive PP strategy play was aimed at tapping this growing market. It is visible in our value brand growth of over 75 per cent compared to pre-pandemic and its salience going up to 38 per cent compared to 25 per cent prepandemic.

Also, the international business reported significant growth this year with the highest-ever revenue and over double its pre-pandemic portfolio. The bottom line is our growth this year was driven by deeper penetration in existing geographies. In the coming year as well, we will focus on deepening our presence in existing highpotential markets. Beyond that, from FY25 onwards we may look to expand in US and European markets. Having said that, our focus to expand international business would be more from a branded point of view and not white-label manufacturing.

How do you view the trend where consumers are opting for lower-price or budget brands like Aristocrat and Sky Bags? Is it somewhere hampering VIP Industries?

The branded luggage sector in

India is still in its early stages of penetration, a major growth driver is new consumers and therefore the higher demand for the lowpriced value segment. To maintain its dominance in the sector, it is critical for VIP Industries to be the choice of brand for value-seeking consumers. The brand 'Aristocrat' plays the leading role in tapping into this opportunity. At the same time, we see a good demand for the mass premium and premium segment ahead. Our power brands - VIP, Skybags and Carlton, play a pivotal role in tapping into this demand. We are seeing consistent growth across our brands catering to both

premium and value customers. In fact, our premium brand – Carlton – reported the highest growth across brands this year. Even other industries be it cars, phones or even household items have been reporting rapid pick up in the premiumsegment demand.

Give us some insight on demand for domestic and international travel. Because I feel there's outsized demand for both?

You are right. There is a growing demand for both domestic and international travel. ICRA has predicted growth of 8 - 13 per cent for domestic air passenger traffic in

THE VALUE SEGMENT WAS A STRATEGIC FOCUS AND A MAJOR GROWTH DRIVER FOR VOLUMES AS WELL AS SHARE GAIN FOR THE YEAR.



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FY24 (145-150 million) surpassing pre-Covid levels in FY24. International passenger traffic is expected to surpass pre-Covid levels in FY23 itself and then exceed its peak traffic level, which it touched in FY19. That said, Global aviation company Boeing forecasts India's long-term passenger growth rate of nearly 7 per cent annually over the next 20 years. In fact, travel booking websites are reporting an upward trend in bookings this summer (domestic and international) despite airfares being 60 -70 per cent higher than prepandemic levels. A research report by travel search engine Kayak points to a sharp uptick in summer travel searches in India. As outbound travel from China has ebbed - airline and hotel companies around the globe are tempting Indians to travel and stay abroad with discounts and buy-oneget-one-free deals. While railway traffic recovery is slow - Bus travel has seen growth at an unusually rapid pace in India post-Covid as per InterCity cofounder. SmartBus

Considering all these data points, we expect the luggage sector as a whole to grow in the range of 10-11 per cent and within that branded segment to grow 15 per cent+.

What are yourexpansion plans in terms of store expansions and domestic manufacturing. Also, can you give us an insight as to what impact this will have on your top line?

As far as our store portfolio is concerned, we exited FY23 with a



store portfolio of 500 stores. For the year FY24, we aim to add another 300 to take our portfolio to ~800 stores. With respect to adding manufacturing capacities – we spent Rs 100 crores in FY23 and would further invest Rs 200 crores in FY24 to create capacities for the next three years. We forecast peak revenue potential of this capex would be around Rs 3,200 to 3,500 crore. That said, our expansion would be in the form of greenfield as well as brownfield in India as well as existing SEZ locations in Bangladesh.

Currently, our capacities are running at almost 100 per cent and we have pegged our capacity additions in the future to have a utilisation of ~80 per cent. We conduct a bi-annual exercise called LTCP - Long term capacity planning - wherein we continuously monitor demand for a rolling three-year period. Based on demand, we evaluate which part of the country and what categories is the output of this exercise was undertaken. Our capacity expansion is planned on the basis this output at the most optimised location.

Your competitors including American Tourister, Samsonite, and Safari have exhibited substantial growth rates. On the other hand, VIP's market share has experienced a slight decline, currently standing at approximately 47 percent. In light of this, do you anticipate VIP reclaiming a market share exceeding 50 percent in the upcoming year? Furthermore, could you outline the strategies that will be employed to achieve this objective?

VIP enjoys leadership positions across key physical distribution channels. E-commerce is a segment where we have a competitive gap. To tackle this, we have engaged BCG, one of the best consulting firms in the field, to build for us the right capabilities and muscles in an accelerated way for the future. The final objective is to strengthen our share in E-commerce and improve our overall market share. But it is premature to put a number at this stage. (2)

The Phoenix Effect: How India is Transforming Plastic Waste into Environmental Resurgence

The article outlines how several innovations are across the realm of plastic waste, leading to ingenious approaches to harness its latent value and pave the road for a resilient and sustainable environment.

By Pankaj Poddar, Group CEO, Cosmo First Ltd.

lastic, an inseparable companion in our daily lives, has interwoven itself into the very essence of our existence. Its ubiquitous presence empowers us, enhancing our routines' ease, safety, and convenience. Within the confines of our kitchens, plastic containers dutifully guard and preserve our nourishment, while humble plastic utensils gracefully simplify our culinary endeavours. During transit, the protective embrace of plastic packaging ensures the unvielding freshness and resilience of goods, extending their lifespan. In the realm of healthcare, plastic stands as an unwavering sentinel, fortifying sterile medical equipment, life-saving devices, and the shielding armour of protective gear. It stretches far beyond, seamlessly integrating into our wardrobes, adorning our feet, empowering our electronics, and even breathing life into automotive components.

Its chameleon-like versatility, durability, and gift of affordability have propelled industries forward, catapulting us into the realm of technological marvels. While our commitment to addressing the challenges of plastic waste remains undeterred, let us acknowledge the undeniable truth that a world devoid of these polymer marvels seems unfathomable, for they have become indispensable in our daily lives.

India's journey toward conquering the plastic waste conundrum has garnered well-deserved praise, yet formidable challenges persist. The limitations of infrastructure, coupled with a lack of widespread awareness among the public, and the inefficiencies of existing waste management systems, have hampered our progress. Moreover, the economic viability of recycling technologies adds another layer of complexity to the equation. However, in the face of adversity, the clarion call for solutions and strategies becomes even more imperative. Embracing the vision of a sustainable future demands the establishment of resilient waste management systems, characterised by the seamless integration of effective collection, meticulous segregation, and innovative recycling mechanisms.

According to research conducted by the Indian Institute of Science & Praxis Global Alliance for India, 10 per cent of plastic is being recycled globally vs 30 per cent in India. As we draw the curtain on the complex



landscape of plastic waste in India, the statistics unveil a pressing reality: plastic constitutes a minimum portion, ranging from 4 per cent to 7 per cent, of the vast expanse of landfill waste; of which only a mere 1 per cent remains in the landfills after navigating the journey of collection and recycling. To catalyse further change, we must embark on a spirited campaign to educate and enlighten the masses, with a focus on the significance of responsible plastic consumption and the power of recycling. By resolutely confronting these challenges head-on, India will not only triumph over its plastic waste predicament but will also forge a path toward a greener, cleaner, and infinitely brighter tomorrow.

A wave of innovation is sweeping across the realm of plastic waste, birthing ingenious approaches to harness its latent value. Among these, waste-to-energy plants have emerged as a beacon of hope, illuminating the path toward a sustainable future. These cuttingedge facilities possess the remarkable ability to transmute plastic waste into a coveted resource: energy. By embracing this revolutionary solution, we not only diminish our reliance on fossil fuels but also curtail the perils of environmental degradation. India proudly showcases numerous successful waste-to-energy projects that stand as testaments to the boundless potential of this technology. In tandem with wasteto-energy plants, the exploration of advanced recycling technologies ushers a new era of possibility. Pyrolysis and chemical recycling, at the vanguard of this movement, unlock the mind-blowing power to convert plastic waste into invaluable fuel or raw materials. These ingenious processes lay the foundation for a circular economy, where the cycle of plastic consumption and disposal is perpetually revitalised; indicating our commitment to a future where plastic waste ceases to be a burden but instead becomes an element for progress.

In the process of innovation, an authoritative plastic institution takes centre-stage, setting up a revolution that defies boundaries. Fuelling this transformation is the infusion of specialised plastic engineering courses within Indian educational institutes, fusing knowledge, and imagination. With a research-led ethos, we nurture a cadre of visionary talents, poised to redefine the plastic industry with their boundless creativity and expertise. This dynamic fusion of academia and industry births an ecosystem that can propel India to the vanguard of pioneering advancements. These possibilities can harmonise the medley of progress and (re)imagination of plastic in our dynamic world.

In a triumphant convergence of government bodies, civil society, and industry stakeholders, a formidable alliance emerges to combat India's plastic waste challenge and foster sustainable plastic disposal practices. This dynamic collaboration harnesses a symphony of collective wisdom, abundant resources, and far-reaching influence, forging an uncharted path toward lasting solutions. As the fulcrum of change, the government assumes a pivotal role by enacting and rigorously enforcing legislation that instils responsibility in plastic production, usage, and disposal. On the frontlines, civil societies orchestrate a harmonious blend of grassroots activism, captivating

public awareness campaigns, and community outreach, igniting a passionate movement for ecoconscious practices. Industry leaders, armed with their visionary prowess, venture into uncharted territories, embracing sustainable manufacturing processes, pushing the boundaries of research and development to unveil ingenious eco-friendly alternatives, and actively fortifying the infrastructure for recycling and waste management. United in purpose, India's journey towards a verdant future takes flight, countering the perils of plastic waste that imperil both the environment and human well-being. By spearheading this tripartite collaboration, India holds a great opportunity to script an unparalleled narrative and lead the charge in reframing the plastic waste crisis into a catalyst for innovation, economic growth, and environmental stewardship.

The intricate puzzle of Extended Producer Responsibility (EPR) programs reveals a kaleidoscope of challenges such as non-uniformity of policies and regulations across countries which creates a fractured landscape for multinational companies seeking standardised approaches. The legal framework adds another layer of complexity, with its limited reach weakening the enforcement of EPR and allowing non-compliance to persist. Amidst this labyrinth, resistance from industry stakeholders cast shadows on the potential benefits, obscuring the path to progress. The interplay of awareness, stakeholder engagement, and the intricate web of global supply chains, weaves further barriers, while the quest for financial sustainability struggles against the shackles of inadequate funding mechanisms. The absence of robust monitoring and evaluation systems further obscures the impact and obstructs the path to improvement. Only through resolute leadership, collective collaboration, and determined action we can construct a harmonised

global framework for EPR that transcends these challenges and ushers in a new era of responsibility and sustainability.

In the realm of possibilities, the government conducts vital symphony, nurturing the plastic industry and orchestrating collaborative efforts against plastic waste. To embark on this transformative journey, innovative measures must be unveiled. Reshaping negative perceptions of polymers and conversion of oil into high-quality polymers are key. Enticing global polymer universities, attracting foreign direct investment, and incentivising the creation of exquisite plastic goods fuel industry growth. It is crucial for the government to embrace the responsibility of waste collection and cleaning, ensuring a well-organised and efficient management system for plastic waste.

India is on the cusp of transformation, and we can change waste plastic into priceless resources. We can give life to a vision of a greener and more prosperous future by adopting sustainable practices, making significant investments in robust recycling infrastructure, and encouraging fruitful collaborations. Let's invoke the Phoenix Effect, a beautiful transition in which plastic trash transforms into a positive force, rising gloriously from the ashes like the mythological Phoenix. We can rewrite the narrative of "plastic waste" by working together to unlock its hidden potential to stimulate innovation, generate employment, and pave the road for a resilient and sustainable environment. Let our actions, as we set out on this transforming path, echo with unflinching resolve and optimism, blazing a legacy that succeeding generations will be proud of and treasure. Together, we can unleash the tremendous power of the Phoenix Effect, reversing the tide of plastic waste, and shaping a future in which economic growth and environmental ministration coexist together. ()

"In the future, I see governments implementing strict regulations regarding plastic waste"

In today's scenario, effective plastic management is not just a responsibility, but an opportunity to build a safe future. Realising the potential that safe recycling holds, Dhanish Goyal, Founder and CEO, SD Polymers gave an insight into innovative emerging technologies, issues with regards to value-creation and government initiatives to create a circular economy in an interview with Dipika Lalwani.

Could you provide an overview of SD Polymers' recycling practices and initiatives?

SDPPL has been a major player in the manufacturing of polymer compounds for the past 43 years. Over the past decade, we have been working to minimise plastic waste and have established polymer recycling units in Saudi Arabia, Malaysia, Latin America, and India. Additionally, we hace created a dedicated recycling concept for recycling plastic waste generated from car dismantling units in Sharjah, UAE, at Beea'h (a state-owned company of the Sharjah government).

To promote awareness and inspire action across diverse segments of society, we have undertaken several initiatives. For instance, we have engaged with school students by creating chairs from plastic bottle caps collected from their own consumption. Furthermore, we have repurposed waste plastic into exam boards, automobile waste into benches for school students, plastic bags into slogan and sign boards, and MLPs and single-use plastics into dustbins, among other initiatives.

Can you share any specific examples of innovative recycling technologies implemented by SD Polymers?

Plastic waste poses a persistent challenge due to the difficulty in accurately identifying the specific



polymer type from which it originates. Failing to identify the polymer type results in the mixing of plastic waste, reducing its value and leading to the disposal of polymer waste in landfills or incinerators. At SDPPL, we employ cutting-edge technology to accurately determine the type of polymer content in waste. Additionally, we deploy the latest sorting technology, which separates mixed waste on the basis of polymer type; as well as on the basis of colour. Further, SDPPL has developed a sand abrasion technology that removes dirt from polymer waste without the use of water. By implementing our latest extruders, we ensure zero emission of harmful gases, thus contributing to the preservation of a healthy environment.

What measures have you taken to promote awareness about plastic recycling among your employees and the wider community?

Creating awareness is one of our main agenda items. We regularly inform

SPOTLIGHT

our employees about the importance of waste segregation, waste disposal, and creative developments from the collected waste.

At the community level we have various awareness programme such as "Dhakkan se Jaddoo" which focuses on educating young children about the importance of correctly disposing of plastic waste at home and school, by demonstrating chairs made from used plastic bottle caps.

"Pariksha ki Bottel" where we are creating awareness among students for their responsibility for proper disposal of plastic waste by demonstrating exam boards made by recycling plastic cold drink bottles.

Additionally, through our program "Swach Bharat Vichar," we create awareness among adults and senior citizens about plastic recycling. We showcase motivating thoughts printed on boards made from waste plastic, encouraging individuals to actively participate in recycling efforts.

Furthermore, we continuously strive to develop innovative awareness programs tailored to rural areas, government organisations, and other stakeholders in society.

There is substantial value-creation potential in transforming plastic waste and using technologies to make new plastics or other chemicals. However, the investments needed to translate this potential into reality have been relatively small. What, according to you, are the major factors that prevent manufacturers and companies from proactively recycling their plastic waste?

The recognition of the significance of these transformations is a major factor which. It is necessary for the industry to acknowledge the necessity of embracing highly efficient technologies to extract value from waste materials. Moreover, the failure to grasp the advantages stemming from such value creation and a lack of creativity in developing practical

AT SDPPL, WE EMPLOY CUTTING-EDGE TECHNOLOGY TO ACCURATELY DETERMINE THE TYPE OF POLYMER CONTENT IN WASTE. ADDITIONALLY, WE DEPLOY THE LATEST SORTING TECHNOLOGY, WHICH SEPARATES MIXED WASTE ON THE BASIS OF POLYMER TYPE; AS WELL AS ON THE BASIS OF COLOUR.

products from waste act as additional reasons hindering the profitability of the waste-to-value business model.

Could you give an insight into effective initiatives by governments worldwide to incentivize recycling practices? How would you describe the current level of uncertainty surrounding future regulations, such as CO2 taxation?

Governments worldwide are implementing stringent legislation to combat plastic waste generation and introducing various incentive programs to promote plastic recycling.

In Brazil, the government has launched a recycling initiative that specifically benefits individuals from lower-income communities. Under this programme, people are provided with tokens when they deliver their waste to recycling centres. These tokens can be exchanged for transportation or food, thereby generating income for the lower sections of society while simultaneously contributing to environmental cleanliness.

Vancouver places significant importance on recycling, evident in the ban on food scraps in standard waste bins. Instead, it is mandatory to dispose of such waste in designated green compost bins. This measure benefits the country by reducing carbon dioxide emissions associated with proper food waste disposal compared to landfill disposal.

San Francisco has implemented a comprehensive recycling scheme consisting of three categories: compost, recycling, and landfill. Compost includes food scraps, paper, and garden trimmings, while the recycling category encompasses paper, cards, glass, aluminium, hard plastics, and plastic bags. The landfill category contains minimal waste items, such as broken glass, cat litter, and ceramics. The state aims to completely eliminate the use of landfills by 2030.

Furthermore, numerous recycling credit schemes exist worldwide, focusing on reducing plastic waste through organised recycling channels.

Governments are actively striving to reward individuals who contribute to environmental cleanliness and penalise those who contribute to pollution. In the future, I see governments implementing strict regulations regarding plastic waste. Additional regulations, such as CO2 taxation, which imposes penalties on businesses for excessive greenhouse gas emissions per tonne, will be supported by policies like Extended Producer Responsibility (EPR). These measures will become more stringent and encourage recyclers to engage in ground collection and recycling of plastic waste, thanks to higher incentive programs for recyclers.

SD polymers have seen significant expansion in Asia over the years. Could you elaborate on your further expansion plans in the future? And how do you tailor your approach to the recycling needs of different plastics and regional waste management systems?

At SDPPL, we have established a presence in multiple countries, including Malaysia, Saudi Arabia, the UAE, Oman, and India. Our combined production capacity for polymer compounds and recycled products currently stands at 19 KT/month. Additionally, we have recently introduced a state-of-the-art plastic waste recycling unit capable of processing 1250 MT/day or 31.25 KT/month.

Furthermore, we are in the process of expanding our plastic recycling capabilities in Latin America, specifically in Guatemala, where we will have a new capacity of 40 KT. By the end of 2025, our plastic recycling facility in India is projected to reach an annual capacity exceeding 1.5 million MT.

Our approach revolves around a thorough understanding of the local population's consumption patterns, waste disposal practices, government waste collection infrastructure, and the market for recycled products in each region. Taking all these factors into account, we customise our waste management system to ensure optimal use of resources throughout the product life cycle and value chain, from product purchase to reuse. Can you share your perspective on the current fragmentation of value chain partners in the plastics industry and how it is impacting the development of a circular economy? What steps do you believe should be taken to overcome the barriers and encourage dialogue among valuechain partners?

There is a significant lack of coordination among the different partners within the plastic industry's value chain. This lack of coordination has led to inefficiencies in manufacturing processes, resulting in increased costs, reduced output, and delayed adoption of technology.

To address these issues, it is crucial to establish an integrated system that facilitates effective communication among value chain partners. This system should enable partners to collaborate on identifying their specific requirements, implementing cost reduction strategies, fostering innovation in product development, and leveraging available resources synergistically. Emphasising the use of technology-enabled resource management is essential for the longterm sustainability and viability of the industry.

From your perspective, what approaches can be adopted to achieve higher-value-creating outcomes in the circular economy for plastics?

Our unwavering commitment to a brighter future, capacity to develop innovative products, aspiration to build profitable enterprises, and our conviction in leveraging technology within the polymer industry are key factors that can contribute to achieving superior value creation in the circular economy for plastics. To attain this, it is vital to adopt new working methods that concentrate on core competencies while optimising production resources. This approach guarantees the efficient use of all available resources, resulting in the creation of maximum value within the circular economy for plastics. (?)

UPDATE

AGI Greenpac posts Q4FY23 revenue from operations of Rs 680 crore

GI Greenpac Limited, a focused 🗥 Packaging Products company in India, recently announced its financial results for the fourth quarter and year ending March 31, 2023. In Q4 FY23, the company delivered a strong performance and reported revenue from operations of Rs 680 crore, compared to Rs 432 crore in Q4FY22, registering a robust growth of 58 per cent on a Y-o-Y basis. The company delivered EBITDA of Rs 196 crore, registering a growth of 111 per cent on a Y-o-Y basis with a margin of 29 per cent. Net profit of continued operation stood at Rs 96 crore, registering a growth of 152 per cent on a Y-o-Y basis with margins of 14 per cent.

In FY23, the company delivered a robust performance and reported revenue from operations of Rs 2,281 crore, compared to Rs 1,430 crore in FY22, registering a strong growth of 60 per cent on a Y-o-Y basis. The company delivered EBITDA of Rs 488 crore, registering a growth of 59 per cent on a Y-o-Y basis with a margin of 21 per cent. Net Profit stood at Rs 249 crore, registering a growth of 114 per cent on a Y-o-Y basis with margins of 11 per cent.

The sales and profitability improved on a Y-o-Y and Q-o-Q basis an improved product mix, and an increase in demand for the non-alcoholic and alcoholic beverages and packed food segment for the glass containers products.

Commenting on the results, Sandip Somany, Chairman and Managing Director, AGI Greenpac Limited said, "Rise in demand for the glass packaging containers from both the non-alcoholic and alcoholic beverage segments and our integrated business model and premium products helped us in delivering sustainable growth for the year."

He further added, "AGI Greenpac is a supply chain partner to various consumer brands, including pharmaceuticals, food, non-alcoholic and alcoholic beverages, cosmetics, perfumery and is focused on creating value for all partners."

Everything you should know about the 5 E's Skill Building Model

A look at how "5 E's" Skill Building Model is revolutionising manufacturing in India

By Rony Banerjee, Advisor, EY

he "5 E's" Skill Building Model is a framework that focuses on Empowerment, Entrepreneurship, Employment, Education, and Excellence to develop and enhance skills among enterprises.

The first 'E' of the model deals with **Empowerment.** It involves providing individuals with the authorisation and delegation to take ownership of their skills, whereas **Entrepreneurship** highlights the importance of venture and commercialisation of skills.

Employment focuses on gaining occupation, profession, work, engagement, and service experience, and **Education** involves learning and knowledge acquisition at formal and informal interfaces. **Excellence**



underlines the distinction and eminence of unique skill sets that set the benchmark for performance and continuous improvement. By focusing on these five elements, manufacturers can create a culture of constant learning and development while enabling workforces to reach their full potential and contribute to its success. The "5 E's" Skill Building Model is a comprehensive approach

Model is a comprehensive approach to holistic skill development that integrates collaboration at its highest helm. Each instance brings a unique perspective and set of skills to the table and seeks to leverage these strengths for the organisation's benefit and individual growth.

The 5 E's model offers a comprehensive framework that enterprises can use to enhance their skills and stay ahead of the curve. Its dynamic nature ensures that it can be adapted to the changing needs of the business environment, making it a valuable tool for any business seeking



One of the research-intensive design thinking approaches is deliberated here:

An Illustrative Design Thinking Approach for a 5 E Skill Building Model

Step 1:

Identify key challenges faced with reference to collaboration, sustainability, innovation, credit score, and collateral.

Step 2:

Understand the needs, behaviours, and motivations of the concerned stakeholders and gather feedback from employees, customers, and partners.

Step 3:

Brainstorm ideas around

- How might we increase collaboration with partners?
- What are some ways to reduce our carbon footprint?
- How can we foster a culture of innovation within our organisation?
- What steps can we take to improve our credit score?
- How can we increase the value and quality of our collateral?

Step 4:

- Develop prototypes like A partnership dashboard that tracks the collaboration index, number of partnerships/alliances, joint venture success rate, co-authorship rate, network centrality index, shared resources ratio, etc.
- A sustainability scorecard that measures carbon footprint, energy consumption, water consumption, waste generation, recycling rate, eco-efficiency ratio, environmental management system certification rate, etc.
- An innovation framework that includes research and development expenditure, number of patents, new product development rate, innovation index, technology adoption rate, commercialisation success rate, etc.
- A credit score dashboard that measures credit score index, credit utilisation rate, payment history, credit mix, new credit accounts, credit inquiries, credit report accuracy, etc.
- A collateral assessment tool that evaluates collateral value, collateral coverage ratio, collateral quality index, collateral risk rating, collateral liquidation rate, etc.

Step 5:

- Iterate on the solutions based on the prototypes.
- Innovate new solutions that meet the needs with the 5 E's Skill Building Model.



sustainable growth and success.

For applying this model, businesses can use an illustrative Design Thinking approach, which involves identifying the crucial challenges faced with reference to collaboration, sustainability, innovation, credit score, and collateral. Companies can understand the needs, behaviours, and motivations of the stakeholders and gather feedback from employees, customers, and partners. They can brainstorm ideas around increasing collaboration with partners, reducing their carbon footprint, fostering a culture of innovation within their organisation, improving their credit score, and increasing the value and quality of their collateral. Finally, businesses can iterate on solutions based on prototypes and innovate new solutions that meet the needs of the "5 E's" Skill Building Model.

The 5 E's Model has been implemented successfully in various industries, including manufacturing, where it has revolutionised the way skills are developed and utilised. By focusing on the five elements of **Empowerment, Entrepreneurship, Employment, Education, and Excellence,** the manufacturing industry has created a culture of continuous learning and development, enabling the workforce to reach their full potential and contribute to organisational success.

The manufacturing industry is a critical sector for economic growth in India, contributing significantly to the GDP and providing employment opportunities to millions of people. However, the industry faces several challenges, including increasing competition, changing consumer preferences, and the need to adopt new technologies quickly.

The Design Thinking approach provides a practical way to implement the 5 E's Model by identifying key challenges and developing prototypes that meet the needs of the stakeholders. By adopting the 5 E's Model and the Design Thinking approach, businesses in the manufacturing industry can stay competitive, adapt to the changing business environment, and achieve sustainable growth and success. ()

PRODUCTS

igus to invest Rs 100 crore to strengthen operations in India

gus has announced the setup of a new facility at Bengaluru in India to further strengthen and grow its successful operations in the country for over two decades, since it established as a subsidiary in 2000. igus India, a subsidiary of the German motion plastics company igus GmbH, announced that the company plans to invest Rs 100 crore to increase the availability of items and establish value adding processes at its new plant. igus India has taken up a new four-acre facility in Bengaluru, which will be spread over 84,000 sq. ft. with world-class equipment and infrastructure in motion plastic production. igus has already invested around Rs 15 crore in the first phase of construction of the facility, which is expected to be operational in the coming months.

igus India currently is the 6th largest among 38 subsidiaries and the company's growth plans in the country has gained momentum after doubling its growth in the market in the last two years. igus India revenues have grown from Rs 118 crore in 2020 - 21 to Rs 199 crore in 2021-22 and to Rs 284 crore in 2022-23.

igus India's growth plan is coupled with a continued quest for innovation within the space that igus is globally recognised for. The company launched 190 new products in 2023 for the India market and several digital



services and solutions under its global program, "Enjoyneering", advocating fun with innovation in engineering. "Enjoyneering" aims to make an engineer's job fun, helping them unleash their engineering power with innovation for better productivity and success at work.

Deepak Paul, Managing Director, igus (India) elaborated, "Igus has a global focus on costsensitive and sustainable solutions, designed to meet customer demands, in line with our motto 'Tech up, cost down', which is also the Indian approach to technology and innovation, a key factor that has led to our significant growth in the country. With the economy looking buoyant and with our continued commitment to invest in growth,

we are looking to further double our current revenues in a shorter span of the next 3-4 years."

Moreno Stephen Simpson, International Group Development, Igus GmbH said, "We have initiated 'Chainge', a recycling program, wherein customers can send their discarded energy chains to igus for recycling, irrespective of the company they purchased from, and this will be recycled responsibly. The igus-bike is the world's first robust and durable fully designed bicycle using recycled plastic. 'Reguse' is another initiative we run, that turns electrical devices into functional devices. Besides, we have our tree planting projects, wherein we have planted over 9,000 trees in India and over 30,300 trees globally."

Saint-Gobain Glass launches the production of India's first low carbon glass

Addressing the need for low carbon building materials in the Indian Construction Industry, Saint-Gobain India launches the first production of a new glass with a low carbon footprint. The product should have an estimated carbon footprint reduction of approximately 40 per cent compared to the existing Saint-Gobain Glass India products.

Such environmental performances could be reached thanks to the use of 2/3rd of recycled content as raw material, natural gas, and electricity from renewable energy sources.

Production parameters will be recorded and used to obtain a verified EPD that should be published later this year, confirming the significant carbon footprint reduction. This achievement of Saint-Gobain is the culmination of a substantial R&D effort, the excellence of its industrial teams, and the persistent continuous efforts of achieving the Group's ambition of Net Zero by 2050.

This low carbon glass will retain

PRODUCTS

all the technical, quality, and aesthetic performance of regular glass and will soon be integrated as a substrate option in the energy-efficient glass portfolio of Saint-Gobain Glass. This new low carbon substrate in Saint-Gobain Glass India will give a boost to the embodied carbon reduction of buildings alongside the operational energy efficiency performance.

The building industry currently accounts for almost 40 per cent of global greenhouse gas emissions and is at the heart of the decarbonisation challenge. As stated in the joint study conducted by Engineering consulting firm Arup and Saint-Gobain Glass in 2022 on facades, it is key to act jointly on both reducing operational and embodied carbon. Saint-Gobain Glass advanced Magnetron coating technology can drastically reduce greenhouse gas emissions caused by artificial cooling



and lighting for buildings during the use phase (operational carbon footprint).

By associating energy efficiency performance together with lower embodied carbon in glass, one can contribute to a significant reduction in the whole-life carbon footprint of buildings, while continuing to provide the essential benefits of natural light, solar and thermal comfort for the occupants.

Commenting on this production launch in India, A R Unnikrishnan,

Managing Director, Saint-Gobain India Glass Business said, "It is not a coincidence that the production launch of India's first low carbon glass is taking place on World Environment Day". It is a concerted effort from Saint-Gobain to continue to sustainably contribute to the Indian Construction Industry. The building materials of the future need to

be low carbon to achieve India's commitment as a country towards Net Zero by 2070. This product from Saint-Gobain will accelerate this vision and will actively contribute to Light and Sustainable Construction. In line with our purpose of Making the World a Better Home and achieving our Net Zero goal by 2050, decarbonising the built environment with sustainable products that will have a lower embodied carbon footprint will be the way forward for us.

Ascend introduces HiDura[™] LUX amorphous nylon for packaging films at ProPak China 2023

UPDATE

A scend Performance Materials is launching its Hi-Dura[™] LUX amorphous nylon for packaging films in the Asian market at ProPak China 2023. Ascend will be exhibiting HiDura LUX alongside its HiDura PTR puncture and tear resistant nylon copolymers for films at Booth #51G53 from June 19 to 21.

"There is growing demand for higher-performing packaging films in the greater Chinese market to reduce

the amount of food goods that never make it to consumers due to spoilage or damage," says Terry Yuan, Ascend's Asia commercial director for engineered plastics. "Our packaging films portfolio brings new, high-performance films that minimise food waste and product damage across the supply chain."

HiDura Lux is used as a specialty modifier that is blended with other polyamides to enhance key performance properties of packaging including:

- Enhanced thermoforming.
- Improved orientation to optimize shrink performance.
- Improved Optical properties, i.e higher gloss and lower haze.
- Increased organoleptic performance and oxygen barrier.

HiDura LUX amorphous nylon is ideal for use in shrink films for protein packaging, thermoforming films, and barrier layers for fibreboard pack-

ing, thermoforming films, and barrier layers for fibreboard packaging. In end-use applications, the use of HiDura LUX results in a superior oxygen and moisture barrier to extend product shelflife and prevent food spoilage. With international food contact approvals, HiDura LUX polymer from Ascend is now available globally.

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