

Edition 27, September 2021



**PWM Rules** 

Interview - The Astonishing Rise of PET

**Top 10 Trends in Performance Plastics** 

Product of the Month -**PVC Floor Coverings** 



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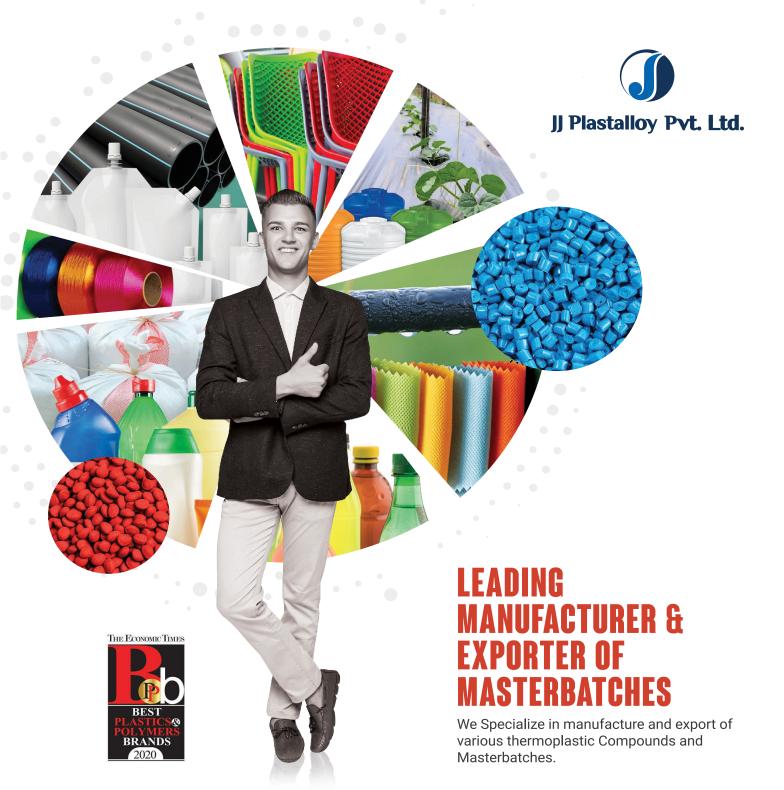
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### From the Chairman's Desk



In early August, the Hon'ble PM, Shri. Narendra Modji called upon industry associations, exporters and Indian missions abroad to take advantage of opportunities created in the post-Covid scenario, explore new destinations and expand the export basket to achieve the ambitious target of USD 400 billion of exports. In his address he stated that while economic recovery is well on its path, the time is now right to focus on growth for the future. He stated that the key factors that will drive this growth are multifold increase in manufacturing, reduction in logistics cost, and international market for domestic goods that would help boost the country's outbound shipments. Echoing similar sentiments, the Hon'ble Union Minister Shri. Piyush Goyal, during his recent interaction with Industry associates to discuss measures to enhance and increase exports also said that there is a need create a roadmap to build a vibrant & robust industry ecosystem. He said that with collective will, agility & synergies we turned a 'Crisis into an Opportunity, as the Merchandise exports for first 2 weeks of Aug'21 up by 45% over 2020-21 & up 32% over 2019-20 and Merchandise exports for 1 Apr - 14 Aug' 21 up by 71% over 2020-21 and up 23% over 2019-20.

Supporting its various initiatives to boost exports, the GOI has announced plans to fast track FTAs with at least 6 nations, including UAE, UK, Australia, Canada and EU in the coming months. India expects to close its FTA with UAE first in a strategic move considering the long term bilateral relations that the two countries enjoy. The revamping of the country's FTA strategy follows close on the heels of the economic cooperation pact (CEC-PA) signed with Mauritius recently. Plans are in place to sign at least 20 FTAs in the short term. As exporters, we welcome such critical measures that are sure to boost exports as FTAs have thus far been rather skewered towards supporting imports rather than exports.

During July 2021, India exported plastics worth USD 1,154 million, up 33.8% from USD 862 million in July 2020. Cumulative value of plastics export during April 2021 – July 2021 was USD 4,571 million as against USD 3,073 million during the same period last year, registering a positive growth of 48.7%.

Sustainability continues to be an important aspect of our industry and PIBOs are integral to creating an effective Circular Economy in Plastics. In this issue, we spoke to Mr. Ainain Shahidi, 4Sixes Packaging and an expert to understand the implications of EPR under the amended PWM Rules. While we take cognizance of concerns over challenges to its implementations, there is little doubt that as an industry, we must align ourselves to this transformation for long term sustainability.

PET is one of the fastest growing plastics globally as in India. We bring you excerpts from an interview with Mr. Bharat Mehta of Reliance Industries and an active member and advisor to PACE (PET Packaging Association for Clean Environment) who talks about the segment, innovations, future outlook and more.

We examine export performance of PVC Floor Coverings and exports to Mauritius, in addition, to news and updates from the Council. The Council has been actively organizing Webinars each month that we hope will add much value to your business understanding and operations. We hope you have been taking advantage of these sessions and welcome your suggestions so that we may do better.

With so much speculation over the progress of the pandemic, apprehensions continue to cloud our lives. However, the best way forward is to take all precautions and stay safe at all times. Until then, we send you good vibes and positive energy!

Warm Regards,

Arvind Goenka Chairman











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#### Celebration of 4th GST Day by CGST Kolkata Zone - 1st July, 2021

O/o the Principal Chief Commissioner of CGST & CX, Kolkata zone invited the Council for the above programme held on 1.7.2021 through webex software. Mr Amit Pal, COA Member and Mr Nilotpal Biswas, RD joined this online programme.

### Webinar on "Common Investing MISTAKES Made By Exporters – 2nd July, 2021

PLEXCONCIL organised webinar on "Common Investing MISTAKES Made By Exporters" on 2nd July, 2021. The following topics were discussed to guide the exporters to spot the right opportunity.

- Parking Business Working Capital Funds for a couple of days
- Investing Options in Foreign Currency
- Tax Efficient Investment Strategies (for HNIs)
- Current Investment Opp. Like Cryptocurrency, RBI Bonds, Equities.

Speaker for the webinar was Mrs. Arpita Gupta, Chartered Accountant (CA), Chartered Financial Analyst USA (CFA) Level 1, Director, Nivesh Mitr

#### Interactive webinar o¬n MSME exporters from Tamil Nadu - Opportunities and Challenges - 8th July, 2021

MTIPB – Govt. of Tamil Nadu along with FIEO-South organised an Interactive webinar on MSME exporters from Tamil Nadu - Opportunities and Challenges. Mr. Ruban Hobday, Regional Director – South represented the Council.

### Convening of 2nd UT level State Export Promotion Committee (SEPC) Meeting - 9th July, 2021

The 2nd UT level State Export Promotion Committee (SEPC) Meeting was held on 09 Jul 2021 under the chairman-ship of the Chief Secretary to Govt. of Puducherry in the Video Conferencing Hall-I of NIC, IV Floor, Chief Secretariat, Puducherry.

Mr. Ruban Hobday, Regional Director – South represented the Council and emphasized the need for Plastic Park in the UT.

### Virtual Meeting to discuss the Iran's wish list received in respect of Negotiations on Preferential Trade Agreement between India and Iran ) - 9th July, 2021

Above meeting held on 9.7.2021 under the chairmanship of Shri Praveen Kumar, Director (South Asia), Department of Commerce, Ministry of Commerce & Industry, Govt. Of India. Prime objective of the meeting was to discuss and take industry feedback on the Iran's wish list in respect of Negotiations on Preferential Trade Agreement between India and Iran. Mr. Nilotpal Biswas, Regional Director represented the Council at this meeting.

#### Webinar on Export Credit Risk Management with ECGC Ltd - 9th July, 2021.

Plexconcil organized webinar on Export Credit Risk Management with ECGC Ltd on 9th July, 2021. Shri R Mahalingam, AGM, ECGC Limited was the speaker during the webinar. A PG in Commerce with PG in Computer Applications and PG in Taxation, he joined ECGC in 1991 and has vast experience in International Trade, Credit Risk Management and Banking.

Mr. Saurabh Kalani - Western Region Chairman of Plexconcil welcomed the guests and topics covered during the webinar included background about ECGC Ltd., various products of ECGC for exporters & Payment settlement procedure. The said webinar was attended by more than 100 participants.

The presentation was followed by Q & A session.

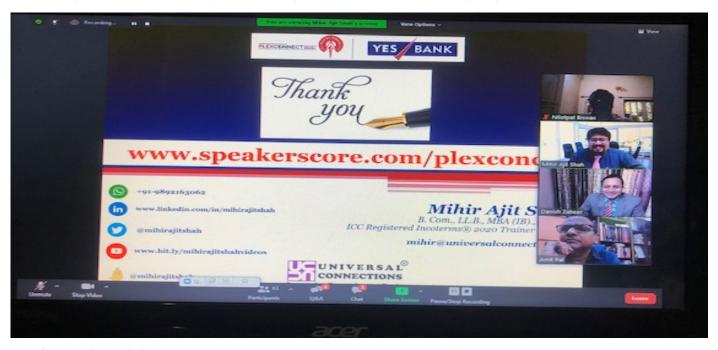
### **Council Activities - July 2021**

#### Virtual Meeting of Export Promotion Councils under the Chairmanship of the DGFT - 15th July, 2021

The virtual meeting was held under the Chairmanship of the DGFT with the prime objective to discuss various issues and concerns related to Expansion of Negative list for EPCG scheme, Export incentive schemes – budgetary issues, Post dated MEIS/SEIS scrips, RODTEP, 'Others' issue in ITC(HS) classification, Inputs related to FTP, EDI related issues, etc. Mr Arvind Goenka, Chairman, PLEXCONCIL submitted Council's issues and concerns during the meeting. Mr Nilotpal Biswas, RD, Ms Bharti Parave, Asst. Director also joined the session.

#### WEBINAR on latest changes and updates for Exporters and Importers - 22nd July, 2021

PLEXCONCIL in association with Yes Bank organised the above WEBINAR. Mr. Mihir Shah, an expert in International Business made a detailed presentation on the various changes and updates on FTP, Customs Rules, GST and also updates on online compliances. The presentation was followed by a Q&A session and Mr Amit Pal, COA



Member moderated the session.

### VC Meeting of Sub-Committee of MAI to consider proposals for 2021-22 for assistance regarding organizing / participating in export promotion activities - 22nd July, 2021

The meeting was heldunder the chairpersonship of Ms. Nidhi Mani Tripathi, Joint Secretary, Department of Commerce in order to discuss & consider Council's various proposals for undertaking export promotion activities during FY 2021-22. Mr. Nilotpal Biswas, Regional Director and Mr. Krunal Goda, Sr. Manager (Exhibitions) represented the Council at this meeting.

#### PLEXCONCIL & FICCI -Webinar on ATA UN TIR Carnet – 27th July, 2021

PLEXCONCIL along with FICCI organized a 'Webinar on International Trade Facilitation under "ATA Carnet" & "UN TIR" system on 27th July 2021 for the exclusive benefit of members of Plexconcil. The webinar started with a Welcome Address by Mr. Arvind Goenka, Chairman, PLEXCONCIL followed by Special Address by Mr. Mostafa Ayati, Senior Advisor to President of Customs in TIR & Transit, Islamic Republic of Iran Customs Administration (IRICA) and Inaugural Address by Mr Satyajit Mohanty, Joint Secretary & Commissioner of Customs, CBIC, Ministry of Fi-

nance, Government of India. The other technical sessions were moderated by leading industry experts.



ATA Carnet (facilitates duty free temporary movement of goods between member countries) is an internationally accepted customs document which is used by members of the exporting community from India, to travel abroad with samples/goods for participating in an exhibition/trade fair/business promotion tour or for testing, demonstration or calibration.

India has recently acceded to the United Nations TIR Convention - the Customs Convention on International Transport of Goods under cover of TIR Carnets. TIR Carnet facilitates seamless movement of goods by road or multimodal across international borders without any additional checks under the TIR procedure, defined by the United Nations TIR Convention. TIR will help India to move cargo along the Chabahar and the CIS countries, Central Asia & Europe.

The focus of the webinar was to familiarize the industry representatives with the operational aspects of using ATA Carnet & UN TIR and their benefits.

### Webinar on 'Transition of Single use Plastic items & Phasing out single us plastic items in the MSME" - 28th July, 2021

The Webinar was organised by MSME-DI, Durgapur in association with Indian Plastics Federation, Kolkata. Mr Bidhan Das, Dy Director, IIP, Kolkata and Dr Manoj Kumar Mondal, Asst. Professor, IIT, Kharagpur, Mr Debabrata De, DGM & Team Leader of Business Development Group, Haldia Petrochemicals Ltd. made a presentation on the subject. Mr Nilotpal Biswas, RD joined this online session.

#### Commissioning of Study on Pipes & Fittings - 28th July, 2021

A preliminary meeting with KPMG officials on Commissioning of Study on Pipes & Fittings was held under the guidance of Mr. P. Mohan, Panel Chairman, Pipes & Fittings long with other Mr. Sekaran, Panel Member. M/s. Ashirwad Pipes and Mr. Ruban Hobday, Regional Director - South. The agenda was to understand the expectations of the Council and approach by KMPG to outline the scope.



### **Council Activities - July 2021**

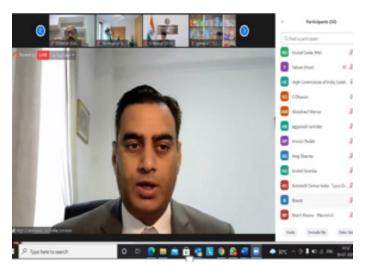
#### Meeting with GSPMA - 28th July, 2021

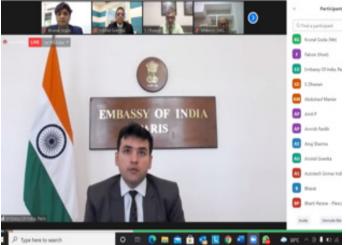
Plexconcil held a meeting with GSPMA to deliberate on organizing joint activities and events for the benefit of Plastic Industry from Gujarat region. This initiative will encourage and support Domestic manufacturers to start export and also boost exports of existing exporters.

#### Virtual B2B Meeting organized by PLEXCONCIL (European Region) - 30th-31st July 2021

The Plastic Export Promotion Council organized a Virtual B2B Meeting to promote the Indian plastic export industry among the European region buyers from 30th-31st July 2021 considering the high potential for Indian plastic exports in the European region, India's emergence as a reliable alternative source of procurement in the pandemic era and its major role in providing quality solutions to the world's crisis caused by overdependence on single source for imports. The event received robust and enthusiastic support from the High Commission of India, UK; Embassies of India in Germany, France, The Netherlands, Belgium, Ireland and Croatia; Consulate General of India, Munich; Indo-German Chamber of Commerce; Indo-French Chamber of Commerce & Industry and VDMA Germany.

#### Inaugural session of the Virtual B2B Meeting in progress:



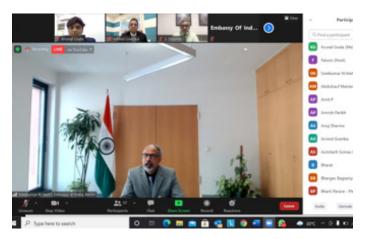


Shri. Deepanshu Khurrana, Second Secretary (Eco & Comm), Embassy of India, France

Shri. Rohit Vadhwana, First Secretary (Eco)
High Commission of India, UK

The inaugural event held on 30th July 2021 brought together the leading trailblazers in the industry, who addressed India's expansive export potential and vouched support to the Council's endeavor to boost plastic trade in international markets. The addresses were given by Shri Arvind Goenka, Chairman, Plexconcil; Shri Rohit Vadhwana, First Secretary (Eco), High Commission of India, London; Shri Deepanshu Khurrana, Second Secretary (Eco & Comm), Embassy of India, Paris; Shri Sreekumar Veetil, Marketing Officer, Embassy of India, Berlin; Smt Payal Kanwar, Director-General, IFCCI; Smt Sonia Prashar, Deputy Director-General, IGCC and Mr. Florian Mikulasch, Market Analyst, VDMA Germany. Shri Sribash Dashmohapatra gave the formal vote of thanks and urged the Indian missions, CCIs and plastic associations across the region to aid in connecting with the potential markets in the respective nations.

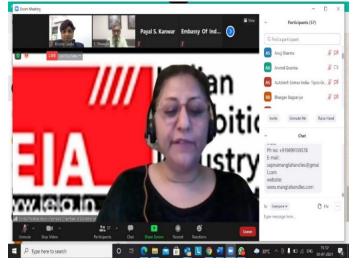
### **Council Activities - July 2021**



Shri. Sreekumar Veetil, Marketing Officer Emabssy of India, Berlin



Smt. Payal S Kanwar, Director-General, IFCCI



Smt. Sonia Prashar, Deputy Director-General, IGCC



Mr. Florian Mikulasch, Market Analyst, VDMA Germany

Upon conferring with several Indian missions in the region regarding the current status of European markets, the Council decided to keep the virtual platform open for the entire month of August 2021 to better facilitate the business networking among Indian suppliers and European buyers. The Indian suppliers that participated in the event are Autotech-Sirmax India Pvt Ltd, Blend Colours Pvt Ltd, General Traders, Jay Laxmi Polyplast, JJ Plastalloy Pvt Ltd, Mangla Handles, National Vinyl Industries, Om Vinyls Pvt Ltd, Pashupati Laminators Pvt Ltd, Pittie Polymers Pvt Ltd, Priyadarshini Filaments Pvt Ltd, SSB Metal Works, Synthetic Packers Pvt Ltd, Tirupati Colour Pens Pvt Ltd, Universal Masterbatch LLP, Vishal Pipes Limited.





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# Ainain Shahidi,

Founder-Director, 4 Sixes Packaging & Marketing

# EPR Under PWM Rules

What is EPR?

Extended Producer Responsibility (EPR) is a policy approach under which producers are given a significant responsibility – financial and/or physical – for the treatment or disposal of post-consumer products. Under Plastic Waste Management rules, EPR holds producers responsible for the collection and recycling of specified volumes of plastic that they produce and place into the market.

In the field of waste management, EPR is a strategy to add all of the environmental costs associated with a product throughout the product life cycle to the market price of that product.



The EPR entails three liabilities as described below:

**Economic responsibility** means that the producer will cover all or part of the expenses, for example, for the collection, recycling or final disposal of products he is manufacturing. These expenses could be paid for directly by producer or by a special fee.

Physical responsibility is used to characterize the systems where the manufacturer is involved in the physical management of the products and/or their effects. The manufacturer may also retain ownership of his product throughout the product's lifecycle and therefore be responsible for environmental damage caused by it.

**Informative responsibility** signifies several different possibilities to extend responsibility for the products by requiring the producers to supply information on the environmental properties of the products they are manufacturing.

### Why is EPR needed today? How can it improve plastic waste management cycles in India?

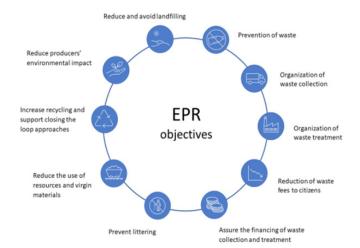
EPR provides the leverage to move towards a sustainable model of material use by changing the way the products are designed. This can be most effective when individual producers are required to take back and recycle their own products.

EPR helps create an effective, industry-driven scheme for plastic waste management ensuring prompt collection, waste reuse, recycling and dis-

### **Interview**

posal. It also incentivises producers to become resource-efficient and manufacture low impact products. ERP in Plastic Waste Management remolds existing systems for greater efficiency.

EPR programs, if implemented effectively, are able to provide a number of benefits and opportunities, including increased collection and recycling rates, reduction of public spending on waste management, reduction in overall waste management costs and design for environment innovations, such as increasing the durability, compostability and reusability of products.



Source: Landbell, BFS, 2021

ERP can improve Plastic Waste Management systems in India by adopting the following principles;

#### 1. ERP Software & Integrated System

This will enable end to end management as data across the enterprise is brought together into one database accessible through a common interface. All software and hardware components can be centrally managed while they carry on independent tasks. Accurate decisions can be made when all functional units of waste management systems work together.

#### 2. Real-Time Management

ERP System ensures that decisions can be made and executed in real-time, ensuring quick response-time and efficiency. Visibility reduces scope of error in management and ensures toxic wastes are not released until treated as per standards.

#### 3. Big Data Capacity

Predictive analytics will highlight patterns in waste production and disposal and aid policymakers to strategize sustainability. Categories and sub-categories of waste and large scale sources of materials enable analysis of large datasets.

#### 4. Efficient, Agile and Secure

Efficient and agile systems create space for innovation. Innovative methods for waste disposal reduce the added financial burden on enterprises and governments and drive health and economic well-being.

### What are the essential or key components of EPR under the Amended PWM Rules in India?

The Environment Ministry has notified the Plastic Waste Management Amendment Rules, 2021, which prohibit specific single-use plastic items which have "low utility and high littering potential" by 2022.

#### The New Rules:

- 1. What is banned? The manufacture, import, stocking, distribution, sale and use of the identified single-use plastic will be prohibited with effect from the 1st July, 2022.
- 2. The ban will not apply to commodities made of compostable plastic.
- 3. For banning other plastic commodities in the future other than those that have been listed in this notification, the government has given industry ten years from the date of notification for compliance.
- 4. The permitted thickness of the plastic bags, currently 50 microns, will be increased to 75 microns from 30th September, 2021, and to 120 microns from the 31st December, 2022.
- 5. The Central Pollution Control Board, along with state pollution bodies, will monitor the ban, identify violations, and impose penalties already prescribed under the Environmental Protection Act, 1986.
- 6. The plastic packaging waste, which is not covered under the phase out of identified single use plastic items, shall be collected and managed in an environmentally sustainable way through the Extended Producer Responsibility (EPR) of the Producer, importer and Brand owner (PIBO), as per Plastic Waste Management Rules, 2016.

## What is the target of EPR in India? Which PI-BOs (Producers/Importers/Brand Owners) are required to register?

The targets for EPR compliance shall be based on the model selected by each producer, importer brand owner. Perhaps, the collection and disposal/recycling of plastic in the first year of establishing the components (rag-pickers, assemblers, recyclers etc) of value chain shall be difficult, however, once the components are established, achieving the targets shall be easier.

A graded approach for achieving the targets shall be recommended in case of plastic waste management. Starting with 30% and moving upto 90% in a period of 5 years.

Furthermore, it is proposed that plastic waste collection and recovery targets be set for a single consolidated recycling and recovery target for all obligated plastic packaging types (to be determined through industry consultation)

As per the provision of Standard Operating Procedure (SOP) for Registration of Producers, Importers & Brand Owners (PIBOs) under Plastic Waste Management (PWM) Rules, 2016, EPR for management of plastic waste packaging is entrusted with all the PIBOs who introduce the products in the market. They are required to establish a system for management of plastic waste generated due to their products by engaging with local bodies.

Local bodies are responsible for setting up of PWM system with assistance from PIBOs. Further, PIBOs who are operating in more than two states, are required to obtain registration from CPCB and those operating in one or two states have to obtain registration from the concerned SPCB/PCC. EPR Action Plan for PWM has to be submitted for obtaining the registration.

EPR Action Plan for PWM has to be submitted by PIBOs (those operating in more than two states) for obtaining registration from CPCB. PIBOs shall fulfil EPR in all the States/UTs in which they are introducing their products. EPR Target for a particular State/UT shall be equal to the type & quantum of plastic introduced by them in the market in the specific State /UT.



### What are the likely challenges to the implementation of EPR in India?

EPR for every industry includes a chain of responsibilities assigned to each stakeholder. There are numerous issues that ail the process which begins with understanding of the process, regulations, responsibilities, ways of compliance, documentation and maintenance of transparency. Communication is also one of the major issues that are encountered by both ends, the government as well as the stakeholders.

There are many challenges to implementing EPR in India considering the volume of waste and the expanse of the nation.

#### Inadequate Infrastructure

The waste disposal, collection, processing, and recycling facilities in all the Urban Local Bodies are understaffed and lack proper infrastructure. The informal sector recycles the majority of the waste being generated, despite having poor infrastructure. The awareness created by ULBs and brands on effective waste management is not resulting in desired actions by consumers.

#### **Data Accuracy Problem**

Data about the amount of waste being generated in India is not accurately measured thus creating added EPR challenges which is resulting into other obstacles with regards to administration, infrastructure, policies and others. Lack of waste inventory with the State Pollution Control Boards (SPCBs) and Urban Local Bodies (ULBs).

From the implementation perspective, the biggest challenge would be monitoring the data provided by PIBOs, PROs and other stakeholders. The National registry created by CPCB is a positive step, however the accuracy and reliability of the data will be a difficult task to validate.

### Type & Segregation of waste

Another challenge is the lack of awareness among consumers about different types of wastes. Though there are lot of awareness events being taken up. Also the lack of segregation at source poses a severe challenge to local authorities, burdens the waste collectors for segregation. Poor segregation hinders the efforts by PIBOs in implementing their EPR related programs.

#### Gaps in the system

The significant gap between the recycler, aggregator and waste generator has to be minimised. The gaps exist between the government authorities and the PIBOs in the jurisdiction as well. Digitization of Waste Management System is required to be done to streamline and channel the waste effectively.

#### **Documentation Difficulties**

Documentation is the proof of the EPR activity performance. The companies find it difficult to understand the procedure and the sequence of documentation.

#### Technology Bottlenecks

Inadequate infrastructure, distance and connectivity to the recycling centres make it difficult to process all the waste that comes in. The informal waste economy is not yet formalised and hence remain unseen and non-inclusive. Current technologies applied at the collection centres are hardly enough to hold the increasing amounts of waste generated by the cities.

The recycle mechanisms that are used here, in India are still in their initial development stage and are in-efficient to handle and process large amounts of waste at a time. Further, they are not designed to recycle MLPs effectively. The PET recycling infrastructure needs to upgrade to be comparable to some European countries. There are grey areas with the technology imports from other countries in relation to the rules, political will and awareness.

EPR in India is looking ahead at a long winding road with severe bumps to overcome. Let's hope a proper structured operational process flow for the entire EPR regime will follow soon.

### What are the options for adoption available to PIBOs?

As per annexure I for implementation of EPR plan for PWM in the States/UTs, PIBOs have three alternatives:

- Plastic Waste Management through Own Distribution Channel
- Plastic Waste Management through Direct engagement with Urban Local Body (ULB)
- Plastic Waste Management through engagement with Waste Management Agency (WMA), which in turn should engage with ULBs

PIBOs shall have the option of adopting any or all of the above options. However, it has to be ensured that the total type & quantum of plastic waste managed through these alternatives in a particular State/UT meets the EPR target of the concerned PIBO for the respective State/UT. WMAs, if engaged, shall be enrolled with the concerned ULB/ any authority designated by the State/UT. Details of such WMAs shall be intimated to the respective SPCB/PCC by the ULB/ designated state authority.

How many Producer Responsibility Organizations (PRO) are there in India? How can they help/ support in further the goals of EPR under the PWM Rules?

A "Producer Responsibility Organization (PRO)", usually a not-for-profit organization or an industry association, is created by the producers (brands/retailers) for the purpose of meeting their EPR obligations. PROs develop and execute a program plan to comply with legislative/regulatory requirements and also set and collect fees from producers to finance those activities.

There are 57 PROs registered with CPCB (Central Pollution Control Board) till Aug 21. They are spread all over India. Majority of them are in Delhi, 15 PROs followed by UP – 14, Karnataka – 8, Haryana – 6, Maharashtra – 3, Gujarat – 3, Telangana – 2, Tamil Nadu – 2. Rajasthan, MP, Punjab, West Bengal have one each.

Few of the important actions taken by a PRO can be summarised as below:

- 1. Play an instrumental role in motivating and educating the citizens to adopt cleaner habits like sorting out the waste.
- 2. Focus on welcoming the combined efforts of the people to work in collaboration with the public authorities at all possible levels. This may include the efforts targeting the finance related or other technical aspects.
- 3. Fosters cooperation to trigger the sustained collection methods and also ensures that the waste is being reused.
- Presents opportunities to producers in the form of incentives so that they can contribute in designing a range of products that are sustainable in nature.
- Guides in highlighting the achievements in the realm of environment especially that fall under the EPR scheme.

### How is EPR more likely to lead to Sustainable Designs in Plastics?

At a community or societal level, there are many ways to make plastic more sustainable –from using more renewable content and reclaiming and recycling material, to reducing energy needed for manufacturing and returning material to nature at the end of its life.

EPR, through a more circular supply chain or a redesign of products, has the ability to break strong dependencies on natural resources. Improving design has also proven to be an eco-friendly measure for producers, where they can alter the trajectory and footprint of their products

In addition to including green spaces, examples include: Minimizing Non-Renewable Energy Consumption - Using as many recycled products as possible. Using Environmentally Preferable Products - Examples include materials manufactured from recycled products and from local sources.

EPR if implemented in the best way can lead to Sustainable Designs in Plastics through;

- 1. Optimize site potential;
- 2. Protect and conserve water;
- 3. Enhance indoor environmental quality;
- 4. Use environmentally preferable products;
- 5. Minimize non-renewable energy consumption;
- 6. Optimize operational and maintenance practices.

Ainain Shahidi, a Gold Medalist from Indian Institute of Packaging, Mumbai and a 1st Class PGDBA degree holder from IMT Ghaziabad, is an accomplished Packaging professional with more than 3 decades of work experience in Packaging Strategy & Dev., Research & Validation, Design to Delivery Value Chain, Automation, Procurement, Value Engineering & Cost Optimization, Vendor Dev & Rationalization, Customer Supplier Collaboration & Relationship, Team Management and Grooming.

He has worked with reputed Organizations dealing with a vast range of Product categories and has presented papers at various platforms in India and abroad. He is a Certified Speaker, Coach & Trainer and a member of Professional Speakers Association of India. He has been a Keynote Speaker at Safe Biopack Conference in July 2018, organized by UPM, Malayasia besides having moderated many panel discussions.

He is the Founder Director of 4 Sixes Packaging & Marketing and Ainsway Success & Happiness Academy. He is also doing his PhD in Management Sciences specializing in Training & Development.

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### **Export Performance - July 2021**

#### TREND IN OVERALL EXPORTS

India reported merchandise exports of USD 35.4 billion in July 2021, up 49.9% from USD 23.6 billion in July 2020. Cumulative value of merchandise exports during April 2021 – July 2021 was USD 130.8 billion as against USD 75.0 billion during the same period last year, reflecting a growth of 74.5%.

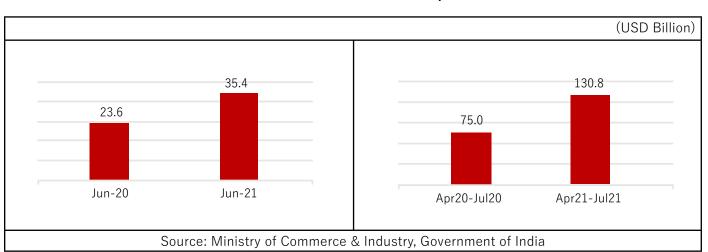
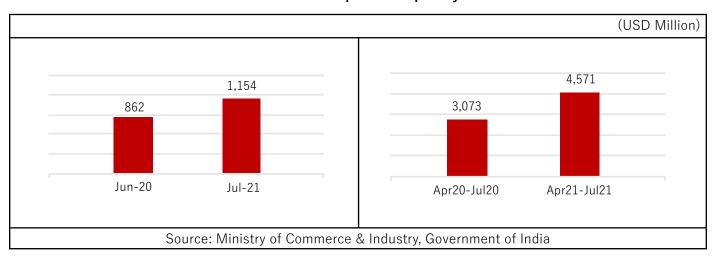


Exhibit 1: Trend in overall merchandise exports from India

#### TREND IN PLASTICS EXPORT

During July 2021, India exported plastics worth USD 1,154 million, up 33.8% from USD 862 million in July 2020. Cumulative value of plastics export during April 2021 – July 2021 was USD 4,571 million as against USD 3,073 million during the same period last year, registering a positive growth of 48.7%.

Exhibit 2: Trend in plastics export by India



#### PLASTICS EXPORT, BY PANEL

In July 2021, all the product panels especially Floor coverings, leathercloth & laminates; Woven sacks / FIBCs; Composites / FRP products; and Human hair products, reported high growth. In terms of absolute growth, strong gains were registered by Plastic raw materials; Miscellaneous products; Woven sacks / FIBCs; and Human hair products.

Exhibit 3: Panel-wise % growth in plastics export by India

Panel	Jul-20	Jul-21	Growth	Apr 20- Jul 20	Apr 21- Jul 21	Growth
	(USD Mn)	(USD Mn)	(%)	(USD Mn)	(USD Mn)	(%)
Consumer & House ware	44.7	66.6	+49.0%	113.4	228.9	+101.8%
Cordage & Fishnets	16.0	16.6	+3.7%	45.2	63.5	+40.6%
Composites / FRP products	25.9	39.4	+52.3%	72.0	139.8	+94.2%
Floor Coverings, Leather cloth & Laminates	36.8	56.7	+54.1%	109.1	214.0	+96.2%
Human Hair & Related Products	26.1	93.1	+256.5%	74.2	312.3	+321.0%
Miscellaneous Products	128.3	178.1	+38.9%	387.8	665.7	+71.7%
Pipes & Fittings	17.8	24.4	+37.0%	44.4	83.8	+89.0%
Polyester Films	142.2	166.1	+16.9%	526.1	683.3	+29.9%
Plastics Raw Materials	307.4	358.4	+16.6%	1,368.8	1,598.9	+16.8%
Rigid Packaging & PET Pre- forms	32.0	32.3	+1.0%	95.9	129.7	+35.3%
Woven Sacks / FIBCs	68.4	104.3	+52.5%	196.8	392.9	+99.6%
Writing Instruments	16.8	18.0	+7.2%	39.9	58.2	+45.8%
	862.4	1,154.2	+33.8%	3,073.4	4,570.9	+48.7%

Source: Ministry of Commerce & Industry, Government of India



Export of Consumer & house ware products increased by 49.0% in July 2021 due to higher shipment of Toys of plastics (HS code 95030030); Tableware and kitchenware of plastics (HS code 392410); and Electrical switches of plastics (HS code 85365020).

Cordage & fishnets export were also up by 3.7% in July 2021 aided by improved sales of Other binder or baler twine of polyethylene or polypropylene (HS code 560749).

Export of Composites was up by 52.3% due to increased sales of Articles of plastics and articles of other materials of heading 3901 to 3914, n.e.s (HS code 39269099).

In case of Floor coverings, leather cloth & laminates, exports in July 2021 were up 54.1% as Indian exporters reported higher sales of Textile fabrics impregnated, coated, covered or laminated with plastics other than PVC or PU: Other (HS code 59039090); and Decorative laminates (HS code 48239019). Exports under HS code 59039090 have been witnessing strong export growth from India to the United States of America.

Export of Human hair & related products clocked an impressive 256.5% growth due to strong sales of Human hair, dressed, thinned, bleached or otherwise worked (HS code 67030010); and Human hair, unworked, whether or not washed and scoured (HS code 05010010). India's export of human hair, unworked, have zoomed to USD 30.5 million in July 2021.

Miscellaneous products export increased by 38.9% in July 2021 due to higher sales of Optical fibres, optical fibres bundles and cables (HS code 90011000); Other sacks and bags of plastics (HS code 39232990); and Polypropylene articles, n.e.s (HS code 39269080).

Export of Pipes & fittings witnessed a growth of 37.0% due to improved sales of Tubes, pipes, and hoses of polymers of vinyl chloride (HS code 391723); and Flexible tubes, pipes and hoses, having a minimum burst pressure of 27.6 MPa (HS code 391731).

Polyester films witnessed an increase of 16.9% in exports during July 2021 due to higher shipments of Sheets and films of polymers of propylene (HS code 392020); Flexible films and sheets of polyethylene terephthalate (HS code 39206220); and Self-adhesive sheets and films (HS code 39191000).

Plastics raw materials export was up 16.6% in July 2021 due to higher sales of Other acrylic polymers in primary form (HS Code 39069090); Other primary form of Polyethylene terephthalate (HS Code 39076190); Polytetrafluoroethylene (HS Code 39046100); Linear low-density polyethylene (HS Code 39011010); and Epoxy resins (HS Code 39073010).

Rigid packaging & PET performs export were up 1.0% on higher sales of Insulated ware of plastics (HS code 39231030); Spools, cops, bobbins and similar supports (HS code 39234000); and Caps and closures of plastics (HS Code 39235010).

Export of Woven sacks and FIBCs gained 52.5% during July 2021 as sales of Flexible Intermediate Bulk Containers or FIBCs (HS code 63053200) further strengthened. India is a significant exporter of FIBC to Europe and North America.

Export of Writing instruments witnessed an increase of 7.2% in July 2021 and have reached the pre-covid levels as were seen in February 2020.

Exhibit 4: Details of % change seen in top 50 items of export

HS Code	Description	Apr 20 - Jul 20	Apr 21 - Jul 21	Growth
		(USD Mn)	(USD Mn)	(%)
63053200	Flexible intermediate bulk containers, for the packing of goods, of synthetic or man-made textile materials	161.2	316.2	+96.2%
39021000	Polypropylene, in primary forms	324.9	249.8	-23.1%
39076190	Polyethylene terephthalate: Other primary form	221.5	299.4	+35.2%
39232990	Sacks and bags, incl. cones, of plastics (excl. those of polymers of ethylene): Other	93.4	161.3	+72.6%
67030010	Human hair, dressed, thinned, bleached	71.2	250.3	+251.6%
39269099	Articles of plastics and articles of other materials of heading 3901 to 3914, n.e.s: Other	71.0	138.2	+94.6%
39012000	Polyethylene with a specific gravity of $\geq$ 0,94, in primary forms	150.6	101.3	-32.7%
39014010	Linear low-density polyethylene, in which ethylene monomer unit contributes less than 95 % by weight of the total polymer content	108.5	109.1	+0.6%
90011000	Optical fibres, optical fibre bundles and cables (excl. made-up of individually sheathed fibres of heading 8544)	58.7	126.2	+114.8%
48239019	Decorative laminates	49.7	88.7	+78.4%
39206220	Plates, sheets, film, foil and strip, of non-cellular polyethylene terephthalate, not reinforced, laminated, supported or similarly combined with other materials, without backing, unworked or merely surface-worked or merely cut into squares or rectangles: Flexible, plain	81.3	86.9	+6.8%
39269080	Articles of plastics and articles of other materials of heading 3901 to 3914, n.e.s: Polypropylene articles, not elsewhere	48.3	94.3	+95.2%
39202020	Plates, sheets, film, foil and strip, of non-cellular polymers of ethylene, not reinforced, laminated, supported or similarly combined with other materials, without backing, unworked or merely surface-worked or merely cut into squares or rectangles: Flexible, plain	80.3	123.2	+53.3%
39232100	Sacks and bags, incl. cones, of polymers of ethylene	41.6	66.9	+60.8%
39076990	Polyethylene terephthalate: Other primary form	51.3	100.1	+95.0%
59039090	Textile fabrics impregnated, coated, covered or laminated with plastics other than polyvinyl chloride or polyurethane: Other	31.6	76.4	+142.2%
39239090	Articles for the conveyance or packaging of goods, of plastics: Other	44.1	56.9	+29.1%
39069090	Acrylic polymers, in primary forms (excl. polymethyl methacrylate): Other	24.9	126.8	+409.4%

39202090	Plates, sheets, film, foil and strip, of non-cellular polymers of ethylene, not reinforced, laminated, supported or similarly combined with other materials, without backing, unworked or merely surface-worked or merely cut into squares or rectangles: Other	37.1	64.9	+75.1%
90015000	Spectacle lenses of materials other than glass	30.3	43.5	+43.3%
39011010	Linear low-density polyethylene, in which ethylene monomer unit contributes 95 % or more by weight of the total polymer content	50.9	35.0	-31.3%
54072090	Woven fabrics of strip or the like, of synthetic filament, incl. monofilament of $>=67$ decitex and with a cross sectional dimension of $<=1$ mm: Other	24.9	48.6	+95.3%
39206290	Plates, sheets, film, foil and strip, of non-cellular polyethylene terephthalate, not reinforced, laminated, supported or similarly combined with other materials, without backing, unworked or merely surface-worked or merely cut into squares or rectangles: Other	36.4	47.2	+29.6%
39046100	Polytetrafluoroethylene, in primary forms	31.6	52.8	+66.8%
90183930	Cannulae	28.5	29.2	+2.6%
39219099	Plates, sheets, film, foil and strip, of plastics, reinforced, laminated, supported or similarly combined with other materials, unworked or merely surface-worked or merely cut into squares or rectangles: Other	36.0	37.4	+4.0%
39011020	Low density polyethylene	48.2	45.8	-5.0%
39219096	Plates, sheets, film, foil and strip, of plastics, reinforced, laminated, supported or similarly combined with other materials, unworked or merely surface-worked or merely cut into squares or rectangles): Flexible, laminated	35.3	28.9	-18.1%
96081019	Ball-point pens	24.2	30.9	+27.9%
39241090	Tableware and kitchenware, of plastics: Other	17.8	34.2	+92.2%
39072090	Polyethers in primary forms (excl. polyacetals): Other	28.2	14.9	-47.2%
56074900	Twine, cordage, ropes and cables of polyethylene or polypropylene, whether or not plaited or braided and whether or not impregnated, coated, covered or sheathed with rubber or plastics	20.7	37.3	+80.6%
95030030	Tricycles, scooters, pedal cars and similar wheeled toys; dolls' carriages; dolls; other toys: of plastics	17.6	33.4	+89.9%
39199090	Self-adhesive plates, sheets, film, foil, tape, strip and other flat shapes, of plastics, whether or not in rolls > 20 cm wide: Other	24.7	29.0	+17.6%
39219094	Plates, sheets, film, foil and strip, of plastics, reinforced, laminated, supported or similarly combined with other materials, unworked or merely surface-worked or merely cut into squares or rectangles: Flexible, metallised	27.3	31.3	+14.8%

39206919	Plates, sheets, film, foil and strip, of non-cellular polyesters, not reinforced, laminated, supported or similarly combined with other materials, not worked or only surface-worked, or only cut to rectangular, incl. square, shapes: Other	24.6	31.0	+26.1%
96032100	Tooth brushes, incl. dental-plate brushes	18.5	28.6	+54.9%
59031090	Textile fabrics impregnated, coated, covered or laminated with polyvinyl chloride: Other	13.0	23.6	+80.7%
39023000	Propylene copolymers, in primary forms	41.1	24.4	-40.6%
39140020	lon-exchangers based on polymers of heading 3901 to 3913, in primary forms: lon exchangers of polymerisation or	21.2	24.0	+13.1%
39119090	Polysulphides, polysulphones and other polymers and prepolymers produced by chemical synthesis, n.e.s., in primary forms: Other	15.6	20.7	+32.6%
39204900	Plates, sheets, film, foil and strip, of non-cellular polymers of vinyl chloride, containing by weight < 6% of plasticisers, not reinforced, laminated, supported or similarly combined with other materials, without backing, unworked or merely surface-worked or merely cut into squares or rectangles	18.1	21.7	+20.1%
39241010	Tableware and kitchenware, of plastics: Insulated ware	9.2	22.2	+140.3%
39129090	Cellulose and chemical derivatives thereof, n.e.s., in primary forms (excl. cellulose acetates, cellulose nitrates and cellulose ethers): Other	17.9	22.1	+23.9%
39095000	Polyurethanes, in primary forms	18.1	24.5	+35.5%
39235010	Stoppers, lids, caps and other closures, of plastics: Caps and closures for bottles	14.9	23.3	+56.4%
39206929	Plates, sheets, film, foil and strip, of non-cellular polyesters, not reinforced, laminated, supported or similarly combined with other materials, not worked or only surface-worked, or only cut to rectangular, incl. square, shapes: Other	12.7	24.3	+92.3%
54072030	Woven fabrics of strip or the like, of synthetic filament, incl. monofilament of $>=67$ decitex and with a cross sectional dimension of $<=1$ mm: Dyed	5.2	18.3	+254.1%
39073010	Epoxy resins	10.4	34.6	+232.9%
39011090	Polyethylene with a specific gravity of < 0,94, in primary forms: Other	16.1	25.5	+58.8%

Source: Ministry of Commerce & Industry, Government of India



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- Liners & Bags
- Tamper proof courier Bags
- Slider Bags
- Zip lock bags
- Bubble film & Bags

### Countryscape



### MAURITIUS Economic overview

Mauritius is a small island nation located in the western Indian Ocean. It has an area of 2,040 square kilometres and a population of 1.3 million. Mauritius has successfully transitioned from an agriculture-based economy to a more diversified one led by tourism, textiles, and financial services. Although the outbreak of Covid-19 pandemic and the resultant disruptions thereafter had derailed its economic growth, the long-term outlook of Mauritius remains bright.

As of August 3, 2021, Moody's rating for Mauritius stands at Baa2 (negative).



Economic indicators		2018	2019	2020
Nominal GDP	USD Billion	14.2	14.0	11.4
Nominal GDP per capita	USD	11,206	11,090	8,993
Real GDP growth	%	3.8	3.0	-15.8
Total population	Million	1.3	1.3	1.3
Average inflation	%	3.2	0.5	2.5
Total merchandise exports	USD Billion	1.98	1.87	1.55
Total merchandise imports	USD Billion	5.63	5.60	4.24

Source: IMF, TradeMap

Mauritius has several Trade Agreements with countries in Africa, South Asia, Europe, and North East Asia. The India-Mauritius Comprehensive Economic Cooperation and Partnership Agreement (CECPA) was signed in February 2021 and came into force in April 2021.

India-Mauritius CECPA which is the first trade agreement of India with an African nation covers 310 export items for India including tubes and pipes of plastics, tableware and kitchenware of plastics, plastic tablecloth, food containers and other household articles of plastics, plastic gloves, statuettes and ornaments of plastics, suit-cases and similar bags of plastic, artificial flowers of plastic, furniture of plastic, and hand-operated floor sweepers, mops, etc of plastics.



### Akhilesh Bhargava, CMD, AVI Global Plast Pvt Ltd., Mumbai

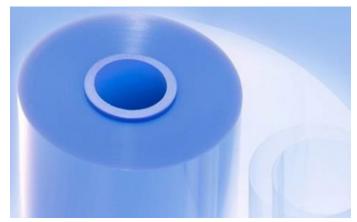
In our experience, doing business in Mauritius has been very good as we have been exporting to only one customer and have found them to be reasonably cordial in terms of payment and communication. The payment terms are 100% advance due to which we have never faced any issue of follow up for payment. Also, they prefer to take the consignment on FOB basis and hence the freight is also not paid by us in India.

However, we believe that the removal of MEIS and no clear visibility on RoDTEP has resulted in lack of incentive for exporters exporting to Mauritius and this could impact long term strategies towards exports to the country. Having said that, if the CECPA agreement takes care of concessions in duty payment at the destination it will definitely prove helpful.

#### Trade overview

India and Mauritius share cordial trade relations. India is among the top-5 trade partners of Mauritius. In 2020, India and Mauritius engaged in bilateral trade worth USD 435.1 million. During the year, India's exports to Mauritius were valued at USD 398.2 million in comparison to India's imports worth USD 36.9 million resulting in a trade surplus of USD 361.3 million to India.

The major items of export (2-digit HS) from India to Mauritius are mineral fuels and oils (USD 76.7 million), cereals (USD 39.8 million), pharmaceuticals (USD 37.1 million), cotton (USD 35.8 million), and apparel and clothing accessories, not knitted or crocheted (USD 25.7 million). Likewise, major items of export (2-digit HS) from Mauritius to India are medical and surgical instruments (USD 15.1 million), and iron and steel (USD 8.6 million).





### Countryscape

Within plastics, the trade is in favour of India with exports of USD 16.5 million to Mauritius and a trade surplus of USD 4.5 million. India's plastics exports to Mauritius primarily comprise of the following:

- Plastic sheets and films (23.5%)
- Plastic raw materials (23.4%)
- Packaging items (12.9%)
- Medical Disposables (7.7%), and
- Woven sacks/FIBCs (7.7%)

#### Vinit L Shah, Partner, Plastona, Mumbai

We have been engaged in exporting houseware products to Mauritius for some time now and over the years, we have found that doing business in the country has been quite amicable. We have luckily not encountered any specific difficulties as processes are fairly organized. Mauritius is a small country and hence has comparatively lower consumption. However, we do hope that the recently signed pact for economic cooperation between our two countries, will open up more opportunities for Indian plastic exporters.

Mauritius' annual plastics imports are valued at USD 200 million approx. Its plastic imports are largely catered to, by China (28.8%), India (9.2%), and France (8.7%). India also has an extremely good standing in some of the plastic product imports by Mauritius:

- Woven sacks/FIBCs Market share of 51.6% (Rank 1)
- Plastic sheets and films Market share of 16.5% (Rank 2)
- Medical disposables Market share of 15.3% (Rank 2)
- Plastic raw materials Market share of 10.4% (Rank 3)
- Packaging items of plastic Market share of 8.6% (Rank 3)



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## Bharat B Mehta

VP – PET Marketing, Reliance Industries

# The Astonishing Rise of PET

PET has become the primarily preference in the packaging sector owing to the rigidity it offers, its eco-friendly attribute and recyclable nature, especially post pandemic. This astonishing increase in the demand is a ripple effect of the increasing awareness of hygiene, prompting an enhanced procurement of disposable and packaged items to reduce the chances of infection by any means.

Data from the Smithers market report, "The Future of PET Packaging to 2025" indicates that the global demand for PET will reach 22.65 million tonnes, with a value of \$44.1 billion in 2020. The impact of Covid-19 is still unclear, and while volume consumption will increase this year, overall value could shrink by as much as 17% compared to 2019. As it recovers, future growth in this segment is forecast at a compound annual growth rate (CAGR) of 3.7% pushing consumption to 27.13 million tonnes in 2025.

While majority of the demand for PET in India is satisfied by domestic production, cheap imports from other countries have certainly caused abrupt material injury to the Indian production in the last few years. However, the immense production capacity of PET in the country is also sufficient to cater to the export requirements. In the post COVID era, the sudden spike in the demand for PET from food and beverages and healthcare industries is anticipated to compel manufacturers to operate over

60 per cent efficiency in order to profoundly fulfil the domestic as well as the international demand.

Despite India's per capita plastic consumption growing steadily, at least 80-90 per cent of the polyethylene terephthalate (PET) bottles are collected and recycled, ahead of even the world's most advanced countries like the US or even the European countries. rPET is extensively used to manufacture textile yarns and footwear amongst other applications in India, which makes it among the most environmentally sustainable plastics.

Plexconnect talks to Bharat B Mehta, VP- PET Marketing, Reliance Industries to understand more about the segment, what drives it, innovations, challenges, etc. Mr. Mehta currently heads the Sustainability, Business Development, Advocacy for PET Business @ RIL and has been previously the Head of domestic sales for PET Business @ RIL. He is also an active member and advisor to PACE (PET Packaging Association for Clean Environment)

#### (Interview)

PET has witnessed a steep incline in demand in the F&B, Pharma, etc, segments, especially post-pandemic. What does the future hold for the segment?

In India, PET has been growing 1.5 to 3 times faster than the nation's GDP over the past several years. It's established that PET is safe for food contact packaging material. Coupled with its other inherent properties such as unbreakable, light weight, inert, convenient, and economical PET has become a packaging of choice in

### Interview

FMCG, healthcare, dairy and beverages industries. Also, it is the only plastic packaging material that gives glass-like transparency that consumers prefer.

During the pandemic, PET's demand increased due to its usage in packaging sanitisers, packaged water bottles for Corona warriors, face shields, masks, as well as tubes for blood and swab collection. The growth is expected to continue as demand for PET is expected to increase further. The petrochemicals Industry is witnessing expansion of PET capacities and installation of high-speed lines to enhance production and serve the burgeoning needs of consumers.

Furthermore, India's over 90% recycling rate of post-consumer PET bottles is aligned to the Centre's Swachh Bharat Abhiyaan, thereby aiding sustainability of the business.

### Besides F&B packaging, what are the other or new opportunities for PET application?

Apart from the increasing usage PET in food and beverage packaging, personal hygiene and care products like shampoo, hair oils, antiseptic liquids, sanitisers etc., are seeing renewed demand and are expected to drive future growth. New categories like fruit and vegetable punnets and face shields too are increasing the consumption of PET sheets. Vacutainers for blood/sample collections are also finding traction. A few years ago, the demand for vacutainers was entirely met by imports. But of late, several domestic companies have set up capacities to manufacture high-quality vacutainer, a step towards Atmanirbhar Bharat.



# How has rPET impacted the growth / development of textile fibres industry? What can we expect in the future (even the fashion industry has been adopting rPET fibres)?

rPET to textile is a perfect example of Waste to Wealth. Discarded PET bottles are collected and converted into PET flakes, which are further processed to make fibres. Increasing awareness among consumers about green fashion and sustainability has resulted in rPET becoming a sought-after material in textile industry.

At Reliance, we produce Recron® Green Gold, one of the greenest fibres in the world, by recycling used PET bottles. These fibres are used to produce R|Elan™ fabrics. We are currently doubling rPET capacity to 5 billion bottles. We are seeing increased demand from leading brands, apparel manufactures and fashion designers for R|Elan™ fabrics as they are trying to meet consumer demand for sustainability and green fashion quotient. India's leading fashion designers have presented R|Elan™ apparel collections at various editions of Lakme Fashion Week.



## Major brands have been increasingly adopting rPET across numerous applications. How does this impact the use of virgin plastics production?

With increasing awareness among consumers about sustainability and green fashion, the demand from leading global brands and fashion houses for rPET based fabrics have catapulted. Result: rPET now commands higher prices as compared to virgin PET. Europe and North America are rapidly adopting rPET for 15-25% of their packaging. Initially, this is likely to be a slight drag for virgin PET demand, but the situation is likely to recover. Also, increased rPET consumption is the key to sustainable growth of PET industry.



### Besides light weighting, what are the other innovations taking place in the segment?

Innovations are focused on enhancing oxygen barrier, heat resistance, light barrier, carbon dioxide barrier, as well moisture barrier capacities. The creation of 250 ml carbonated beverage bottles with more than 6 months gas retention capability is one such example. Research is also underway to develop barrier technologies for packaging of beer. Machinery producers have developed heat-set technologies for packing jams, ketchups and sauces which require higher temperature while packaging.

PET is one of the most highly recycled plastics in India due to its economic value for the unorganized sector in particular. What measures are needed to integrate this sector into the mainstream?

With the implementation of Plastic Waste Management Rules and Extended Producer Responsibility (EPR), integration of waste pickers for a better livelihood has already begun. Several units from ecosystem of waste management start-ups are engaged in this activity with industry support. Waste pickers have helped keep roads clean and deserve better lifestyle, even the draft EPR notification recognises this fact.

What is the likely impact of the ban on SUP and growing movement for use of alternate material on PET that is proven a more environmentally sustainable alternate?

Compared to its alternatives, PET is better suited as a packaging material in terms of its impact on environment. In India, PET has a recycling rate of over 90%. Due to its lightweight property, it helps cut emission and cost pertaining to transportation. These traits of PET are key advantages vis a vis alternative packaging material. In fact, the share of PET in packaging is increasing as compared to alternative materials.

# RIL & IVL Dhunseri are the 2 largest producers of PET in the country. What are the strategies being adopted by producers to enhance exports while meeting the rising domestic demand in the coming years?

Today, 55-60% of domestic production is sold in India, with the rest exported. Going forward as domestic market grows, new capacities are likely to come up to cater to domestic and export markets.

India is a major exporter of PET resin to the world, but there are challenges in exporting PET resin to EU-27, UK, USA, Brazil, Africa, Turkey etc. on account of ADD and Anti-Subsidy Tariffs. What are the measures needed to overcome such challenges?

Globally PET demand is growing, and there is enough demand from other geographies which Indian exporters can cater to.

### What is the potential for energy recovery from PET waste in coming years?

PET has well-established recycling facilities in India, and it is recyclable into fabrics. The recycling of PET is expected to increase further. Hence, energy recovery, which is the end-of-life option for non-recyclable products, is not a preferred option for PET. Other high calorific value, non-recyclable plastics can be used for energy recovery applications.

### Polymer Price Tracker



# POLYMER PRICE TRACKER (DOMESTIC MARKET) JULY 2021

High Density Polyethylene HDPE)			
<b>I</b>		1	<ul> <li>HDPE prices increased by Rs 3000 per MT in July 2021 after a decline of Rs 3000 per MT in June 2021 and Rs 6500 per MT in May 2021.</li> <li>In July 2021, HDPE prices were hiked by Rs 2000 per MT in the second week and by Rs 1000 per MT in the third week. Thereafter no changes</li> </ul>
May-21	Jun-21	July-21	were announced.
Linear Low	r-Density Po (LLDPE)	lyethylene	<ul> <li>LLDPE prices increased by Rs 4500 per MT in July 2021 after a decline</li> </ul>
<b>I I</b>		1	<ul> <li>of Rs 1000 per MT in June 2021 and Rs 9500 per MT in May 2021.</li> <li>In July 2021, LLDPE prices witnessed a rise of Rs 2500 per MT in the second week, Rs 1000 per MT in the third week, and Rs 1000 per MT</li> </ul>
May-21	Jun-21	July-21	in the last week.
Low Densi	ty Polyethyl	ene(LDPE)	<ul> <li>LDPE prices increased by Rs 3500 per MT in July 2021 after a sharp de-</li> </ul>
<b>I I</b>		1	<ul> <li>cline of Rs 5000 per MT in June 2021 and Rs 11500 per MT in May 2021.</li> <li>In July 2021, LDPE prices were hiked by Rs 1000 per MT in the second week, Rs 1000 per MT in the third week, and Rs 1500 per MT in the</li> </ul>
May-21	Jun-21	July-21	last week.
Poly	/propylene (	PP)	<ul> <li>PP prices moved up Rs 3500 per MT in July 2021 after a decline of Rs</li> </ul>
1	1	1	<ul> <li>6000 per MT in June 2021 and Rs 8500 per MT in May 2021.</li> <li>In July 2021, PP prices increased by Rs 2000 per MT in the second week and Rs 1500 per MT in the last week. Thereafter no changes were</li> </ul>
May-21	ay-21 Jun-21 July-21		announced.
Polyvinyl Chloride (PVC)		(PVC)	<ul> <li>PVC prices increased by Rs 1000 per MT in July 2021 after a decline of</li> </ul>
-	•	1	Rs 10000 per MT in June 2021 and Rs 4500 per MT in May 2021.  In July 2021, PVC prices eased by Rs 5000 per MT in the first week. However, in the third week prices increased by Rs 6000 per MT.
May21	Jun-21	July-21	



### FLOOR COVERINGS OF PLASTICS

Floor coverings of plastics are sheets, rolls or tiles of polymers, particularly poly vinyl chloride (PVC), that are used for decorating and providing an aesthetic feel to homes, offices, shops, hospitals, hotels, sports arenas, trains etc. at an efficient cost. These products are available in several designs including hardwood and stone finishes. As floor coverings of plastics are easy to install, water resistant, noise absorbing, and easy to clean, they are preferred by several consumers. Floor coverings of plastics can also be used as wall or ceiling coverings. The product is classified under Heading 3918 and 5904 of the Harmonized System (HS) of Coding.

World-wide import of floor coverings of plastics is between USD 10-12 billion per year.

- In 2020, top-5 exporting countries of floor coverings of plastics were: China (61.6%), Belgium (6%), South Korea (4.9%), Germany (3.4%), and France (2.7%).
- Likewise, top-5 importing countries of floor coverings of plastics were: United States of America (40%), Germany (7.5%), Canada (5.1%), United Kingdom (4.5%), and France (4.2%).

In 2020-21, India exported 16,071 tonnes and 774 sqm of floor coverings of plastics valued at USD 44.8 million to the world. United States and America and United Arab Emirates were the major destinations for export of floor coverings of plastics from India

Destination Country	Value (USD Mn)	Destination Country	Qty. (Tonnes)
United States of America	15.86	United Arab Emirates	3,940
United Arab Emirates	6.37	United States of America	3,824
Nepal	2.59	Nepal	1,150
Sudan	2.55	Saudi Arabia	835
Yemen	2.37	Sudan	633
South Africa	1.67	Qatar	576
Samoa	1.09	Yemen	463
Saudi Arabia	0.93	South Africa	394
Somalia	0.92	Oman	387
Ecuador	0.89	Greece	310

Source: Department of Commerce, Govt. of India, Plexconcil Research

### **Product of the Month**

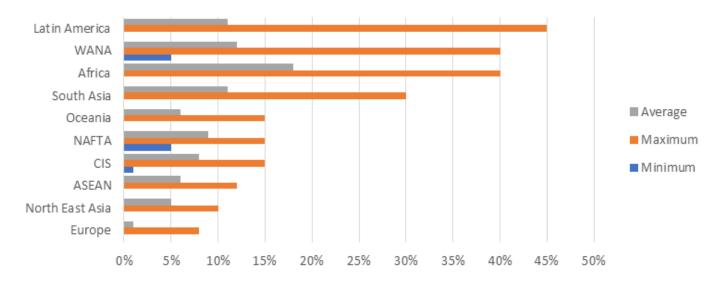
India is also a significant importer of floor coverings of plastics. In 2020-21, India imported 24,873 tonnes and 18,352 sqm of floor coverings of plastics valued at USD 39.7 million from the world. China was the major source for India's imports.

Source Country	Value (USD Mn)	Source Country	Qty. (Tonnes)
China	24.08	China	16,572
United States of America	1.85	Thailand	1,612
South Korea	1.72	South Korea	1,358
Thailand	1.57	Vietnam	1,036
Sweden	1.54	Belgium	647
France	1.26	Sweden	555
Taiwan	1.11	United States of America	529
United Kingdom	0.92	Taiwan	480
Vietnam	0.91	Nepal	430
Netherlands	0.86	United Kingdom	280

Source: Department of Commerce, Govt. of India, Plexconcil Research

Indian firms dealing in floor coverings of plastics have immense potential to export to destinations like United States of America, Canada, United Kingdom, Australia, Japan, Sri Lanka and the European Union. There is zero customs duty applicable on import of floor coverings of plastics from India in the European Union and the United Kingdom due to Generalised Scheme of Preferences Scheme; and in Japan and Sri Lanka due to India-Japan Comprehensive Economic Partnership Agreement and India-Sri Lanka Free Trade Agreement.

Unfortunately, countries in Africa, Latin America, NAFTA and WANA do not accord any preferential treatment to Indian floor coverings of plastics due to which the average customs duty faced on these products is high.



Source: Market Access Map, Plexconcil Research

### **Industry Speak**



Amitaabh Goenka, Executive Director, Premier Polyfilm Ltd.

Despite India's large production capacities / capabilities in PVC Floor Coverings, what is the reason for our huge imports, especially from China?

PVC resin is the main raw material to produce PVC floorings. In India the production of PVC Resin is 1.5 million tonnes and consumption is over 3.0 million tonnes annually. Due to this India is dependent on

imports and CIF prices offered to India is atleast 10% higher than that offered to China by all major suppliers making all PVC products expensive. Also, China has lower production costs as regards electricity, logistics etc which adds to their competitiveness. Indian manufacturing industry is not able to get access to cheaper options of raw materials like first grade virgin/scrap materials as they are not allowed for import unlike manufacturers in China.

PVC Floor coverings raw material has been witnessing high price volatility in addition to supply challenges. How can processors manage their operations in such case, ensuring they remain domestically and globally competitive?

Due to price volatility and supply challenges manufacturers have no option but to import as there is net shortage of Polymer in the country. Ironically there is an anti dumping duty on imported raw materials also which makes the situation worse. The only way for processors is to manage by maintaining stock of these raw materials, but it also adds to costs. They need to remain abreast of market situation and buy in bulk when prices are low.

Scrap PVC commonly used in Europe and available more cheaply is not allowed for import in India though it could help ease manufacturing input costs. What is your opinion on the same?

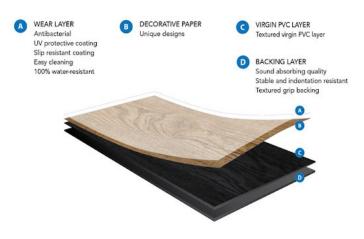
Factories in Europe and America are using scrap PVC for manufacturing first grade finished products which makes the product competitive and also helps have a cleaner environment. These manufacturers advertise on their sample books and shade cards about the percentage of recycled content in their floorings which gives them brownie points. In Europe due to circular economy and extended producer regulations (EPR) post consumer scrap is collected by industry associations, its grinded & processed and supplied back to industry for use in long life products like PVC floorings. PVC being a highly versatile polymer, its scrap is not found in landfills as

it is used several times and hence government should allow import of post industrial PVC rejects without any barriers which can help reduce rampant import of PVC Floorings. As we all know, plastics are recyclable, PVC post industrial rejects is a clean and good quality material, which is post consumer, and it can be used by the PVC processing industry just by grinding it & refeeding it. This will give a fillip to the industry.



What are the most recent advancements in the industry? How does the Indian industry fare at a global scale?

The most recent development is the introduction of LVT and SPC tiles. These are PVC floorings in the shape of long planks or square tiles and provide a floor which resembles a natural wood or stone floor. Several manufacturing units have been setup in India recently and this product is fast replacing the ceramic tile/ vitrified tile space. LVT & SPC tiles are very easy to install and is maintenance free.



### **Product of the Month**

## What are the emerging opportunities for Indian exporters? Which countries are our major competitors in the segment?

Main competition is from the North East Asian countries for reasons as already explained earlier. Prices in Europe & USA is also competitive as the factories there produce in very large quantities and enjoy economies of scale. Recently, due to the China plus one policy and the container freight rate hike issues, opportunities have come up in the American continent and already an upward trend in exports is seen. Emerging opportunities for Indian exporters are in the area of value added products. This market is dominated by China who are able to give perfect and consistent quality and are supplying to the world.

### Logistics and high freight cost have had immense impact on Indian exports in the past year or so. How has the industry been dealing with the challenge?

As far as logistics and high freight costs are concerned industry is like a sitting duck

and has to bear the high freight costs both in imports and exports. We have no option but to pass on the increase to the customers which is making the product expensive. The irony is that when plastic goods become expensive, customers start looking for other options.

### What are the measures needed to enhance exports of PVC Floor coverings?

What has surprising recently has been the MEIS & RoD-TEP. Neither old MEIS scripts have been issued and now we learn that RoDTEP won't be made available to AA holders. We had never expected this and had been always calculating its benefits in anticipation that RoD-TEP has replaced MEIS. Apart from this Government collects import & export data through their Export Promotion Councils and other Trade Bodies on a regular basis. Lots need to be done including renegotiation of trade agreement / bilateral trade partner countries as surge in imports can be easily identified. Presently the FTA allow preferential import duties on imports of value added plastics including PVC floorings. Rather preferential rate of duty should be accorded for Plastic Raw Materials under PTA & FTA's. But I must say CAROTAR has helped curb import of Chinese goods through the 3rd countries under FTA.

## What is the environmental impact of PVC Floor coverings (in terms of manufacturing / recycling, etc)? Would the PWM rules impact the segment?

Environmental impact of PVC Flooring is NIL. These are 100% recyclable and hence an eco friendly product. Rather use of PVC floorings replaces the need to install a wood or stone flooring, thereby preserving our environment. The PWM rules are a good step by the Government of India. It targets single use plastic items and I do not see the PWM rules impacting the PVC Flooring segment which is basically a long life cycle product.







International Trade Show for Plastics, Petrochemicals, Packaging & Rubber Industry



Overseas Associate





















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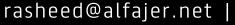




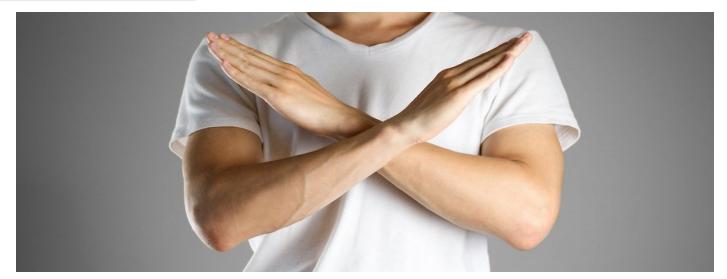








### **Medical Plastics**



### The X factor

Developing a smart medical device is a task that lies somewhere between complicated and complex. Strict regulations and multilayered requirements necessitate an array of skills from product design to manufacturing and processing to risk management. Peik-Christian Witte, head of engineering & innovation, Sanner GmbH, explains how to develop intelligent products with Design for Excellence.

Smart medical devices with certain functions such as reminders or dosage can increase therapy adherence. Products range from intelligent tablet dispensers to retrofittable add-ons for inhalers or injection systems.

Numerous factors feed into the development and subsequent production of such products. Each factor has a different emphasis depending on the complexity and design of the device. In Design for Excellence (DfX), the X stands for a variable that makes a development successful only in optimal interaction with the others (Figure 1).



Figure 1: According to the Design for Excellence (DfX) strategy, only the optimal interaction with numerous other variables will lead to success.

#### Design for product

Requirements management already plays an important role in the initial development phase. Based on numerous customer requirements, product designers should develop concepts that incorporate functionality, manufacturability and costs — also for subsequent series production — and physically convert the results in CAD (computer-aided design) models.

#### Design for usability

User-friendliness and ergonomics make decisive contributions to the correct use and acceptance of the smart medical device, which ultimately improves the therapeutic success. Particular attention must therefore be paid to usability with the aim of minimizing risks from application errors, ensuring patient safety, and creating the framework conditions for the highest possible level of adherence.

#### Design for manufacturing

The product must be optimally designed at an early stage regarding the planned manufacturing and assembly conditions, quality, and costs. Particularly in the case of plastic components, product and process development must go hand in hand, hence material selection, tooling and injection molding technology, the lowest possible number of components and functional integration are considered.

#### Design for assembly

The product design, including product structure, is optimized with regard to assembly. The assembly concept (that is, a partially versus a fully automated process) depends on the number of parts to be assembled.

#### Design to cost

An optimum cost-benefit ratio and low follow-up and modification costs are also relevant. Considerations include the optimum use of materials, the lowest possible number of components, and optimizing manufacturing process cycle times. As electronic components for smart medical devices can also boost manufacturing costs, these too warrant detailed analysis.

#### Design for patient safety

Patient protection, patient well-being and patient benefits are important issues in the development, production and application of smart medical devices. Adverse outcomes or harm from healthcare interventions must be avoided, prevented and/or improved; for example, by ensuring the device is used correctly through sensors that indicate incorrect handling.

#### Design for risk mitigation

To ensure patient safety, risk management in accordance with ISO 14971 is a key element in the development of smart medical devices. Manufacturers must ensure that their products are safe when used properly and eliminate or minimize the risk of error from handling the product.

#### Design for quality

Process reliability and speed play major roles in developing and implementing inspection concepts. Precise, often fully automated, error detection is essential. Today, it can be implemented almost in real time via video assistance systems integrated into the production process. These systems compare the actual results with the specifications from the CAQ (computer-aided quality assurance) system.

#### Design for regulatory requirements

Smart medical devices are usually categorized as 'active medical devices' and are subject to the same strict documentation requirements as all other medical devices. These include risk analysis and risk assessment to prove the safety and performance of a clinical evaluation, as well as comprehensive quality management, especially when using electronic assemblies.

#### Design for recycling

In the case of installed electronic components, environmental aspects such as disposal, recycling, retrofitting and rechargeability play a central role in development. Recycling considerations maximize the proportion of recoverable and recyclable materials; they also help to develop products that facilitate the dismantling and recovery of recyclable materials.

#### **CASE STUDY Best Practice 1: Mouthpiece for inhaler**

A mouthpiece for a measuring device to determine inflammatory activity in chronic respiratory diseases shows how the aspects of Design for Excellence interact: Product and Usability Design ensure high functionality and ease of use. Design for Manufacturing and Assembly defined the multistage assembly line, including filling, welding, and packaging (Figure 2).

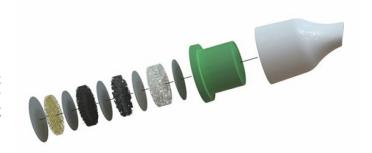


Figure 2: Complexity in a nutshell: the injection-molded mouthpiece for inhalers is filled with different media and components in several stations.

The main challenges in assembly were how to feed the various parts and filling media in a way that would be gentle on the product, to meter them accurately to 1/100 of a gram, and to position and weld components and filter materials in the correct position and fit. The result is multistage, precise, and fast assembly with high reproducibility and quality.

In addition, a fully automated, software-supported 100% inspection of each work step ensures quality control: 15 camera systems inspect presence, correct execution and completeness, while at the same time, six weighing stations check the adequate quantity. This combination eliminates subsequent testing on the finished assembled part, which conserves resources and saves time and costs.

### **Medical Plastics**

#### CASE STUDY Best Practice 2: Add-on device for inhaler

Another example is an add-on device for a DPI (dry powder inhaler [Figure 3]). First, the development team had to answer the following: where and how can we position and attach the electronic components to ensure their functionality and to make the assemblies reproducible for large quantities?

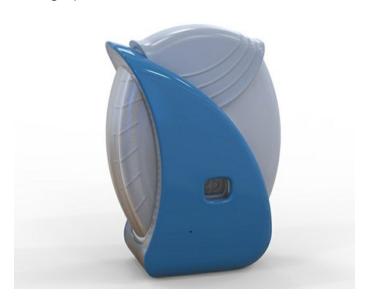


Figure 3: Add-on devices for DPIs illustrate the challenges of developing intelligent medical devices.

The position of the sensors is crucial: for example, one of the sensors ensures the vibration characteristics are optimally transmitted during the inhalation process. This avoids over-dosage or under-dosage and helps maintain both usability and patient safety. The exact position of the sensor also prevents impairments that could arise from the user's grip.

Special attention must also be paid to a flexible tolerance compensation and to the simplest possible tool geometries for fixing the sensor boards, which minimize subsequent cycle times. A pre-assembled battery with holder, which is placed in the bottom of the add-on, facilitates the assembly steps and cabling.

#### Many years of experience

As the two examples show, smart medical devices must be designed to make them ready for series production. These multilayered requirements can only be met by a team of engineers, project and quality managers, as well as compliance experts that precisely coordinate all process steps in Design for Excellence and works together flexibly.

Source: Medical Plastic News



# Top 10 Modern Trends in Performance Plastics

Plastics are now being used to improve quality and safety, and lower manufacturing costs and production time in a wide range of industries including transportation, recreational equipment, medical devices, and many others. Among today's growing trends in the use of performance plastics, here are 10 such trends that span industries and applications.

# 1 Specifying Plastics with Antimicrobial Properties and Enhanced Disinfectant Compatibility.

Following the pandemic, surfaces are now being cleaned and disinfected in ways and frequencies that can quickly degrade traditional plastic materials. New antimicrobial and disinfectant-compatible plastics originally developed for use in hospital equipment are now being specified for many nonmedical applications including aerospace interiors, emergency vehicles, and retail store fixtures.

# 2 Using Transparent Plastics to Create Safer Public Buildings.

Governments around the world are focused on the need to protect citizens in public spaces. The plastics industry has responded with new classes of transparent polymer sheet materials that can resist projectiles and forced entry. These plastics can be used as monolithic glazing or they can be combined with glass and/or other polymers for enhanced levels of protection. Many of these materials are available with scratch-resistant coatings and UV stabilizers for extended service life.

# 3 Using Innovative Plastics for Orthotics and Prosthetics to Improve Patient Outcomes.

There have been dramatic advancements in the plastic materials used for splints, braces, and artificial limbs. New polymer formulations allow healthcare professionals to craft thinner, lighter, more comfortable devices that maximize patient comfort. These polymers are capable of being shaped using only hot water or a handheld heat gun instead of an industrial forming oven. This allows adjustments for fit to be made in a medical office, reducing the time that it takes to fabricate and custom-fit a device

#### 4 Using Detectable Plastics to Enhance Food Safety.

Engineering plastics offer a number of advantages for food processing machinery including reduced operating noise, low friction, and resistance to cleaning chemicals. However, in recent years there has been growing concern that worn or damaged plastic machinery parts could potentially pass through food inspection equipment, resulting in contamination and costly product recalls. New plastics have been formulated which can be detected by a variety of food-safety technologies including X-ray detection, metal detection, and visual inspection methods.

#### **Trends**

5 Replacing Wood with Plastics to Extend Service Life. Wood can quickly rot and degrade in outdoor conditions. This results in short part life, reduced aesthetics, and hazards from splinters. Many products traditionally made from wood such as highchairs, outdoor furniture, playground toys, and boat cabin interiors are now being manufactured from highly engineered polyethylene sheet materials. Polyethylene can be formulated to resist weathering and FDA compliant grades can be used in direct contact with food. Polyethylene sheet is available in a wide variety of colors and can be fabricated using ordinary woodworking equipment. It does not rot or splinter and never requires painting.

# **6** Using Polymers to Reduce Weight and Enhance Fuel Efficiency in Vehicles.

Growing concern over carbon emissions and the desire to develop more fuel-efficient vehicles has resulted in increased use of engineering plastics to save weight. Lightweight, durable polymers are being more widely used in passenger railcars, fixed wing and rotary aircraft, and all types of ground vehicles. Many plastics are available in UV resistant formulations for longer service life outdoors. The plastics used in gasoline and diesel-powered vehicles can be formulated to operate in contact with fuels and lubricants. Reinforced high temperature plastics are used in applications where parts are placed in close proximity to engines.

# 7 Replacing Metals and Thermoset Composites with Reinforced Thermoplastics.

Devices that require high strength and stiffness have traditionally been made from either metals or thermoset composites – which have significant limitations. Metals are heavy, which limits their use for applications where light weight is desired. Thermoset composites tend to be brittle and often have poor chemical resistance. Thermoset manufacturing also tends to be slow and labor-intensive. A new class of thermoplastic composites is at the cutting-edge of materials technology. These materials have strength and modulus values comparable to metals and thermoset composites. They also provide many of the advantages of thermoplastics including ductility, superior chemical resistance and the ability to be quickly formed from sheet using heated metal tooling 8 Specifying Plastics that Don't Interfere with Communications Equipment RF Signals.

The proliferation of connected devices and the introduction of 5G telecommunications has resulted in increased demand for high-performance antennas. Optimum antenna functionality requires plastic radome materials that won't significantly attenuate radio frequency (RF) signals at the operating frequency. Specialized engineering plastics with low dielectric constants and low dissipation factors as well as enhanced toughness, UV resistance, and thermoformability have seen increasing use as protective antenna radomes.

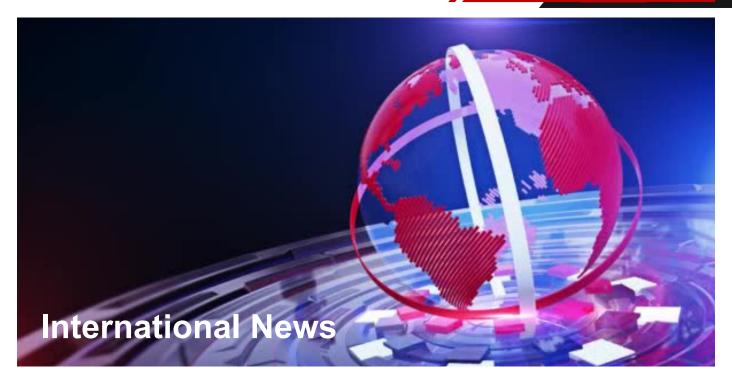
# **9** Using Low-Friction, Long-Wearing Plastics to Eliminate the Requirement for Lubrication.

The machinery used for manufacturing items such as semiconductors, food products, and pharmaceuticals must be maintained at the highest levels of cleanliness. Liquid lubricants such as oil or grease are a potential source of contamination and their use is avoided by these industries to the greatest extent possible. When machinery parts have to move in relative motion to each other, engineering plastics formulated to have low friction and long wear life without the use of external lubrication are often specified.

#### 10 Specifying High-Impact Plastics for Durability.

Traditional plastic materials often fail due to brittle cracking, especially when plastic parts are exposed to elevated temperatures or UV light, or when they are dropped or impacted in cold environments. Recent advances include the development of tougher, more impact-resistant plastic materials that remain ductile even after many years of outdoor exposure or when used at extreme temperatures. These materials are being specified for a wide range of applications including heavy equipment bodies, medical device housings, and aerospace interior components.

Source: ptonline



# Sumitomo Builds Pilot Plant for Chemical Recycling of Acrylic Resin

Sumitomo Chemical plans to construct a pilot facility for chemical recycling of acrylic resin (PMMA; poly-methyl-methacrylate) at its Ehime Works in Niihama City, Ehime Prefecture, Japan. The new facility is scheduled to begin pilot tests in the fall of 2022 and to start providing samples in 2023.

In parallel with this project, the company will work to develop a recycling system for PMMA, from collection of scrap acrylic resin to recycling and reprocessing into products, aiming for early commercialization of chemically recycled PMMA.

Transparent, weatherable, easy-processing acrylic resins are used in a range of applications, such as automotive tail lamp covers, electrical appliances, aquariums, outdoor signboards, liquid crystal displays, building materials, and protective partition panels to reduce the spread of droplets. Global demand for acrylic resins exceeded 1.3 million tonnes in 2020, and is expected to continue to grow steadily in the future.

In response to growing environmental awareness, Sumitomo Chemical is working on the development of various chemical recycling technologies in-house as well as collaborating with other companies and academic institutions. For acrylic resin, the company has been working with Japan Steel Works Ltd. (JSW), combining JSW's continuous plastic decomposition technology using twin-screw extruders with Sumitomo Chemical's expertise on MMA (methyl methacrylate) monomers and acrylic resins.



With its own basic technology to pyrolyze acrylic resin and regenerate it as MMA monomer successfully established, Sumitomo Chemical has decided to construct a pilot facility. The acrylic resin produced by re-polymerizing MMA monomer obtained by this technology is expected to reduce greenhouse gas emissions over the entire product life cycle by more than 60% compared to virgin materials produced from fossil resources, while maintaining the same level of basic properties, such as transparency and strength.

The scrap acrylic resin to be used as a raw material in this pilot test will be sourced from Nippura Co. Ltd., which commands the world's top share in the production of large acrylic panels for aquariums. In order to commercialize chemically-recycled PMMA, Sumitomo Chemical also will begin to study the development of a stable raw material procurement system, including the collection of used acrylic resin from scrapped automobiles, electrical appliances, and protective partition panels. The recycled MMA monomer and the acrylic resin made from it are expected to be used in fields and products in which the added value of recycled materials is

#### **International News**

recognized, including automobiles, where environmental regulations are being tightened, and road sound barriers for public highways.

Source: Plastics Today

#### New PET Blister Packaging Film is Recyclable

Sustainable packaging advancements continue in pharmaceutical markets with the launch of kpNext, a first-to-market innovation in recyclable PET blister films from Klöckner Pentaplast (kp). It's produced from a globally recyclable material and designed to be recycled in the RIC (resin identification code) #1 PET stream.

kpNext is claimed as the only PET recyclable blister that's 100% compatible on pharmaceutical manufacturing form, fill, and seal (FFS) equipment.

It performs as well as conventional materials and is a drop-in replacement for standard blister films. Pharmaceutical companies and converters can utilize kpNext on their FFS lines without a loss of line speed or a need to retool.



"Current pharmaceutical blister packaging is classified as RIC #7, produced from a multimaterial structure, which is not recyclable and therefore is disposed in a landfill or incinerated," says Daniel Stagnaro, head of technology. "Pharmaceutical companies have been challenging blister manufacturers for a solution that is responsible and recyclable. kp has answered those challenges with kpNext."

The film is the culmination of three years' research and development out of the company's kp i.center, an application development lab located in Charlottesville, VA. At launch, Dr. Jorg Schneewind, president of kp's PHD Division, stated: "kpNext is an example of excellence in product innovation because it has been designed to be recyclable and is a seamless transition, taking the burden off our customers to adapt to the sustainable film. Instead, the film adapted to the equipment. It's a true milestone for the industry and for kp."

Source: Plastics Today

### Women in Plastics to host biggest and best event at Interplas 2021

Women in Plastics hosts its own conference session, focusing on attracting, training and retaining talent in the industry. With so many questions around quotas and the right people for the job, should you put people in a job due to gender, race or sexual orientation? The panel will discuss quotas, asking is it simply a promoted tokenism, box-ticking exercise, which could represent an unsustainable short-term fix?

The Women in Plastics community is looking forward to welcoming members old and new to this relaxed and friendly networking morning at Interplas 2021. Interplas is Women in Plastics' home, after the group's debut at the show in 2014, which is why this year the free-to-attend 'Breakfast' networking event and associated presentations will be back at 09.30am on Thursday 30th September in Hall 4.

Representatives and supporters of Women in Plastics of all genders will be in attendance to join the networking morning which will be followed by a panel discussion on Attracting, Training and Retaining Talent.

The panel will include Holly Turner, Material Planner at Bright Green Plastics, Adela Putinelu, Senior Sustainability Executive at the British Plastics Federation, Mark Lawson, Managing Director Sierra57 Consult and Alice Mortiboy an associate at Potter Clarkson.

The event gives attendees the chance to network and learn more about the mentoring opportunities available to women in the plastics industry, helping to pave the way to more female visibility across the sector which in time will help narrow the gender representation gap by inspiring new generations to pursue a career in plastics. Women in Plastics Networking event at Interplas 2021 - 09:45 - 10:30, 30 September 2021

Join the Women in Plastics team for refreshments and networking. You'll be able to meet the founders, members, and companies championing diversity, plus you'll find out more about how you can benefit from the Women in Plastics community. The reception is open to all, not just women.

Source: Interplas Insights

#### **International News**

### LG Chem invests \$2.2 billion to manufacture eco-friendly petchem products

LG Chem today announced that it will invest a total of 2.6 trillion Korean won (\$2.2 billion) by 2028 to build a total of 10 plants, including biodegradable PBAT and POE for solar film, at its Daesan Complex in Chungnam Province.

LG Chem will make a large-scale domestic investment to foster eco-friendly materials in the petrochemical sector. This is to initiate transformation of the business structure towards high value-added sustainability businesses and eco-friendly materials.

Starting with the construction of PBAT and POE plants this year, LG Chem plans to develop the Daesan Complex as a hub for ESG-based businesses, from biobased raw material production to eco-friendly materials, waste plastic recycling, and greenhouse gas reduction by 2028.



Starting construction within this year, the PBAT plant will be built with an annual capacity of 50,000 tons and the POE plant with an annual capacity of 100,000 tons. Both plants aim for commercial production in 2024. The resulting increase in sales is expected to exceed 470 billion Korean won per year.

According to the industry, PBAT and POE are expected to continue to grow at an average annual rate of 30% until 2025 due to increase in demand for perishable plastics and the expansion of new and renewable energy following the ESG trend.

In the case of POE, LG Chem currently has a plant with an annual capacity of 280,000 tons in Daesan, and when the 100,000-ton expansion is completed, the POE production capacity will be expanded to a total of 380,000 tons. This is expected to reach the second largest in the world in terms of production capacity.

Investment agreement (MOU) signed with Chungnam Province and Seosan City for new investment and securement of land. Meanwhile, LG Chem also signed an investment agreement (MOU) with Chungnam Province and Seosan City so that the planned investment can be carried out smoothly.

Through this agreement, LG Chem secured an additional new site with an area of 790,000 m2 (240,000 pyeong) in addition to the existing Daesan Complex site, and decided to actively utilize it for the establishment of a new plant and investment in related eco-friendly materials and processes.

Source: Indian Chemical News

### Avient launches new TPEs with PCR content from automotive windshields

reSound™ R TPEs incorporate 25% recycled content from polyvinyl butyral (PVB) from broken automotive windshields and laminated architectural glass to support a circular economy.

Both new TPEs contain 25 per cent post-consumer recycled (PCR) content from PVB reclaimed from broken automotive windshields and laminated architectural glass.

It is estimated that 75 million broken windshields need replacing each year. This abundant supply includes thousands of tonnes of PVB, found in the inner layer of the glass and potentially bound for landfills. Instead, the outer glass is recycled and the PVB is reclaimed and reprocessed for various uses, including an alternative raw material source for polymers. Avient's unique formulation expertise allows the supply of reprocessed, high-quality, non-toxic PVB to be upcycled into more sustainable TPEs with excellent properties.



Developed in 45 to 55 Shore A durometers, the new re-Sound R grades are ideal for general purpose applications in the consumer and automotive industries. Both TPEs can be over-moulded to PP and come in a natural grade that can be easily coloured.

These reSound R grades with PCR content offer similar performance properties to traditional TPEs and are suitable for many durable consumer products and grips – such as personal care items, consumer goods, and foot-

#### **International News**

wear. Their performance properties also fit automotive applications that could benefit from vibration damping. Matt Mitchell, Director, Global Marketing of Specialty Engineered Materials at Avient, said: "This technology brings together advanced material science and innovation to support customers' goals and the circular economy. These material developments create an opportunity to help divert mountains of valuable resources from the waste stream and upcycle them into new products."

Jens Holmegaard, CEO and Founder of Shark Solutions, added: "Our mission is to create high-performance raw materials from a former waste stream of laminated glass, instead of allowing it to decompose in landfills over thousands of years. Avient shares our vision to preserve limited natural resources for future generations through products that enhance performance and protect the environment."

Available globally, the new reSound R TPEs are formulated with regionally recycled PVB. A complete view of the reSound R line of recycled-content TPEs can be viewed on Avient's website.

Source: Interplas Insights

### Cool Idea Award Helps Nonprofit Create Custom Boombox Component

The most recent recipient of the Cool Idea Award from Maple Plain, MN-based Protolabs is John Weiss, founder of The BOOM, a San Francisco-based nonprofit that teaches engineering skills to marginalized teens. The award, a manufacturing grant that aids development of innovative products, enabled The BOOM to develop a 3D-printed nylon part for boombox battery packs.

Teen apprentices at The BOOM learn from engineering mentors about electronics, woodworking, metalworking, and product design by assembling retro boomboxes using recycled and repurposed materials. The boomboxes are then painted by local artists specializing in genres such as comics, tattooing, and videogames. Each completed boombox is unique.



Protolabs' Cool Idea Award funded development, design, and testing of a part needed to create an expand-

able battery pack for the boomboxes. That part — which securely holds multiple batteries together, creating a single pack — was not readily available and required a custom design.

It needed "to fit an off-the-shelf component, including internal features. We didn't have access to production documents for the off-shelf part, so we were designing blind," Weiss told PlasticsToday.

Weiss designed the small part and worked with Protolabs, a leading digital manufacturing services provider, to manufacture it. The design features an intelligent dovetail joint that couples with inexpensive off-the-shelf battery spacers. The nylon spacer nut is created using an industrial 3D-printing process.

"The spacer nuts are made of PA 12 Black [or nylon 12], which is known for its durability, strength, and near isotropic mechanical properties," Brent Renneke, public relations and media strategist at Protolabs, told PlasticsToday. "They were manufactured using a Multi Jet Fusion printer, meaning that these strong parts had high-resolution features with quality surface finishes — and they could be made in as fast as one day. Another benefit of using PA 12 Black is that it is a comparatively inexpensive material."

The BOOM initially planned to injection mold the part, but the cost of tooling made that method cost-prohibitive. "We realized that an additive process was the most appropriate option for our volume," Weiss says.

Renneke recalls that after Protolabs and Weiss "settled on 3D printing, our digital manufacturing process created a digital twin of John's part for automated design-for-manufacturability feedback, which identifies any issues up front in the design that could slow down the manufacturing process. We were able to work with John to easily correct any issues here, and then send his part to our shop floor through the digital thread that connects our e-commerce system to the manufacturing process. This part was created at our 3D-printing facility in Morrisville, NC. In the end, the part was uploaded, manufactured, and shipped in two weeks."

"After we won the Protolabs Cool Idea Award, Autodesk hosted The BOOM in a residency with their Technology Center. An amazing team of volunteer Autodesk designers helped us bring the component much closer to market readiness".

The Cool Idea Award is presented throughout the year, as Protolabs discovers projects that are a good fit.

Source: Plastics Today

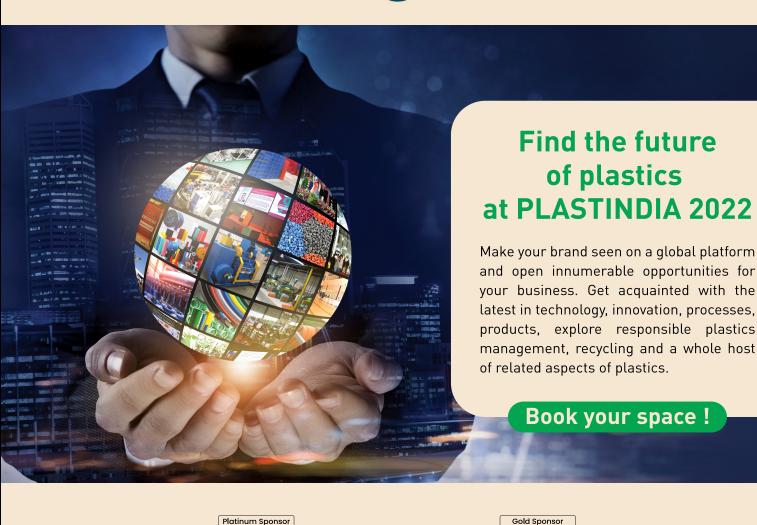


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### Serum Institute buys out Indian partner in SCHOTT Kaisha joint venture

Vaccine-maker Serum Institute of India has bought out the Indian partner in the SCHOTT Kaisha joint venture for an undisclosed amount.

SCHOTT is a German speciality glass company and Serum Institute now becomes its new partner, as it picks up 50 per cent stake in the Indian joint venture SCHOTT Kaisha, from former co-owners Kairus Dadachanji and Shapoor Mistry.

The development will help Serum Institute tie up its back-end supplies in the wake of global demands, as the JV makes pharma packaging products, including vials, syringes, ampoules and cartridges used to package life-saving medications.

"Even the best medication can't reach the patient without the right packaging. Securing this supply chain is of strategic importance. SCHOTT is the perfect partner for us to do this because of their expertise and global network. As a longtime customer, we use their vials, ampoules and syringes to store our vaccines, including Covishield," said Serum CEO Adar Poonawalla in a statement.

Dr Frank Heinricht, CEO, SCHOTT, added: "As India has steadily established its position as a global pharmaceutical hub, we are delighted to strengthen our footprint within the Indian pharma supply chain."

Eric L'Heureux, the new Managing Director and former longstanding head of operations with the venture, said: "We have significantly increased our production capacity in India. Over the last three years we have invested roughly ₹600 crore to set up two new plants in Umarsadi, Gujarat, and Baddi, Himachal Pradesh, and to secure uninterrupted supply in our existing facilities during the pandemic."

Both SCHOTT and Serum are committed to invest further, and will announce concrete plans as this partnership evolves, the statement said. On the packaging end, SCHOTT has already exceeded its target to deliver vials for more than 2 billion vaccine doses through 2021. The company is providing glass vials globally to key vaccine manufacturers. The fact that SCHOTT has an integrated value chain, covering also the glass tubing the packaging is made of, further helped to secure the supply chain, it said.

Source: HinduBusinessLine

### Manjushree Technopack buys packaging co Classy Kontainers

Advent International backed Limited (MTL), one among India's largest packaging firms, on Monday introduced the acquisition of Classy Kontainers, India's largest custom-molded inflexible packaging provider, for an undisclosed sum to additional consolidate its presence within the quick rising section.



However, sources conversant in the transaction, stated MTL paid round Rs 350-Rs 400 crores for the goal. This would be the second acquisition by Manjushree after Pearl Polymers final September.

As per the transaction, the proposed acquisition will give Manjushree entry to all manufacturing models of Classy Kontainers – situated in 5 cities and serve the latter's present purchasers within the paints, adhesives, Chemicals and FMCG segments.

"The acquisition is in line with our aggressive, inorganic growth and business diversification plans," Sanjay Kapote, MD & CEO of Manjushree Technopack Limited, stated. "It will allow us to consolidate our position as leaders in the rigid-packaging sector and diversify our presence into new rigid packaging market segments. Given our success in acquisitions till date, we expect a seamless integration of Classy Kontainers with the rest of the MTL group."

With over 40 years of packaging experience in India, MTL caters to the packaging necessities of the FMCG, F&B, homecare, private care, agrochemicals, pharmaceutical, and liquor industries. With a producing capability of 1,90,000 MT each year and a turnover of round Rs 1200+ crore, MTL is amongst the highest mid-sized firms in India.

Classy Kontainers has a manufacturing capability of greater than 12,000MT polymer processing, specializing in HDPE & PP packaging.

"MTL's technological strength, product range and geographical spread, coupled with Classy Kontainers' robust business will help us deliver complete packaging solutions to our customers in the future. Post-closing of the transaction, the promoters will continue to work with MTL to ensure smooth transition and future business growth," Kapote added. Manjushree was suggested by Khaitan & Co & Classy Kontainers was suggested by Cyril Amarchand Mangaldas and UnaPrime Investment Advisers on this deal.

"Classy Kontainers is a pioneer when it comes to innovative solutions for rigid packaging in India. With the strength of our team and MTL's nationwide customer base in every segment we are confident this partnership will add tremendous value to our Customers and help us the business to next level of growth," stated Rajiv Mehta, Partner at Classy Kontainers, stated.

Source: The Greater India

# FM asks banks to work with state govts to push 'one district, one product' agenda

Finance Minister Nirmala Sitharaman said she has requested banks to work with all state governments to push the 'one district, one product' agenda.

Banks have also been requested to interact with export promotion agencies, chambers of commerce and industry to understand and address the requirement of exporters on time, Sitharaman said while addressing media here on Wednesday.

The Finance Minister, who is on a two-day visit to the financial capital, said there should be some simple approach between public sector banks so that exporters are not made to run between one bank to another, scouting for a better offer.

Source: The Hindu Business Line

### Grace Licenses UNIPOL PP process technology to GAIL

W. R. Grace & Co., the leading independent supplier of polyolefin catalyst technology and polypropylene (PP) process technology, has licensed its UNIPOL PP process technology to GAIL (India) Limited.

The UNIPOL PP process technology will be used for a 60 KTA polypropylene plant located at their existing petrochemical complex in Pata, India.



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M. V. Iyer, Director of Business Development, said, "We are excited to partner with Grace and their UNIPOL PP process technology at our existing gas cracker complex in Pata, India. The total project economics, which included a catalyst supply agreement, made this an easy choice for us. We plan to produce a variety of homo-, random, and impact- copolymer resins using our existing propylene supply."

Grace's all gas-phase UNIPOL PP process delivers technology, innovation, and services for plant lifetime performance. The versatile process technology provides the broadest range of PP homopolymers, random copolymers, and impact copolymers in the industry.

The UNIPOL PP process is a state-of-the-art engineering technology that achieves mechanical and operational simplicity and delivers leading total installed cost and operating expense, accelerated project schedules, fast startups, grade transitions, and business results. The process technology, coupled with Grace's proprietary catalyst and donor systems and the UNIPOL UNIPPAC Process Control System, allows for maximum performance.

"We are thrilled that GAIL has chosen our UNIPOL PP process technology," Laura Schwinn, President of Grace's Specialty Catalysts business, said. Schwinn added, "Our UNIPOL PP process technology, our catalysts, and our global technical services team will provide GAIL with the ability to produce leading products and help them meet the growing demands for non-phthalate resins in the market."

All UNIPOL PP licensees can take advantage of Grace's strong long-term commitment to ensure their success through support which includes continuous process and product improvements, access to superior catalysts and donor technology, and on-going global technical support for the lifetime of the plant.

Source: Indian Chemical News

### India's exports to ASEAN estimated at USD 46 billion in FY22: MoS Anupriya Patel

Union Minister of State for Commerce and Industry Anupriya Patel on Monday said that India is expected to export USD 46 billion to ASEAN in the financial year 2022.



Patel on Monday inaugurated the "India-ASEAN Engineering Partnership Summit" organised by the Engineering Exports Promotion Council (EEPC) with support from the Ministry of External Affairs and the Department of Commerce.

While addressing the inaugural session, Patel said: "As one of the largest destinations for Indian exports, ASE-AN will be an important region for India with an export target of USD 46 billion in meeting the global export target of USD 400 billion in the financial year 2021-22."

"Both India and ASEAN have large share of skilled population, robust service and manufacturing sectors and there are many complementary sectors and products available for greater cooperation. With a combined economy of approx. USD 5.8 trillion, there is significant potential for enhancing trade and investment partner-ship between India and ASEAN."

Patel further said that Prime Minister Narendra Modi has set a target of USD 400 billion of merchandise exports for fiscal 2021-22 and also envisioned a roadmap to achieve this milestone.

"As a part of the Atmanirbhar Bharat Abhiyaan, the Central government has recently approved the Production-Linked Incentive (PLI) Scheme worth USD 26 billion covering 13 sectors, including electronics, pharmaceuticals, solar modules, speciality steel, automobiles, and medical devices for attracting investment and enhancing India's manufacturing capabilities," she said.

Source: ET

### FTAs could up exports of auto components and textiles: India Inc's top CEOs

A committee comprising India Inc's top CEOs have argued that India's proposed Free Trade Arguments (FTAs) could help increase exports of auto components and textiles.

Focussing on cost and ease of doing business, market access via trade treaties, technology and quality issue and supporting Brand India for manufacturing, the Steering Committee for Advancing Local Value-Add and Exports (SCALE committee) suggested that a sustained effort be maintained to reduce disabilities for domestic businesses.

Headed by former M&M MD, Pawan Goenka, the committee is working on improving exports of 24 products that have been identified by them. He said that the government must focus on addressing cost issues, related to land, power and capital, and scale, which in turn helps in lowering cost disabilities.

He added that businesses can be made more competitive in the global markets by addressing concerns related to infrastructure and logistics, labour flexibility. Strengthening MSMEs could also help in lowering costs for companies.



The committee put up a presentation at a meeting between industry players and the Minister of Commerce, Piyush Goyal. In the meeting, the committee suggested a push to the "China plus one" strategy. This would help to pull in foreign investment and would also position India as an export hub.

Piyush Goyal agreed with most of the points stated, and said that the government is working towards certain points already. The committee added that with the FTAs in place, auto components could be the biggest gainer across markets like the UK, US and the EU.

Besides that, treaties with the UK, EU, Asean, South Asia and the US could benefit textiles. ACs and drones could also gain in four markets each.

Source: ET

### India pips US to rank 2nd in list of most attractive manufacturing hub globally; China 1st

India has overtaken the United States (US) to become the second-most sought-after manufacturing destination globally, driven mainly by cost competitiveness, according to real estate consultant Cushman & Wakefield. China remains at number one position, the consultant said in its 2021 Global Manufacturing Risk Index, which assessed the most advantageous locations for global manufacturing among 47 countries in Europe, the Americas and Asia-Pacific (APAC).

"India takes the second spot after China as the most sought-after manufacturing destination globally," Cushman and Wakefield said in a statement. The US is at third position, followed by Canada, Czech Republic, Indonesia, Lithuania, Thailand, Malaysia and Poland. In the last year's report, the US was at second position while India ranked third.

The consultant said that this indicates the growing interest shown by manufacturers in India as a preferred manufacturing hub over other countries, including the US and those in the APAC region. "The growing focus on India can be attributed to India's operating conditions and cost competitiveness. Also, the country's proven success in meeting outsourcing requirements has led to the increase in the ranking year-on-year," the statement said.



The rankings in the report are determined based on four key parameters, including the country's capability to restart manufacturing, business environment (availability of talent/labour, access to markets), operating costs, and the risks (political, economic and environmental). The baseline ranking for top manufacturing destinations is determined on the basis of a country's operating conditions and cost effectiveness.

"This year, India and the US switched places (second and third) taking India one rank above from the rankings released last year, when India stood at the third place. "This switch in ranking is attributed to the plant relocations from China to other parts of Asia due to an already

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established base in pharma, chemicals and engineering sectors, that continue to be at the centre of the US-China trade tensions," it said.

As far as the cost scenario ranking goes, India continued to retain the third spot like last year, while Vietnam is pushed to the fourth position from the third. "Despite being among the top-three countries in the baseline and cost scenario rankings, there is a long road for India to traverse when it comes to areas like managing the geopolitical risks involved in running business and its ability to restart its manufacturing business after a devastating second wave of the COVID-19 virus," Cushman said.

Source: FE

### Piyush Goyal asks industry to flag non-tariff barriers in exports

Concerned about protectionism by stealth adopted by some nations, commerce and industry minister Piyush Goyal asked industry associations to flag non-tariff barriers (NTBs) faced by Indian exporters in various countries so that New Delhi can firm up appropriate responses wherever feasible.

Urging domestic industry to work on improving its competitiveness and help the country realise an ambitious merchandise export target of \$400 billion for FY22, Goyal said, "The key to success is to focus on goals, not obstacles." Merchandise exports until the second week of August this fiscal jumped 71% from a year before and 23% over the same period in FY20 (pre-pandemic level), the minister said.

Highlighting the growth in the start-up ecosystem, the minister said over 54,000 start-ups were providing more than 5.5 lakh jobs, and more than 20 lakh jobs will be created by 50,000 new start-ups in the next five years.



FE had earlier reported that major developed and developing countries, such as the US, China, South Korea, Japan and those in the EU, had put up huge NTBs to discourage "undesirable imports", even though they claim to maintain a low-tariff regime.

The US had put in place as many as 8,453 NTBs, followed by the EU (3,119), China (2,971), South Korea (1,929) and Japan (1,881), according to a commerce ministry analysis last year, based on World Trade Organization data. In contrast, India has imposed only 504 NTBs.

While non-tariff measures are not always aimed at curbing imports — for instance, safety, quality and environmental standards are put in place by all countries for imported products — what has often worried analysts is that they can be abused for trade protectionism.

Goyal highlighted incentives for manufacturing through the production-linked incentive schemes and the need to focus on 24 sectors to attract investment. He also emphasised the "One District, One Product" programme to create a pool of 739 products for exports from 739 districts. Similarly, he highlighted the India Industrial Land Bank for providing a GIS-enabled database of industrial areas. Industry should suggest areas for intervention through research, handholding of exporters/manufacturers, deeper engagement with states and greater engagement with overseas missions, among others, to realise the export target, he said.

Source: FE

### Export credit: Key interest subsidy scheme to be extended

The government is considering a proposal to extend the validity of the interest equalisation scheme for exporters by 2-3 years from the September 30 deadline, a senior official told FE.

Any such move will lend predictability to the policy regime and continue to support Covid-hit exporters with cheaper credit at a time when they are striving to reap benefits of a resurgence in global demand for merchandise.

Under the scheme, large manufacturing and merchant exporters get an interest subsidy of 3% on pre- and post-shipment rupee credit for the outbound shipment of 416 products (tariff lines). However, manufacturing MSMEs get a 5% subsidy on such credit to ship out any product.

The government has budgeted Rs 1,900 crore for the scheme for FY22, compared with Rs 1,600 crore (revised estimate) for FY21. "The commerce ministry is in talks with the finance ministry on this issue. A Cabinet note will be floated very soon," the official said.



However, the government may reduce the subvention rates to suit current realities, given that interest rates have declined substantially from the levels when the scheme was rolled out.

The scheme, introduced in 2015, was initially valid up to March 2020. Its validity was then extended periodically, along with that of the foreign trade policy, up to September 2021.

The scheme has been an effective instrument for exporters, especially the small ones, struggling to cope with a cash crunch in the aftermath of the Covid-19 outbreak. Having witnessed a 7% year-on-year drop in FY21, the country's goods exports have staged a rebound this fiscal. Exports in the first four months of this fiscal rose to \$130.8 billion, recording a jump of 75% year on year and 22% from the pre-pandemic level (same period in 2019), as orders from key western markets poured in and global commodity prices remained elevated.

Of course, export growth was subdued even before the pandemic – outbound shipments rose about 9% in 2018-19 but again shrank by 5% in 2019-20. So only a sustained uptick over the next 2-3 years would help recapture the lost heights. Sustained credit push will help exporters benefit from a rise in external demand.

However, inadequate credit flow to exporters has been a nagging issue for the past three years before the recent pick-up. Export credit under the priority sector grew 18.3% as of June 19 from a year before, driven by a favourable base and growing demand in light of the latest surge in exports.

Ajay Sahai, director-general and chief executive at apex exporters' body FIEO, said the interest equalisation scheme has immensely benefited the exporters, especially the small ones, as it has made credit available at reasonable costs.

The International Monetary Fund last month revised up its predictions of global trade volume growth by a sharp 130 basis points for 2021 to 9.7% and 50 basis points for 2022 to 7%. India is set to benefit from the expected rise in global trade prospects once its supply side gains traction.

The government has already set an ambitious merchandise export target of \$400 billion for FY22, against \$291 billion last fiscal. Keeping up the flow of cheaper credit remains critical to materialising the target, exporters say.

Source: FE

### Nayara Energy achieves financial closure for foray into petrochemical business

The company signed a financial agreement with a consortium of banks led by SBI for a project term loan of ₹4,016 crore. Russia's Rosneft-backed Nayara Energy said it has achieved financial closure for phase-one expansion plans for petrochemical business following the tie-up of ₹4,016 crore funds from banks.

The company, which operates a 20 million tonnes a year refinery at Vadinar in Gujarat, is setting up a 450 kilo tonnes per annum polypropylene plant at the refinery to mark its foray into petrochemicals business.

"The company signed a financial agreement with a consortium of banks led by State Bank of India for a project term loan of ₹4,016 crore," the company said in a statement. For the proposed project, it is already in possession of required land.



In 2019, Nayara Energy had first announced its plans to expand into petrochemicals at the Vibrant Gujarat Summit. "The loan facility carries a tenor of over 15 years and is amongst the largest private sector project finance deals in recent times," the statement said. The project is proposed to be funded with a mix of debt and equity, it said without giving details.

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Alois Virag, Chief Executive Officer, Nayara Energy said, "The financial closure brings to fruition our growth plans to become one of the largest integrated energy and petrochemicals complexes in the country." The demand for polypropylene, he said, is expected to grow at around 10 per cent per annum.

"The construction of the first phase of the petrochemicals project is expected to be completed in 2023," he said. "With this foray into petrochemicals, we are committed to make India a world-class petrochemicals hub." The buoyant response from financial institutions despite tepid market conditions is a vindication of the trust and confidence in the company, its strong parentage and leadership, Anup Vikal, Chief Financial Officer, Nayara Energy added.

"The project will provide a boost to the profitability of the company and improve Nayara Energy's overall financial performance over the next few years in line with the asset development strategy adopted by the shareholders," he said.

In August 2017, Rosneft and an investment consortium comprising global commodity trading firm Trafigura and UCP Investment Group had acquired Essar Oil and renamed it Nayara Energy.

The company owns and operates India's second largest single site refinery. It also operates a fuel retail network consisting of over 6,000 petrol pumps across India and is the fastest growing private retailer in the energy sector.

Source: Hindu Business Line

### DGTR recommends anti-dumping duty on polyester yarn from China, Indonesia, Vietnam

The commerce ministry's investigative arm DGTR has recommended the imposition of anti-dumping duty on polyester yarn – used in making fabric for garments and home furnishing – from China, Indonesia, and Vietnam for five years, according to a notification.

The move is aimed at protecting domestic players in the sector against cheap imports from these countries.

The Directorate General of Trade Remedies (DGTR) has recommended the duty after concluding its probe that imports of the yarn from these countries have been exported at dumped prices in India, which has impacted the domestic industry.



"The authority accordingly recommends imposition of anti-dumping duty...on all imports of goods... originating in or exported from China, Indonesia and Vietnam for a period of five years from the date of notification to be issued in this regard by the central government," the directorate has said in a notification.

The duty suggested is in the range of USD 4 per tonne and USD 281 per tonne. The finance ministry takes the final call to impose these duties.

"The authority is of the view that the imposition of anti-dumping duty is necessary to offset dumping and injury," it added. The DGTR conducted the probe following a complaint by domestic players.

The directorate is an investigative arm of the commerce ministry, which probes dumping of goods, a significant increase in imports and subsidised imports from India's trade partners.

In a separate notification, the directorate has recommended imposition of the duty on imports of 'Aceto Acetyl Derivatives of aromatic or heterocyclic compounds also known as Arylides' from China. These countries are important trading partners of India.

Countries carry out anti-dumping probes to determine whether their domestic industries have been hurt because of a surge in cheap imports. As a countermeasure, they impose duties under the multilateral regime of the WTO (World Trade Organisation).

The duty is to ensure fair trade practices and create a level playing field for domestic producers concerning foreign producers and exporters.

Source: FE

#### **Cloud Chemicals To Foray Into Manufacturing**

Cloud Chemicals - a contract manufacturing and chemicals' distribution company primarily catering to the plastic, paints and ink industry - has been extremely successful while trading with a reputed network of overseas manufacturers for the past many years now; well catering to the needs of the industry.

As part of the launch of "Make-in-India" in September 2014, the Government of India has undertaken several reforms to create an enabling environment for manufacturing, design, innovation and start-ups while introducing special schemes for MSMEs.

Taking advantage of these opportunities while already having carved a niche for itself in the business of wholesaling, trading and exporting of optimum quality high performance pigment, inorganic pigment, organic pigment and glass flake, Cloud Chemicals has expanded its horizons and forayed into the manufacture of a range of titanium dioxide and pigments.

The manufactured range includes 3 grades of Titanium Dioxide (C 950, C 900 and C 800) and pigments for application in rigid PVC pipes and garden pipes among others. Plans are afoot to manufacture a range of additives.

This initiative by Cloud Chemicals of providing readyto-use colours for the PVC pipe industry is infact a pioneering initiative in India. Consistent quality through an elaborate pan-India distribution network for an efficient just-in-time delivery continue to be the stand out facets of the Cloud Chemicals business. "With a current capacity of 15 tonnes per month, and scalable to 75 tonnes per month, we at Cloud Chemicals are all set to make a mark in this sector too", highlights Pranav Shah, Director, Cloud Chemicals Pvt. Ltd. The technology deployed in the manufacturing process is 'tumbler blending with high-speed mixer blending'.

Armed with a warehouse each in the main metros of Mumbai and Delhi and more than 500 clients across 21 Indian states, the company intends to put its well-established trading network to good use in promoting its product. The objective is to begin with local manufacturing and scale it up to cater to the needs of the Indian and global markets.

Furthermore, Cloud Chemicals prides itself for reliable distribution along with total quality management, continuous improvement and responsible care towards the society and environment.

Riding on its strong presence and outreach among trading partners, both domestic and overseas, the company is confident of setting up a manufacturing facility of its own. The data that India turned a net exporter of chemicals and related products for the first time in at least a decade in FY2020 lends weight to the claim that the country's chemicals' sector can be a sustained driver of its merchandise exports and Cloud Chemicals is keen on being part of this success story.

### Why become a Plexconcil Member?

#### Why become a Plexconcil Member?

Established since 1955, the Plastics Export Promotion Council, PLEXCONCIL, is sponsored by the Ministry of Commerce and Industry, Department of Commerce, Government of India. PLEXCONCIL is a non-profit organization representing exporters from the Indian plastics industry and is engaged in promoting the industry exports.

The Council is focused on achieving excellence in exports by undertaking various activities and initiatives to promote the industry. The Council undertakes activities such as participation at international trade fairs, sponsoring delegations to target markets, inviting foreign business delegations to India, organising buyer-seller meets both in India and the overseas etc.,

The Council also routinely undertakes research and surveys, organizes the Annual Awards to recognize top performing exporters, monitors the development of new technology and shares the same with members, facilitates joint ventures and collaboration with foreign companies and trade associations as well as represents the issues and concerns to the relevant Government bodies.

The Council represents a wide variety of plastics products including – Plastics Raw Materials, Packaging Materials, Films, Consumer Goods, Writing Instruments, Travel ware, Plastic Sheets, Leather Cloth, Vinyl Floor Coverings, Pipes and Fittings, Water Storage Tanks, Custom made plastic Items from a range of plastic materials including Engineered Plastics, Electrical Accessories, FRP/GRP Products, Sanitary Fittings, Tarpaulins, Laminates, Fishing Lines/Fishnets, Cordage/Ropes/Twines, Laboratory Ware; Eye Ware, Surgical/Medical Disposables.

#### Membership Benefits

- Discounted fees at International Trade Fairs and Exhibitions
- Financial benefits to exporters, as available through Government of India
- Disseminating trade enquiries/trade leads
- Instituting Export Awards in recognition of outstanding export performance
- Assistance on export financing with various institutions and banks
- Networking opportunities within the plastics industry
- Listing in PLEXCONCIL member's directory

# The Plastics Export Promotion Council added the following companies/firms as new members during July 2021. We would like to welcome them aboard!

Sr. No	Name of the Company	Address	City	Pin	State	Director Name	Email
1	ALBA PACKS	NO. 67/1, KUMBIKULAM RAD- HAPURAM TALUK	TIRUNELVELI	627112	Tamil Nadu	G THANA- LAKSHMI	info@alba- packs.com
2	AM HAIR PRIVATE LIMITED	VILL & PO KAZISAHA, PS BEL- DANGA MURSHIDABAD	MURSHIDA- BAD	742133	West Bengal	ALAMGIR SK	AMHAIR327@ GMAIL.COM
3	APOLLO POLIWRAP	PLOT NO 21, SURVEY NO. 335, BALDA, TALUKA-PARDI	PARDI	396125	Gujarat	Varun Desai	varun.desai@ apollo-industri- es.com
4	AR SQUARE INFRA SOLUTIONS	L-3, HIMALAYA ACCORD APARTMENT, OPPOSITE LAW COLLEGE, AMRAVATI ROAD,	NAGPUR	440010	Maharashtra	GIRISH DHA- RAMPAL JAIN	vchorghade@ arsquare.co.in
5	AROVA PUMPS PRI- VATE LIMITED	4TH FLOOR, OFFICE-401, ARCON APPARTMENT, GHOD DOD ROAD,	SURAT	395007	Gujarat	SHYAM KANHAIYALAL AGARWAL	radhagovind@ alphapacka- ging.co
6	BAAWAN OVERSEAS	FLAT NO 409, AKSHARDEEP CO. OP. HOUSING SOCIETY, KHADKI BAZAAR, NEAR KHADKI CANTONMENT HOSP.	PUNE	411003	Maharashtra	SHABBIR POO- NAWALA	BAAWAN. OVERSEAS@ GMAIL.COM
7	BAHETI POLYFAB PVT LTD	H-751, NEW HOUSE BOARD, SHASTRI NAGAR,BHILWARA H-751, NEW HOUSE BOARD, SHASTRI NAGAR,BHILWARA	BHILWARA	311001	Rajasthan	ASHIT BAHETI	baheti- polyfab007@ gmail.com
8	BHOLENATH INTER- NATIONAL	PLOT NO 36-37 PAIKI, GO- PALVADI-2, NEAR SAIBABA MANDIR, JOSHIPURA,	JUNAGADH	362001	Gujarat	PULKIT POS- HIYA	sales@bhole- nathinternatio- nal.com
9	CHOLA ECO POLY- MERS	NO:2/84 , VENDAYMAPATTI MAIN ROAD ,VENDYAMPATTI ,	THANJAVUR	613402	Tamil Nadu	LOGANATHAN SIVAPRAKASH	info@cholaep. com
10	EMMAR PACIFIC LLP	B-2/106, 1ST FLOOR, RAJAS- HREE SHOPPING CENTER CHSL; NEAR POST OFFICE, OPP. RAILWAY STATION,MIRA ROAD (EAST)	THANE	401107	Maharashtra	Ashok Purohit	emmar.pacific@ gmail.com
11	FEBIX POLYPACK LLP	SURVEY NO 59/2P1, NEAR KALYANPAR VILLAGE, NEAR GANGOTRI INDUSTRIES, TANKARA,	TANKARA	363650	Gujarat	SHAILESH PATEL	KAPIL@FE- BIXPOLYPACK. COM
12	FOUR M PROPACK P LTD	PLOT NO.8,9, INDUSTRIAL AREA, MAXI ROAD,	UJJAIN	456010	Madhya Pradesh	VISHNU JAJOO	dgft@shrijipoly- mers.com
13	GLOBRIDGE MAR- KETING SERVICES	Flat B - 602, Mercury Co Op Housing Society Limited, Vasant Galaxy, Bangur Nagar, Goregaon West,	MUMBAI	400104	Maharashtra	ISHA GHOD- GAONKAR	ishag2009@ gmail.com
14	HI TECH POLYMERS	SURVEY NO 654, VILLAGE - KUBADTHAL, OPP SUN INDUSTRIAL PARK, TA- DASC- ROI,	AHMEDABAD	382430	Gujarat	JIGNESHKU- MAR	hitech.hi- techpolymers@ gmail.com
15	JAGDISH POLY- FILMS	KHASRA NO 18/9//1/2, NATHUPUR INDUSTRIAL AREA, NEAR RAJPAL DHARM KANTA, NATHUPUR VILLAGE,	SONIPAT	131028	Haryana	MUKESH GOEL	jagdishpoly- films@yahoo. com
16	KETAN MONOPHI- LAMENT PRODU CT	JUNAGADH ROAD, NEAR RAILWAY CROSSING,	DHORAJI	360410	Gujarat	KANTILAL DHANJIBHAI GAJERA	ketanmonop- ro@yahoo.co.in
17	MAHADEV PACKA- GING	25 AMARNATH ESTATE PART - 1, DEHGAM NARODA ROAD, NARODA	AHMEDABAD	382330	Gujarat	Samir Vachhani	sales.maha- devpackaging@ gmail.com

# New Members

18	MANJUSHREE SPNTEK PRIVATE LIMITED	143, C-5, BOMMASANDRA INDUSTRIAL AREA HOSUR ROAD,	BANGALORE	560099	Karnataka	BASANT KU- MAR MOHATA	bkm@manjus- hreeventures. com
19	NU-TECH INDUST- RIAL PARTS PRIVA- TE LIMITED	2/555A BABU JEGAJEEVAN- RAM STREET GERUGAMBAK- KAM KUNDRATHUR ROAD	CHENNAI	600122	Tamil Nadu	SUBRAMA- NIAM MURU- GESAN	dbaskar@nu- techwindparts. com
20	PATCO EXPORTS PVT LTD	2-B/5, VIVINA BUILDING, SU- PER SHOPPING CENTER, SV ROAD, ANDHERI WEST,	MUMBAI	400058	Maharashtra	JYOTI D GAJ- JAR	patcoexports@ gmail.com
21	PLASTO MANUFAC- TURING COMPANY	NO. 107/2 KUMBALGODU INDUSTRIAL AREA, GERUPAL- LAYA	BANGALORE	560074	Karnataka	IMRAN PASHA	accounts@ plastobag.in
22	PRAAG MULTIPACK LLP	SURVEY NO.179, NR. EVEREST FERTILISER, NH 8B, VERAVAL, KOTDA SANGANI,	RAJKOT	360024	Gujarat	MAYANKBHAI BHARATBHAI MEHTA	info@praag.in
23	PRIME ROTO PLAST	A/9, EKTA INDUSTRIAL ESTA- TE, TEMPA GALI, PIPODARA, NH-8, TA-MANGROL,SURAT	SURAT	394110	Gujarat	LAKKAD GHANSHYAM VINODBHAI	primerotop- last007@gmail. com
24	SHREESHAKTI SYN BAGS PRIVATE LIMITED	43, SHAHNAI RESIDENCY, JAWAHAR NAGAR, MHOW- GAON MHOW	INDORE	453441	Madhya Pradesh	SANCHIT CHAUHAN	shreeshak- tisynbag@ gmail.com
25	SURGENT POLY- PACK PRIVATE LIMITED	"BUSA HOUSE" PLOT NO. 3-A, JANKALYAN SOCIETY, TAGORE ROAD,	RAJKOT	360001	Gujarat	HEMANTKU- MAR K BUSA	busa_ca@ yahoo.com
26	SWASTIK POLY- MERS	H-33, Udyog Nagar, Industrial Area,	NEW DELHI	110041	Delhi	Panna Lal Baid	alok@swastik- polymers.net
27	TCPL INNOFILMS PRIVATE LIMITED	414, EMPIRE MILLS COMP- LEX, SENAPATI BAPAT MARG, LOWER PAREL,	MUMBAI	400013	Maharashtra	SOHAN GAMANLAL NANAVATI	nanavati@ tcpl.in
28	VINMAR POLYMER PRODUCTS	673 GIDC ESTATE MAKAR- PURA	VADODARA	390010	Gujarat	JAIN VARUN MADANBHAI	vinmarpoly- mer@rediffmail. com
29	WHITE LOTUS OVERSEAS PRIVATE LIMITED	H NO 93, SAMARA NAGAR NO 1, LANE NO 2, NEAR VIDHAR- BHA, PREMIER HOUSING SOCIETY,	AMRAVATI	444606	Maharashtra	SAURABH MORE	whitelotuso- verseas@gmail. com