



PLEXCONCIL - The Plastics Export Promotion Council

# PLEXCONNECT<sup>®</sup>

Edition 47, May 2023

**Interview with Satish Godase,  
Director, Nu Vu Conair Pvt Ltd., Pg.13**

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**New Foreign Trade Policy 2023-28 – Decoded  
-Anil Kumar Bhansali, Head of Treasury,  
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The countdown begins! With less than sixty days to go to our first ever exhibition for Plastics Exports, we, here at the Council are looking forward to creating a landmark event for the industry. Plastics exports have been an integral part of India's merchandise exports and considering the vast size of the global trade of the segment, opportunities abound. At the time of publishing this magazine, PLEXCONNECT 2023 has been receiving fantastic response from international buyers & importers. We have over 400 registered buyers from 60+ countries who expressed interest in products ranging from raw material to finished products as well as machinery & equipment. Leading Indian exporters have also signed up to exhibit and we are confident of achieving our goals for the exhibition.

In the meanwhile, export figures for March are out now. Despite exceeding expectations in FY 2021-2022, during March 2023, India exported plastics worth USD 1,054 million, lower by 10.2% from USD 1,173 million in March 2022. Cumulative value of plastics export during April 2022 – March 2023 was USD 11,965 million as against USD 13,352 million during the same period last year, registering a decline of 10.4%. The reasons for the decline can be mainly attributed to sluggish global demand amid high inflation and recession concerns in key export destinations; GSP withdrawal in EU; lower price realisations; Zero Covid policy and regular lockdowns in China and reduction in export of polymers from India. Having said that, our industry has over the decades witnessed vagaries in global market conditions and we need to continue to work towards diversifying risks by exploring new opportunities and markets. PLEXCONNECT is a step in that direction, and we have been following stringent processes to ensure that our exhibition attracts genuine buyers with keen business interests with India. While on the subject of exhibitions, the Council is leading participation of its members at JEC World in France as well as Interpak, Germany in April & May respectively. With plans to lead exhibitors to at least nine more in the current fiscal, we are hoping that our members will have greater opportunities for growth.

While the Govt of India has been taking numerous efforts to boost Indian exports, the onus also lies on the industry to ensure that we remain competitive in the global marketplace in terms of quality, commitment and price. In this issue of the magazine, we bring you highlights of the recently announced Foreign Trade Policy that is dynamic and forward thinking. Focused on promoting MSME exports from the country, the policy lays emphasis on export promotion through collaboration with exporters, states, districts, and Indian Missions. It will promote ease of doing business and focus on emerging areas like e-commerce and export hubs.

We also bring you an insight into ZED – Zero Defect policy that aims to uplift the quality of our products and ensure consistency that is critical not only to global trade but also improve product standards in India. This is integral to creating a robust industry, as well as ensure environmental sustainability.

As we are aware, digitization and automation are key to the growth of any manufacturing industry as it focuses on optimum resource utilization and improved efficiency. In this issue, we spoke to Satish Godase, Director, Nu Vu Conair about the impact of digitization and automation in the plastics processing industry in India. All this in addition to our magazine staples, news and views.

As I sign-off, we look forward to your support towards our exhibition and don't forget to book your stall as PLEXCONNECT 2023 promises to be the ideal platform to help you achieve your business goals!

Until next time,

**Warm Regards,**

**Hemant Minocha**  
**Chairman**



## ► Council Activities - March 2023

### **Meeting with the DGFT to discuss the issues hampering export - Vanijya Bhawan, New Delhi - March 2, 2023**

A meeting was arranged by the Council Delhi office of the Executive Director with DGFT to discuss the issue of import of virgin plastic scrap pre industrial. The meeting was held in view of the ban on the import of virgin plastic scrap of PVC by the Ministry of Environment, Forest & Climate Change (MOEFCC).

The DGFT assured the necessary help in early resolution of the same as the ban is hampering the export of the plastic items manufactured by using the pre industrial PVC scrap like floor coverings made of PVC etc.

Mr. Sribash Dasmohapatra, Executive Director, Mr. Arvind Goenka, COA member, Mr. Ashutosh Kumar, Regional Director - North represented Council at the meeting.

### **Virtual Meeting with Human Hair & Hair Products manufacturers and Exporters Association of India on March 3, 2023**

Virtual Meeting with Human Hair & Hair Products manufacturers and Exporters Association of India was held on 03rd March 2023 and Mr. Benjamin Cherian, President & Panel Chairman presided the meeting and briefed its members on the Proposal to Conduct Capacity Building Training & Technology Transfer Course for Human Hair and its Products and also asked the participants at Cosmoprof Show 2023 at Italy to identify the latest trends that needs to adopted by our Indian Hair industry for the betterment of the industry. Mr. Ruban Hobday, Regional Director-South informed the participants at the Cosmoprof Show 2023 on the guidelines to be followed for success participation at the show.

### **Vendor Development Programme Cum Industrial Exhibition (MSME Vendor Expo with CPSEs - 2023) on 7 & 8th March 2023 at Madurai**

Branch MSME Development & Facilitation Office, Madurai, had organized two days "Vendor Development Programme cum Industrial Exhibition", on 7th and 8th March, 2023 at MADITSSIA, with a focus to enhance the marketing opportunities to both Manufacturing and Service Sector MSME's.

This mega event has brought the PSU's/ CPSE's and MSME's under one roof and provided an opportunity to expand the business linkages among PSU's & MSME's. This event also served as a forum to showcase the demand portfolio as well as to enhance the stores and service procurement of CPSUs and Govt Departments through MSME's.

The event was attended by Mr. R. Dayanidhi, Assistant Director-South.

### **Capacity Building Program on "Opportunities for Exports" jointly with NSIC on March 9, 2023 at Ramana-thapuram**

The Plexconcil Southern Region jointly with NSIC – SC/ST Hub Chennai organised a Capacity Building Program on "Opportunities for Exports" on 09th March 2023 at Collectrate Complex, Ramanathapuram, Tamil Nadu.



The primary objective of the program was to bring the SC/ST Entrepreneurs to the export fold and guide them to access the international markets. The program also highlighted the various schemes and export subsidies offered by the Ministry of MSME through NSIC and MSME DI. The Council which was represented by Mr. R. Dayanidhi, Assistant Director-South informed about the benefits of membership while promoting plastics value added products exports from India through participation at Plexconnect 2023 show at Mumbai in June 2023.

### **Representation for District Export Committee Meeting Letter Dated March 8, 2023**

Representation for District Export Committee Meeting Letter was given at collector office in old custom dated 08.03.2023 pertaining to One District One Product and framing new MSME policy for Maharashtra state.

Plexconcil provided suggestions on various implementing reforms in the existing MSME Schemes and framing new MSME policies related to infrastructure, machinery, loans and technology and other suggestions for improving exports of Plastic sector.

### **One Day Workshop on Women Entrepreneurship – Speaker on Role and Responsibilities of PLEXCONCIL on March 8, 2023**

**\*One Day Workshop on Women Entrepreneurship\* and \*Vendor Development Program Seminar Cum Exhibition\*** on 8th and 9th March 2023 was organized by MSME DFO Mumbai & Aurangabad at MSME DFO-Mumbai office, where Plexconcil's secretariate was invited as a speaker to brief on role and responsibilities of PLEXCONCIL.



Women entrepreneurs were briefed about the various services of PLEXCONCIL. Also the scope and benefits of MSME schemes were explained to Women Entrepreneurs.

Various MSME schemes pertaining to women empowerment were briefed post which attendees asked several queries pertaining to Plastic Industry and MSME schemes which were answered by the PLEXCONCIL secretariate.

## Meeting with the All India Plastics Industries Associations (AIPIA) - Pitam Pura, New Delhi - March 9, 2023

A meeting was held with the officials of the All India Plastics Industries Association (AIPIA) in view of the exhibitor recruitment for PLEXCONNECT 2023 exhibition scheduled between June 15 - 17, 2023 at Bombay Exhibition Centre, NESCO, Mumbai.

The Council made the presentation regarding the exhibition highlighting the key objectives of the exhibition and also requested the association assistance towards circulating the exhibition details amongst their members. The Association was extremely receptive about the exhibition and assured regarding circulating it amongst their members.

Mr. Ashutosh Kumar, Regional Director - North, Mr. Anuj Sharma, Assistant Manager & Mr. Ashok Kumar Shah represented the Council at the meeting.

## Meeting with the Commissioner (Industries), Govt. Of NCT of Delhi - Patparganj Industrial Area - New Delhi - March 10, 2023

A second round of the meeting was called by the Commissioner (Industries) to promote the One District One Product initiative of the Government of India. Representatives of the various zones of the Delhi NCR were also called up this time for the meeting to highlight their various products that command huge export potential. The Government assured the various stakeholders regarding the subsidy in the technology upgradation if and when required by them. Mr. Anuj Sharma, Assistant Manag-

er suggested that the Plastic sheets, films, is an item that has been regularly in demand and exported mostly from Delhi & NCR. Mr. Sharma also suggested that the Government should take adequate steps to inculcate to make Delhi a status of Special Economic Zone as this would regularise the power, Labour, Logistics and other operational costs in finalising the export order by the exporters. The point was very well taken by the Commissioner (Industries). He also raised the issue of Human Hair which is again exported in huge volumes from Delhi but also highlighted the issue of smuggling of Human Hair which is degrading the Indian economy.

## India Pavilion at International Exhibition: KOPLAS 2023 (27th Korea International Plastics & Rubber Show) : Korea International Exhibition Center, Kintex 1, Goyang, South Korea

**Date: 14.03.2023 to 18.03.2023**

The Plastics Export Promotion Council (PLEXCONCIL) organized India Pavilion for the first time at KOPLAS 2023, 27th Korea International Plastics & Rubber Show from 14th March-18th March at Goyang, South Korea. Korea's No.1 Plastics and Rubber Industry Exhibition offered a wide variety of attractions ranging from raw materials of plastic to molds, processing machines, ancillary equipment, automation solutions, printing, packaging, semi-finished goods, finished goods from plastics and rubber industry.



India Pavilion at KOPLAS 2023 was inaugurated on 14th March 2023 by **Mr. Swapnil Devidas Thorat**, Second Secretary (Commerce & Investment), Embassy of India Seoul, Republic of Korea. During the Inauguration ceremony **Mr. Swapnil Devidas Thorat** deliberated with Indian exhibitors on boosting exports from India to South Korea and assured of support as and when required by Indian Plastic Industry.

Four Indian Exhibitors participated in this exhibition were: Kanpur Plastipack Limited, Jumbo Bag Limited, Manali Pigments Private Ltd. and Dali Electronics. During 5 days at the fair, Exhibitors interacted with prospective buyers, distributors, agents and other relevant business associates. Several meetings were also held of Plexconcil with Chamber of Commerce, agents, trade



## ► Council Activities - March 2023

distributors and Plastic importers regarding boosting bilateral trade and fulfilling requirement of Korean companies of Raw Material, semi-finished, finished Plastic products and Machinery through Indian exporters.

### INDIA EVENING AT EMBASSY OF INDIA, SEOUL, SOUTH KOREA, March 14, 2023

The Plastics Export Promotion Council (PLEXCONCIL) and Embassy of India, Seoul, Republic of Korea in association with Indian Chamber of Commerce in Korea (ICCK) organized “India Evening” on 14th March, 2023 to share insights with Korean business community on India’s plastic industry and to invite them to attend Plexconnect-2023, which is scheduled to be held in Mumbai in June 2023. During the meeting, Korean industry representatives were briefed about growth story of Indian Plastic Industry, recent trends in Plastic exports from India and potential of Indian Plastic product exports to South Korea. PLEXCONNECT 2023 was announced during the meeting and Korean buyers were invited to participate in PLEXCONNECT 2023. India’s prominent plastic exporters took this opportunity to establish a network with Korean companies during this event.



Welcome Address of the program was given by **Mr. Swapnil Devidas Thorat**, Second Secretary (Commerce & Investment), Embassy of India Seoul, Republic of Korea. **Mr. Anil Sinha**, Chairman, Indian Chamber of Commerce in Korea (ICCK) during his address informed participants about boosting bilateral trade between India and South Korea. Indian companies participating at KOPLAS 2023 were also introduced to participants

during the program. **Mr. Sribash Dasmohapatra**, Executive Director, PLEXCONCIL gave presentation on PLEXCONNECT 2023. Mr Dasmohapatra highlighted goal, objective and salient features of the first ever export focused exhibition for plastics. Participants were also briefed about benefits available to Korean buyer for participation in PLEXCONNECT 2023.

### Meeting with the Plastics Manufacturers Association, Rajasthan - March 16, 2023

A meeting was held with the officials of the Plastics Manufacturers Association, Rajasthan in view of the exhibitor recruitment for PLEXCONNECT 2023 exhibition scheduled between June 15 - 17, 2023 at Bombay Exhibition Centre, NESCO, Mumbai.

The Council made the presentation regarding the exhibition highlighting the key objectives of the exhibition and also requested the association assistance towards circulating the exhibition details amongst their members. The Association was extremely receptive about the exhibition and assured regarding circulating it amongst their members.

The meeting was very well conducted and also issues regarding the ban imposed on plastic items by Central Pollution Control Board was discussed. The Rajasthan members also highlighted the issue of delay in Zed certification resulting in extra burden on cost calculation of the export product as a result of hampering exports from Rajasthan. The other issue of Port Parity was also discussed at length. Rajasthan Association assured the full support in the PLEXCONNECT Exhibition.

Mr. Ashutosh Kumar, Regional Director - North, Mr. Anuj Sharma, Assistant Manager & Mr. Ashok Kumar Shah represented the Council at the meeting.

### Meeting with Industries Dept. Gov. of Telangana at IESS Show at Chennai on 16th & 17th March 2023

Meeting was organised with Mr. T. Sudhin Paul, Deputy Director C&EP Dept., O/o: Commissioner of Industries, Govt. of Telangana, Hyderabad during the IESS 2023 show organised by EEPC at Chennai Trade Centre to discuss the proposal of Telangana Pavilion at Plexconnect 2023 Show at Mumbai.

### Indian Pavillion at the COSMOPROF WORLDWIDE BOLOGNA 2023, 17-20, 2023 MARCH

The Plastics Export Promotion Council (PLEXCONCIL) for the first time organized the India Pavilion at the prestigious COSMOPROF WORLDWIDE BOLOGNA show in Italy from 17-20, March 2023 to promote the Human Hair and Hair Products which is under the purview of Plexconcil.

The 54th edition of COSMOPROF Worldwide Bologna 2023 ended with great results. The world beauty community came together: Over 250,000 professionals from more than 150 countries visited the event, meeting more than 2,900 exhibitors from 64 countries and touching the know-how of 29 country pavilions.

## India Pavilion

The Indian Pavilion which is hosted for the first time at the COSMOPROF Worldwide Bologna show had 20 exhibitors from across India mostly exhibiting Indian Human Hair products and received a good response on the first day when although the pavilion was allocated in a separate hall as there was no space within the existing halls.

The India Branding was effectively visible on all three openings of the pavilion. The Indian Pavilion was added to all the advertisements/information boards across the show inviting the buyers to the pavilion. The **exhibitor's catalogue** containing all the details for the participants was distributed at the show and at the available avenues to promote India.



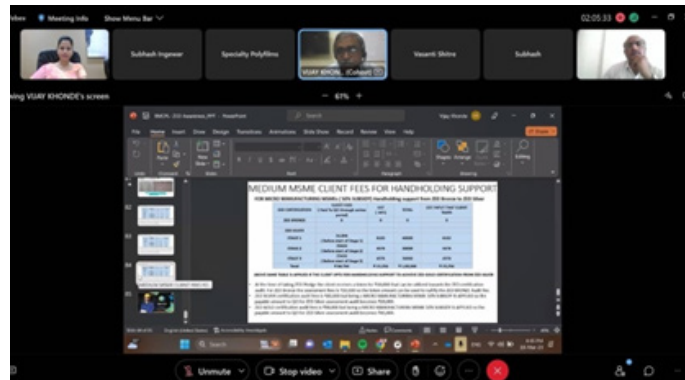
## Inauguration of the Indian Pavilion:

Her Excellency Dr. Neena Malhotra, the Ambassador to India, the Embassy of India, Rome, Italy inaugurated the Indian Pavilion at the CosmoProf Worldwide Bologna show at Bologna, Italy on 17th March 2023 on the opening day. She visited the exhibitors at the pavilion who were exhibiting Indian Human Hair from different parts of India including Andhra Pradesh, Tamil Nadu, Delhi, and West Bengal. She interacted with them to understand the potential of Indian Human hair in Italy. She assured me to support and helps to promote Human Hair exports in Italy.



## Webinar on “MSME Sustainable ZED Certification Scheme on 18th March 2023

The Plastics Export Promotion Council - PLEXCONCIL jointly in collaboration with MSME DFO, Aurangabad office, Ministry of MSME, organized a Webinar on “MSME Sustainable ZED Certification Scheme” on Saturday, 18th March 2023 at 3.30 pm.



Webinar was a great knowledge sharing platform where MSME's were motivated to adopt the best practices in work culture, standardization of products, processes and systems etc in order to enhance their global competitiveness and sustainability.

ZED certification expert Shri. Vijay Khonde explained various parameters, benefits and incentives of ZED certification and how MSME's can upgrade their businesses by adopting best practices in work culture, standardization of products, processes and systems and enhance their global competitiveness and sustainability.

Several queries were answered and participants were extremely enthusiastic to register for ZED certification scheme. Shri. Narendra Estolkar, Joint Director and Shri. Subhash Ingewar, Asst. Director of MSME DFO Aurangabad office also briefed on the benefits of MSME.

## PLEXCONCIL's Awareness Seminar at Palghar on 23 March 2023



PLEXCONCIL in its endeavour to promote the domestic and exports business of plastic sector organized Awareness Seminar on Thursday, 23rd March 2023, 2:30pm at TIMA Hall in Palghar in collaboration with TIMA- Tarapur Industries Manufacturers Association.



## ► Council Activities - March 2023

Seminar was specially organized to create awareness about the various government schemes of MSME/NSIC/DIC/ECGC/Banking/Export-Import benefits related to loans, subsidies, infrastructure, reimbursements etc among the exporters and entrepreneurs of the plastic sector.

Also various PLEXCONCIL initiatives were explained with detailed presentation on PLEXCONNECT 2023 exhibition which is an excellent platform for all MSMEs and entrepreneurs to increase their business network and exploring the export opportunities which will not only help them in expanding their business but also improve their presence in foreign market.

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# Satish Godase,

Director, Nu Vu Conair Pvt Ltd.

## Facilitating Efficiency in Plastics Processing

Digitization and automation are disrupting many traditional processes and practices today. When it comes to Industry 4.0, cloud based applications enable capturing of a huge amount of actionable data that enables interconnectivity and promotes greater efficiency and quality of output in real time. By implementing changes in both outlook and practice, today we see a growing number of processors, both small and large taking deliberate steps towards smart technologies to manage machines, undertake predictive maintenance, reduce wastage and downtime to become leaner and more growth oriented operations.

The benefits of digitization and automation has wider impact in creating sustainable businesses, in economic terms but more significantly in environmental terms. Reduction in usage of power, material, water, etc are some of the additional key benefits that are enabled through digitization.

Nu-Vu Conair Pvt. Ltd., Ahmedabad, India is a joint venture company between Nu-Vu Engineers, Ahmedabad, India and The Conair Group, Pennsylvania, USA. Conair has manufacturing facilities in the USA in addition to India and manufactures 450 different products. The company also owns two world-class R & D (Research & Development) labs. A leading manufacturer of plastic auxiliary equipment in India with state-of-the-art manufacturing facility in Ahmedabad the company manufactures central vacuum conveying systems, drying systems, gravimetric blending systems, chillers and mould temperature control units, crystallizers, belt conveyors, granulators and more for polymer processors.



*In this interview with Satish Godase, Director, Nu Vu Conair, he talks about the impact of digitization on not just the overall processing industry, but growing adoption of automated auxiliary equipment, impact on the environment and a lot more.*

(excerpts)

**When we talk about digitization and automation in Indian plastics processing, what does it primarily entail?**

Digitization in simple terms means controlling and monitoring auxiliary equipment with the help of computers and internet. This is done by collecting data through sensors, and using this data to manage your machines and operations efficiently.

To elaborate further; it is an integration of various technologies such as Robotics, IoT, Machine Learning and Data Analytics to optimise and streamline manufacturing process.

Automation means performing the tasks which were previously performed by humans to improve productivity and quality. Simplest example would be conveying of polymer to machine using vacuum or pressure or removing parts through robots.

Digitization and Automation helps in achieving consistent quality of product, real time monitoring of machines, predictive maintenance, real time utilization of machine, efficient planning and scheduling and so on.



### Over the years, how has the increasing use of automated systems/ robotics impacted the auxiliary equipment industry in India?

Automated systems / robotics are a sub-part of Auxiliary Equipment as the main purpose of auxiliaries is to provide automation and reduce dependence on man-power. Due to the tremendous benefits offered by auxiliary equipment, demand from customers has gone up over the years. Lots of processes previously done manually were converted to automatic mode using auxiliary. This demand has driven the growth of auxiliary equipment industry in India. This also helps industry in capacity expansion, invest in new technologies, etc.

### What are the latest developments/ trends within the auxiliary equipment segment?

The latest trend in auxiliary industry is going in for Industry 4.0 compliant technology, collecting and analysing data, predictive maintenance and improving life of the machine.

Another trend is growing demand for recycling machines as recycling of plastics is gaining importance for various reasons.

Sustainable and eco-friendly equipment are also in demand. Some of the examples here include Adiabatic cooling towers, chillers based on environment-friendly refrigerant.

### In your opinion, which types of equipment are likely to assume greater importance in the future and how will that impact other types of equipment?

The equipment that are eco-friendly, energy efficient, use less water, are smartly connected, Industry 4.0 compliant, operator-friendly will rule in future. I believe there is no option for above as market will demand these.

I also believe usage of 3D printing will grow significantly. Also the speed of 3D printing will increase and in some of the cases, it will replace traditional manufacturing process. The additive manufacturing for 3D printing will grow.



### What opportunities do the use of AI, ML, etc open up for auxiliary equipment manufacturers?

Though currently limited but in future there will be lots of opportunities for integrating AI and ML in auxiliary equipment. This will optimize operations, deliver consistent quality and will help in customization as per preference.

### As a company that has been around for years, what is your approach towards providing seamless solutions to your clientele?

As defined in our vision, mission and value statement, our approach is always customer centric. We passionately work with customers to understand their needs and offer customized equipment for efficient solution. We have a team of engineers who gets involved with customer right from the first call to understand the requirement and build solution around their needs. We are very flexible in making changes to our solution as primary goal is customer satisfaction.

### How do your machinery address skill gaps and manpower challenges in your target industries?

We can address this by various ways our auxiliary equipment greatly automates the process; thereby reducing need of skilled/unskilled manpower. For example, we automatically convey and measure the raw material going in to process, this way customer can get real time data of material consumption.

Our equipment is designed for plug and play operation. The set-up is easy, minimum tools are required for regular maintenance and this greatly reduces dependency on skilled people for operation or maintenance.

We also provide training on our machines to operators at customer-end; thereby reducing their need for specialized technicians.

**MSME processing segment continues to grow and yet remains somewhat hesitant in investing in automated systems due to heavy investments. What is your view on the same?**

This is partly true but in recent years, customers have realised the benefits of automating the process and they are ready to invest in auxiliary equipment which will be beneficial to them in reducing manpower and providing consistent product quality to their end user. I strongly believe this trend will continue and in future you will not see any IMM/ Extrusion process functioning without any auxiliary equipment.

**What are the challenges faced by your industry segment?**

In current scenario the main challenges are, rise in input cost, pressure of supply chain and logistics and most importantly unavailability of semi-conductors. After Covid, all the industries have faced similar challenges and we are no different.

Other challenge we face is ever-changing rule in usage of single usage plastics. Plastic is a wonderful material and needs be used and recycled effectively.

**What are the emerging opportunities for exports of auxiliary equipment manufacturers?**

Indian manufactured equipment is as good as their counterparts from developed countries, also we are cost competitive compared to them. So, the opportunities in exports are tremendous especially from Africa, Middle East, South East Asia, Latin America and other parts of the world. There are also opportunities to export to Europe and USA as well.



**Have growing environmental regulations impacted your industry? What has changed?**

There are many positive changes due to growing environment regulation. The equipment are designed to consume less energy, use eco-friendly material, minimise waste generation, recycle packaging material etc. At our factory also we are implementing ESG guidelines in line with latest trends and these are regularly monitored and audited.

**What are your suggestions to improve or promote growth of the auxiliary equipment industry in India?**

This can be done in following ways:

- Customer awareness, customer should be well informed about the advantages of using auxiliary equipment.
- Using latest technology and innovation to reduce manpower, energy usage thereby improving customer profitability.
- Using best manufacturing methods to reduce cost of operation so that customer can get latest technology at affordable price.
- We also need to provide import substitute solution which is cost effective.

Along with above, effective and impactful marketing with the help of existing and new mediums as well as the use of e-commerce / social media will help to promote auxiliary equipment in India.





## Join the White Goods Manufacturing 'REVOLUTION'

Aequs Infra presents HDC, India's first manufacturing cluster, developed specifically for consumer durables, including white goods and brown goods manufacturing. This vertically integrated manufacturing ecosystem will host the entire durable goods manufacturing value chain, from raw material to finished goods, and shared services like cafeteria, medical services, crèches, sanitation etc.

Further, with world class manufacturing facilities and infrastructure and the fastest speed to market, our expert team makes setting up and operationalizing your business simple and easy. Aequs Infra. We add Ease to your Business.



**EASE OF DOING  
BUSINESS**



**SPEED TO  
MARKET**



**BUILT-TO-SUIT**



**CLUSTER  
ECOSYSTEM**

*The key benefits of the cluster are:*

*Financial Benefits are\**



**INSTANT PLUG-N-PLAY  
MANUFACTURING**



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**TRAINING  
CENTRE**



**READY-TO-HIRE  
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**RESIDENTIAL/  
DORMS**

**20% subsidy** on capital investment of plant & machinery

**2% incentive** on the turnover for the first five years

**100% duty exemption** on electricity for the first five years

**₹1** per unit of **power consumed** for five years

\*Full text & meaning only as per Government of Karnataka (GO) Government Order

**Contact us at:**



**82086 48747**



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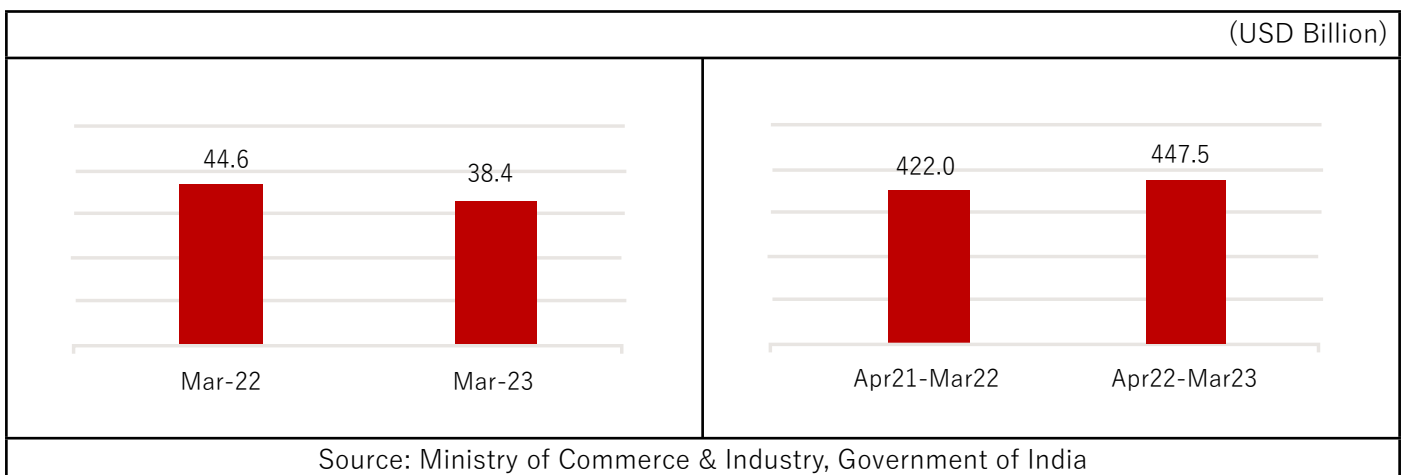


## Export Performance – March 2023

### TREND IN OVERALL EXPORTS

India reported merchandise exports of USD 38.4 billion in March 2023, down by 13.9% from USD 44.6 billion in March 2022. Cumulative value of merchandise exports during April 2022 – March 2023 was USD 447.5 billion as against USD 422.0 billion during the same period last year, reflecting a growth of 6.0%.

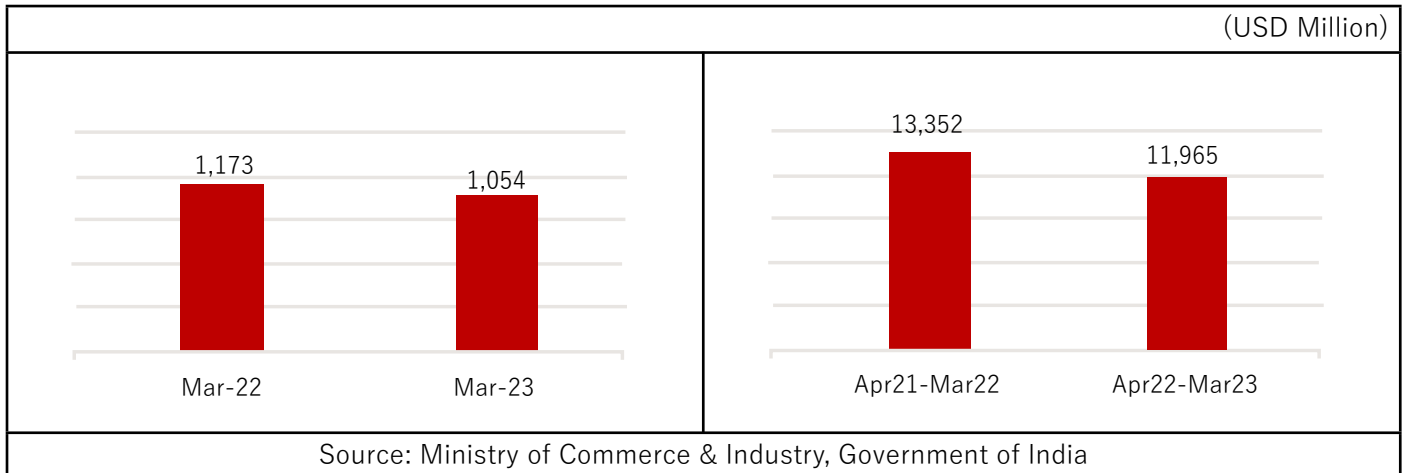
**Exhibit 1: Trend in overall merchandise exports from India**



### TREND IN PLASTICS EXPORT

During March 2023, India exported plastics worth USD 1,054 million, lower by 10.2% from USD 1,173 million in March 2022. Cumulative value of plastics export during April 2022 – March 2023 was USD 11,965 million as against USD 13,352 million during the same period last year, registering a decline of 10.4%.





## PLASTICS EXPORT, BY PANEL

In March 2023, most of the product panels, namely, Plastic raw materials; FIBC, woven sacks, woven fabrics, & tarpaulin; Plastic films & sheets; Packaging items - flexible, rigid; Consumer & houseware products; FRP & Composites; Floorcoverings, leathercloth & laminates; Plastic pipes & fittings; Cordage, fishnets & monofilaments; and Miscellaneous products and reported lower exports.

However, product panels like: Medical items of plastics; Writing instruments & stationery; and Human hair & related products reported a positive growth in exports.

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

Panel	Mar-22	Mar-23	Growth	Apr 21-Mar-22	Apr 22-Mar-23	Growth
	(USD Mn)	(USD Mn)	(%)	(USD Mn)	(USD Mn)	(%)
Consumer & houseware products	79.6	71.6	-10.1%	816.1	752.5	-7.8%
Cordage, fishnets & monofilaments	29.6	25.3	-14.6%	279.2	272.49	-2.4%
FIBC, woven sacks, woven fabrics, & tarpaulin	144.9	110.7	-23.6%	1,688.2	1405.41	-16.8%
Floorcoverings, leathercloth & laminates	63.5	57.2	-9.9%	635.2	579.85	-8.7%
FRP & Composites	44.3	38.0	-14.4%	457.6	425.14	-7.1%
Human hair & related products	45.9	75.9	+65.4%	770.3	683.85	-11.2%
Medical items of plastics	40.5	44.1	+8.9%	417.4	492.78	+18.0%
Miscellaneous products & items nes	95.0	89.1	-6.3%	889.9	1031.89	+16.0%
Packaging items - flexible, rigid	60.0	51.9	-13.5%	623.8	624.67	+0.1%
Plastic films & sheets	187.7	154.6	-17.6%	2,034.4	1818.12	-10.6%
Plastic pipes & fittings	29.3	23.4	-20.2%	289.1	290.41	+0.5%
Plastic raw materials	329.0	287.0	-12.7%	4,232.9	3320.91	-21.5%
Writing instruments & stationery	23.9	25.0	+4.9%	217.5	266.91	+22.7%
	1,173.2	1,053.7	-10.2%	13,351.6	11,964.9	-10.4%

Source: Ministry of Commerce & Industry, Government of India

Export of **Consumer & houseware products** declined by 10.1% in March 2023 on account of lower sales of Tableware and kitchenware of plastics (HS code 392410); Other household articles of plastics (392490); Hand bags and shopping bags of plastics (420222); Jewellery box and similar box of plastics (420232); and Safety headgear (650610). Exports of Toys of plastics (95030030) has been showing a significant decline since May 2022 due to change in the HS code of Toys of plastics resulting in failure to capture the correct value of its exports from India.

**Cordage, fishnets & monofilaments** exports were lower by 14.6% in March 2023 due to a decline in sales of Other binder or baler twine of polyethylene or polypropylene (560749); and Made up fishing nets (560811).

In case of **FIBC, woven sacks, woven fabrics, & tarpaulin**, exports in March 2023 fell by 23.6% as Indian exporters reported a decline in sales of Sacks and bags of plastics (39232990); and Flexible intermediate bulk containers (630532). Exports of Flexible intermediate bulk containers from India had hit a thirty-month low in February 2023. Indian exporters have also mentioned about a decline in price realisations for these products in the international market and competition from Türkiye.

Export of **Floor coverings, leather cloth & laminates** declined by 9.9% during March 2023 on account of lower sales of PVC floor coverings (391810); Decorative laminates (482390); and Other textile fabrics of plastics (59039090). Indian exporters have mentioned about removal of Generalized System of Preferences (GSP) in the EU since January 2023.

Export of **FRP & Composites** was down by 14.4% due to lower sales of Articles of plastics and articles of other materials of heading 3901 to 3914, n.e.s (39269099).

Export of **Human hair & related products** increased by 65.4% due to higher sales of Human hair unworked (050100) and Human hair, dressed, thinned, bleached or otherwise worked (67030010). The high growth rate achieved in March 2023 is an effect of low base of export in March 2022. It may be noted that export of Human hair unworked was placed under restricted category by the Directorate General of Foreign Trade in the last week of January 2022.

Export of **Medical items of plastics** witnessed an increase of 8.9% in March 2023 due to higher sales of Spectacle lenses of polymers (900150); and Catheters (90183910).

Export of **Miscellaneous products & items nes** fell by 6.3% in March 2023 due to lower shipments of Polypropylene articles, not elsewhere specified (39269080).

**Packaging items - flexible, rigid** export declined by 13.5% on lower sales of Sacks and bags of polymers of ethylene (392321).

**Plastic films & sheets** export were lower by 17.6% in March 2023 due to a slide in sales of Self-adhesive sheets and films of plastics (391910); Rigid and flexible sheets of polymers of propylene (392020); Flexible sheets and films of polyethylene terephthalate (39206220) and Flexible & metallised sheets and films of plastics (39219094). Apparently, plastic films & sheets manufacturers in India have slashed production amid sluggish global demand and high inventory. This product segment is also facing headwinds as several new lines have been operationalized both in the BOPP and BOPET segments in the last 1.5 years.

Export of **Plastic pipes & fittings** contracted by 20.2% due to lower sales of Pipes and tubes of polymers of vinyl chloride (391723); Other tubes and pipes (391732) and Fittings (391740).

**Plastics raw materials** export was lower by 12.7% in March 2023 due to a decline in sales of Polyethylene terephthalate (390761, 390769) from India. It may be noted that the prices of Polyethylene terephthalate in India have been on an upswing since January 2023 which may have resulted in shift in focus from exports to domestic sales.

Export of **Writing instruments & stationery** witnessed an increase of 4.9% in March 2023 due to higher sales of Ball point pens of plastics (960810). This product segment has had a fantastic year in 2022-23.



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

HS Code	Description	Apr 21- Mar-22	Apr 22- Mar-23	Growth
		(USD Mn)	(USD Mn)	(%)
63053200	Flexible intermediate bulk containers	999.6	861.1	-13.9%
39076190	Polyethylene terephthalate: Other primary form	763.2	590.4	-22.6%
39021000	Polypropylene, in primary forms	662.5	364.2	-45.0%
67030010	Human hair, dressed, thinned, bleached or otherwise worked	595.5	498.6	-16.3%
39232990	Other sacks and bags, incl. cones, of plastics	504.1	411.2	-18.4%
90011000	Optical fibres, optical fibre bundles and cables	469.0	703.0	+49.9%
39269099	Articles of plastics and articles of other materials of heading 3901 to 3914, n.e.s: Other	450.5	417.3	-7.4%
39202020	Plates, sheets, film, foil and strip, of non-cellular polymers of ethylene: Flexible, plain	330.3	251.8	-23.8%
39076990	Polyethylene terephthalate: Other primary form	297.6	196.9	-33.9%
39269080	Articles of plastics and articles of other materials of heading 3901 to 3914, n.e.s: Polypropylene articles, not elsewhere	293.2	212.2	-27.6%
48239019	Decorative laminates	272.7	286.0	+4.9%
39069090	Acrylic polymers, in primary forms (excl. polymethyl methacrylate): Other	267.0	203.3	-23.9%
39014010	Linear low-density polyethylene (LLDPE), in which ethylene monomer unit contributes less than 95 % by weight of the total polymer content	258.8	83.6	-67.7%
39206220	Plates, sheets, film, foil and strip, of non-cellular polyethylene terephthalate: Flexible, plain	258.7	211.1	-18.4%
39232100	Sacks and bags, incl. cones, of polymers of ethylene	222.3	205.8	-7.4%
39012000	Polyethylene with a specific gravity of $\geq 0.94$ , in primary forms	204.0	53.7	-73.7%
59039090	Textile fabrics impregnated, coated, covered or laminated with plastics other than polyvinyl chloride or polyurethane: Other	182.1	121.4	-33.4%
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	179.5	153.4	-14.5%
39239090	Articles for the conveyance or packaging of goods, of plastics: Other	174.7	174.2	-0.3%
39046100	Polytetrafluoroethylene, in primary forms	163.6	152.6	-6.7%
05010010	Human hair, unworked; whether or not washed or scoured	149.1	169.2	+13.5%
54072090	Woven fabrics of strip or the like, of synthetic filament, incl. monofilament of $\geq 67$ decitex and with a cross sectional dimension of $\leq 1$ mm: Other	131.5	99.1	-24.6%
56074900	Twine, cordage, ropes and cables of polyethylene or polypropylene	127.1	118.1	-7.1%
90015000	Spectacle lenses of materials other than glass	126.1	146.3	+16.1%
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	125.0	111.7	-10.6%
39073010	Epoxide resins, in primary forms: Epoxy resins	117.0	95.1	-18.7%
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	113.4	95.1	-16.2%
90183930	Cannulae	111.4	138.7	+24.5%
96081019	Ball-point pens	109.1	140.1	+28.5%

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	105.8	99.1	-6.3%
39199090	Self-adhesive plates, sheets, film, foil, tape, strip and other flat shapes, of plastics, whether or not in rolls > 20 cm wide: Other	102.4	88.1	-14.0%
95030030	Toys of plastics	99.9	14.4	-85.6%
39241090	Tableware and kitchenware, of plastics: Other	98.0	90.2	-8.0%
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	93.3	95.3	+2.1%
96032100	Tooth brushes	92.0	99.7	+8.3%
39011090	Polyethylene with a specific gravity of < 0,94, in primary forms: Other	89.2	124.3	+39.4%
39011010	Linear low-density polyethylene (LLDPE), in which ethylene monomer unit contributes 95% or more by weight of the total polymer content	87.8	50.7	-42.3%
39219096	Plates, sheets, film, foil and strip, of plastics, reinforced, laminated, supported or similarly combined with other materials: Flexible, laminated	87.0	80.0	-8.0%
39095000	Polyurethanes, in primary forms	80.7	89.7	+11.1%
39119090	Polysulphides, polysulphones and other polymers and prepolymers produced by chemical synthesis, n.e.s., in primary forms: Other	78.1	77.5	-0.8%
39140020	Ion-exchangers based on polymers of heading 3901 to 3913, in primary forms	75.8	85.3	+12.5%
39129090	Cellulose and chemical derivatives thereof, n.e.s., in primary forms: Other	75.6	92.0	+21.7%
39241010	Insulated tableware and kitchenware of plastics	75.4	60.4	-19.9%
39204900	Plates, sheets, film, foil and strip, of non-cellular polymers of vinyl chloride, containing by weight < 6% of plasticisers	72.5	83.2	+14.7%
59031090	Textile fabrics impregnated, coated, covered or laminated with polyvinyl chloride: Other	71.9	75.2	+4.7%
39181090	Floor coverings, whether or not self-adhesive, in rolls or in the form of tiles, and wall or ceiling coverings in rolls with a width of >= 45 cm, consisting of a layer of plastic fixed permanently on a backing of any material other than paper, the face side of which is grained, embossed, coloured, design-printed or otherwise decorated, of polymers of vinyl chloride: Other	71.3	64.8	-9.1%
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	70.1	65.6	-6.4%
39235010	Stoppers, lids, caps and other closures, of plastics	70.0	68.6	-1.9%
39191000	Self-adhesive plates, sheets, film, foil, tape, strip and other flat shapes, of plastics, in rolls <= 20 cm wide	69.6	50.8	-27.0%
39201019	Plates, sheets, film, foil and strip, of non-cellular plastics, 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	66.9	65.8	-1.7%

Source: Ministry of Commerce & Industry, Government of India





# Mishri Lal Suriya

**Managing Director (Here Quality Excellence Pvt. Ltd.) and Peaceful Profit Monk**

## ZED Scheme – Championing Product Quality & Industry Practices

MSME Sustainable (ZED) Certification is an extensive drive designed by the Govt of India to create awareness amongst MSMEs about Zero Defect Zero Effect (ZED) practices and motivate and incentivise them for ZED Certification while also encouraging them to become MSME Champions. International companies competing in global markets focus on their competitive strengths of costs acceptable to the market, technology, innovation, service delivery, lean manufacturing, and defect free products for Zero Defect and Zero Effect (ZED).

The ecosystem around ZED model is calibrated to make aware, assess & certify, counsel, handhold MSMEs and ensure that they rise up the ZED ladder, thus enhancing their competitiveness in the global marketplace and making them truly “atmanirbhar”.

In this interview, Mishri Lal Suriya, MD, Here Quality Excellence Pvt Ltd & Peaceful Profit Monk explains the policy, its benefits and more.

(excerpts)

What is the Sustainable ZED Certification Scheme? The full form of ZED is “Zero Defect and Zero Effect”, which means manufacturing in a manner in which Zero defects products are produced and supplied to customer at the same time Zero or minimal negative effect is caused to the environment. There is a provision of 3 levels of ZED certification i.e. :

1. Bronze
2. Silver
3. Gold

### ZED Bronze certification:

The bronze certification can be achieved in just week -10 days by almost all units. This certificate signifies that the processor is ready and motivated to start the transformational journey of becoming champion and finally MNC from MSME.

There are 5 parameters related to leadership, quality management / delivery measurements/ safety trainings and safety equipment/PPE's like fire extinguishers etc.

### MSME Sustainable ZED Certification Scheme (Zero Defect Zero Effect)



### Silver and Gold ZED certification

The silver and Gold: 1 to 2 years of time should be given to implementation of Silver and Gold certification, depending upon the present maturity of the processes.

There are 9 additional parameters for Silver and further additional 6 parameters for Gold certification. E.g. if a unit has already implemented and been certified for ISO 9001, 14001, 45001, the Silver and Gold certification will be quicker, say it can be received in 1 year.

The additional parameters for silver certification shall guide the units for implementing management of daily work at shop floor, Human resource development, Safety, Environmental, equipment (asset) and materials management etc.

The parameters of Gold certification focus on Management of Business risk, supply chain, waste, technological upgradation and corporate social responsibility i.e. avoiding child labour/ forced labor and community involvement etc.

### Please share with us some background on ZED

As “Bharat” is aspiring for becoming Global Manufacturing and Export Hub, addressing the nation on India’s 68th Independence Day, Hon’ble Prime Minister Shri Narendra Modi urged the industry, especially the Micro, Small and Medium Enterprises (MSMEs) of India, to manufacture goods in the country with “zero defects” and to ensure that these goods have a “zero effect” on the environment.



He said “We should manufacture goods in such a way that they carry zero defect and that our exported goods are never returned to us. We should manufacture goods with zero effect that they should not have a negative impact or on the environment”.



### What was the objective of the MSME Ministry in introducing the same?

The Zero Defect Zero Effect (ZED) initiative is envisioned by the Government of India to enhance MSME competitiveness/sustainability and transform them as National and International Champions thereby contributing towards the realization of the vision of ‘Atmanirbhar Bharat’.

It has been designed to encourage and enable MSMEs for the manufacturing of quality products using latest technology, tools & to constantly upgrade their processes for achievement of high quality and high productivity with the least effect on the environment.

### What are the benefits/ incentives of such certification?

#### Benefits



Improved Quality



Enhanced Productivity



Improved competitiveness/  
Profitability



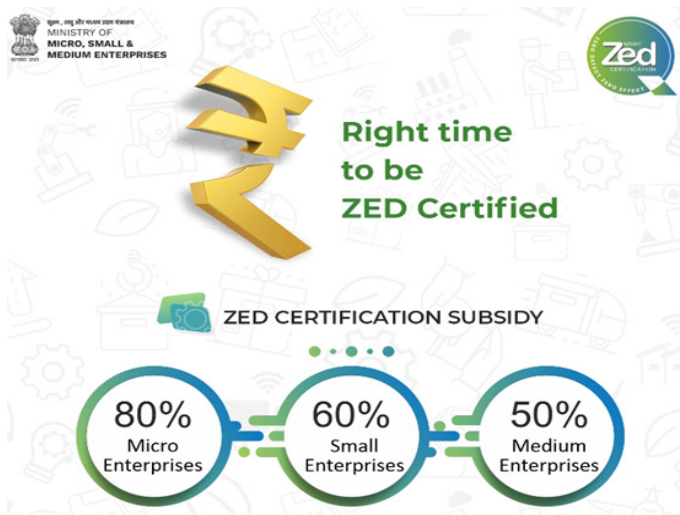
Reduced Negative  
Environmental Impact

- improved credit rating
- training of labour, Creation of knowledge
- introduction of new production equipment/ methods in manufacturing
- highly improved confidence of foreign buyers and investors in goods and services produced in India.

#### Assistance

- 80 %, 60%, 50% Subsidy on cost of certification, respectively for Micro, small and medium units
- Providing ZED consultant fee support for hand holding for silver and gold certification





## Other Incentives

- Reduced interest rates on loans up to 1% by select banks
- Upto 3 lacs assistance on zero effect green technological solutions
- Preference of purchase by PSU's and Govt
- Additional support on exhibition/ digital subscriptions etc.

## Who is eligible for the scheme?

All manufacturing units who have Udyam Registration Certificates can avail the benefits.

## What is the process for application?

The application can be done online visiting <https://zed.msme.gov.in>. First you have to take a ZED Pledge and thereafter starts of uploading of documents /photographs etc.

## How will the implementation impact plastics processors, especially the MSME sector?

This will enable MSME's attract more customers therefore business on one hand, and manufacturing will be cheaper, better, faster, safer, environment friendly with high morale/ continual improvement in the culture of the team, etc.

## Do processors need to undertake special measures to be able to qualify for the certification?

There are no special measures however more focus will be required gradually on –

- Regular trainings
- Visual management
- Auditing

- Data based reviews
  - Energy efficiency
  - waste reduction
  - Product / Process / Technological upgradation/innovation
  - EHS of workers / CSR activities etc. which will be anyway beneficial.
1. How does the Govt plan to monitor/ ensure that processors continue compliance?

There will be periodical surveillance audits of the certification.

## What are the challenges to implementation of the scheme?

Challenge would depend upon the current maturity of the unit. However following challenges are generally faced by processors:

1. Sparing team and time for regular trainings
2. Systematic data collection on key parameters like On time delivery, Material yield, energy efficiency, labor productivity , inventory turns etc.
3. Taking effective corrective actions against root causes
4. On-time disposal of Material waste
5. Reduction of material waste
6. EHS working conditions / working hours etc.

## How will the certification help with export promotion?

ZED certified units will be able to provide more confidence to customers of having implemented sustainable/ competitive business practices which in turn will increase the sustainability (ESG) rating of customers.

## About the Author

*Mr. M L Suriya is a Government of India (QCI) Certified ZED-Master Trainer (Zed 1.0)/ Consultant (ZED2.0). He authors books for the government of India on Zero WASTE, ZERO DEFECT, ZERO EFFECT embracing the Indian spiritual wisdom.*

*He has helped over 200 organizations enabling Doubling their Profits/Growth, Peacefully and Persistently. He has over 30 years' experience and his client list includes Rashtrapati Bhavan (DOPT) to MNC's like ABB, GE, Dupont, Axalta, ABG (Aditya Birla Group), TATA and many MSME's etc. Few MSMEs have transformed to MNC level. He also represented India as a Lean Expert at the International Conference.*

# HERE REQUIREMENTS MEET INNOVATIONS

## A 360° approach in Engineering with Plastics

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**EXPLORE THE CAPABILITIES  
WITH OUR EXPERTS!**


















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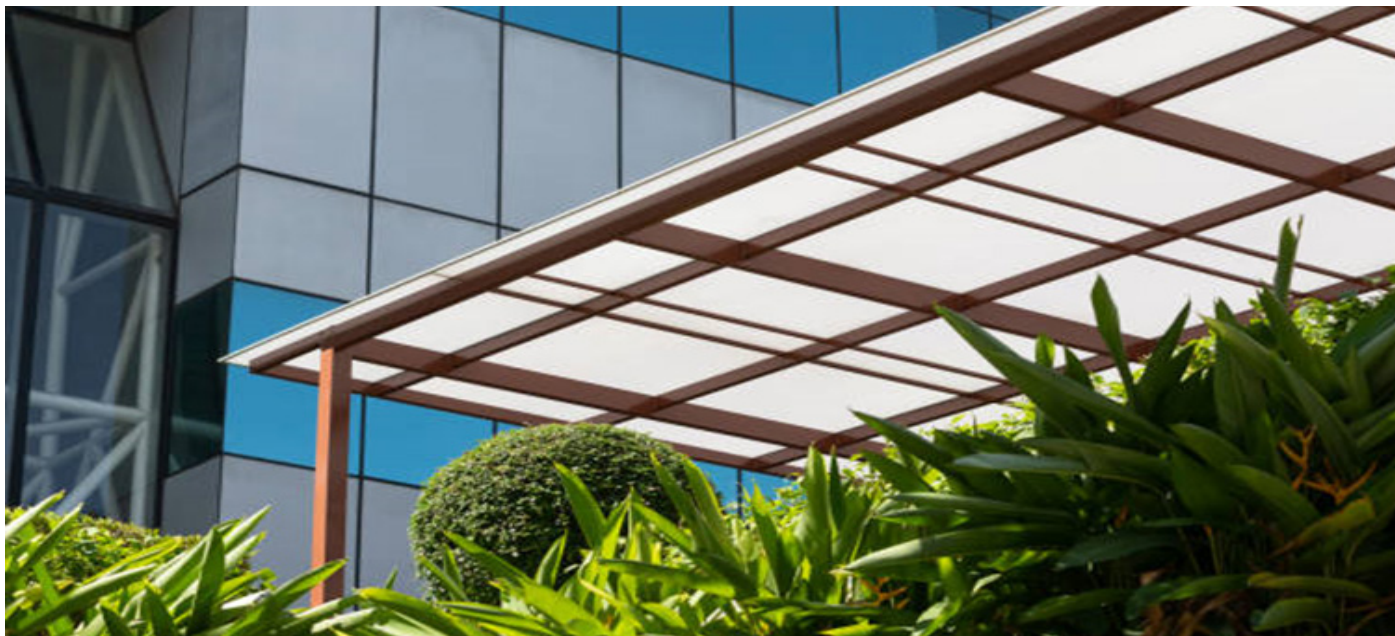


## POLYMER PRICE TRACKER (DOMESTIC MARKET) MARCH 2023

<b>High Density Polyethylene (HDPE)</b>			<ul style="list-style-type: none"> <li>HDPE prices were lower by Rs 2,000 per MT in March 2023 after witnessing a rise of Rs 4,000 per MT in both February 2023 as well as January 2023.</li> <li>In March 2023, HDPE prices were cut by Rs 2,000 per MT during the mid-month. Thereafter no price changes were announced.</li> </ul>
			
Jan-23	Feb-23	Mar-23	
<b>Linear Low-Density Polyethylene (LLDPE)</b>			<ul style="list-style-type: none"> <li>LLDPE prices contacted by Rs 3,000 per MT in March 2023 after rising by Rs 3,000 per MT in February 2023 and by Rs 4,000 per MT in January 2023.</li> <li>In March 2023, LLDPE prices were cut by Rs 3,000 per MT during the mid-month. Thereafter no price changes were announced.</li> </ul>
			
Jan-23	Feb-23	Mar-23	
<b>Low Density Polyethylene (LDPE)</b>			<ul style="list-style-type: none"> <li>LDPE prices were reduced by Rs 3,000 per MT in March 2023. LDPE prices had moved up by Rs 1,000 per MT in February 2023 and by Rs 3,000 per MT in January 2023.</li> <li>In March 2023, LDPE prices were slashed by Rs 3,000 per MT during the mid-month. Thereafter no price changes were announced.</li> </ul>
			
Jan-23	Feb-23	Mar-23	
<b>Polypropylene (PP)</b>			<ul style="list-style-type: none"> <li>PP prices were cut by Rs 3,500 per MT in March 2023 giving up all the price gains seen in February 2023. PP prices stood at Rs 4,500 per MT in January 2023.</li> <li>In March 2023, PP prices were reduced by Rs 3,500 per MT during the mid-month. Thereafter no price changes were announced.</li> </ul>
			
Jan-23	Feb-23	Mar-23	
<b>Polyvinyl Chloride (PVC)</b>			<ul style="list-style-type: none"> <li>PVC prices dropped by Rs 3,000 per MT in March 2023. Prices had remained constant in February 2023 and witnessed a rise of Rs 2,000 per MT in January 2023.</li> <li>In March 2023, PVC prices were cut down by Rs 3,000 per MT in the second week of the month. Thereafter no price changes were announced.</li> </ul>
			
Jan-23	Feb-23	Mar-23	

Source: Industry, Plexconcil Research





# POLYCARBONATE

Polycarbonate is a lightweight thermoplastic polymer that offers excellent heat and impact resistance along with optical transparency and high dimensional stability. Due to the above properties, Polycarbonate finds use in medical components, electronics, automotives, aviation, lighting fixtures, construction, sports equipment, and eyewear among others. The product is classified under Subheading 390740 of the Harmonized System (HS) of Coding.

World-wide import of Polycarbonate resin is valued between USD 13-14 billion per year approximately.

- In 2021, top-5 exporting countries of Polycarbonate resin were: South Korea (18.3%), Taiwan (11.1%), China (8.9%), United States of America (8.7%), and Thailand (8.1%).
- Likewise, top-5 importing countries of Polycarbonate resin were: China (32.7%), Mexico (6.3%), India (3.8%), Germany (3.8%) and United States of America (3.8%).

As can be seen from the above, India is among the top importers of Polycarbonate resin in the world. In 2022, India imported 217,896 tonnes of Polycarbonate resin valued at USD 671.65 million. Thailand and South Korea were the top-2 suppliers of Polycarbonate resin to India, both in terms of value as well as volume.

Source Country	Value (USD Mn)	Source Country	Qty. (tonnes)
Thailand	250.0	Thailand	89,190
South Korea	160.7	South Korea	48,804
Spain	67.7	Spain	18,879
Saudi Arabia	49.2	Saudi Arabia	18,735
China	45.7	China	13,653
United States of America	20.8	United States of America	6,002
Netherlands	20.7	Netherlands	5,926
Singapore	14.0	Singapore	4,777
Belgium	13.2	United Arab Emirates	3,502
Colombia	8.3	Belgium	3,453

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

## ► Product of the month

Nonetheless, in 2022, India also exported 3,299 tonnes of Polycarbonate resin valued at USD 8.50 million to the world. South Korea was the top export destination both in terms of value as well as volume.

Destination Country	Value (USD Mn)	Destination Country	Qty. (tonnes)
South Korea	1.4	South Korea	824.5
Vietnam	1.3	Italy	456.0
China	1.0	Belgium	386.7
Italy	0.8	Mexico	215.0
Belgium	0.7	Germany	205.1
Mexico	0.4	Taiwan	169.8
Germany	0.4	China	167.8
Poland	0.3	Poland	165.0
Netherlands	0.3	Netherlands	154.6
Taiwan	0.3	Nepal	132.3

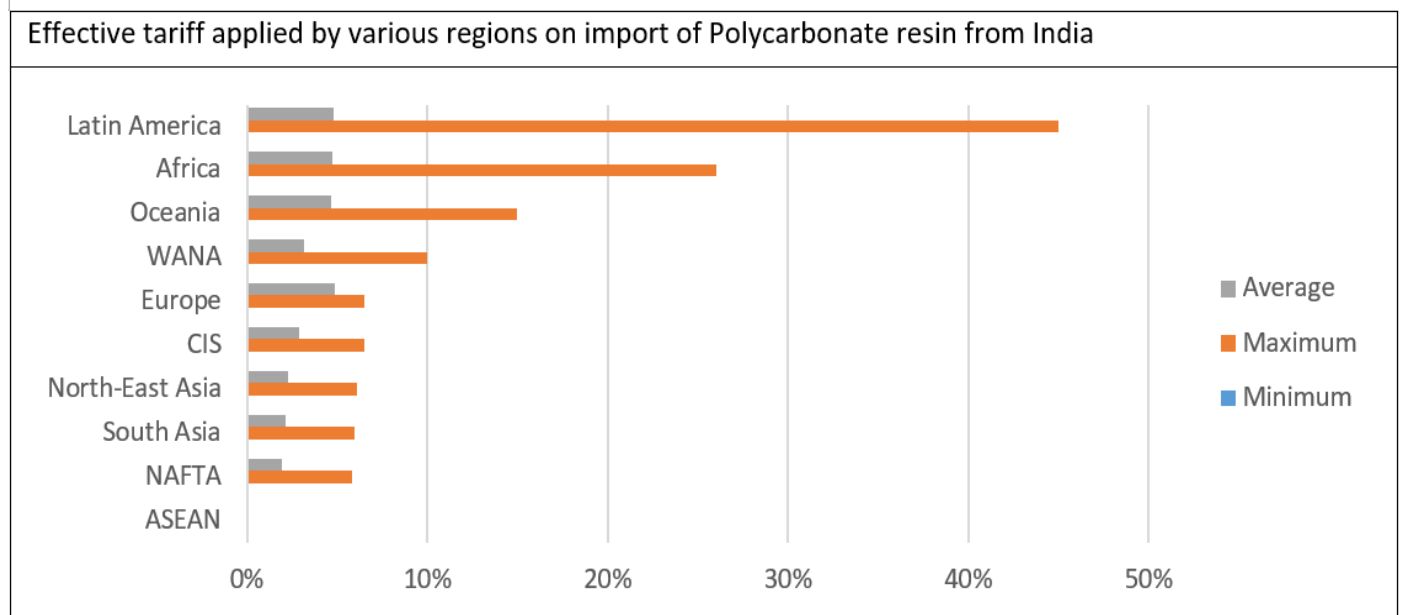
Source: Department of Commerce, Govt. of India, Plexconcil Research

Indian firms dealing in Polycarbonate resin can undertake export to destinations like Australia, Canada, China, Egypt, Indonesia, Mexico, Nepal, Sri Lanka, Viet Nam, and the United Arab Emirates.



There is zero duty applicable on import of Polycarbonate resin from India in Australia as well as the UAE under the recently signed India-Australia Economic Cooperation and Trade Agreement and India-UAE Comprehensive Economic Partnership Agreement, respectively. Import of Polycarbonate resin from India by some of the ASEAN countries (particularly Laos, Myanmar, Philippines, and Thailand) is also eligible for zero customs duty under the ASEAN-India Free Trade Agreement. Further, some of the South Asian countries like Bangladesh and Nepal provide preferential treatment to imports of Polycarbonate resin from India under the SAFTA Agreement. Import of Polycarbonate resin from India by China is also eligible for preferential treatment under Asia Pacific Trade Agreement. Polycarbonate resin import is eligible for zero customs duty in Canada, Egypt, Indonesia, Malaysia, Mexico, Singapore, South Africa, Sri Lanka, and Viet Nam.

Unfortunately, some countries in Latin America, Africa, Oceania and European region do not accord any preferential treatment to Polycarbonate resin imported from India due to which the average customs duty faced on this product is high.



Source: Market Access Map, Plexconcil Research

India does not have any Polycarbonate resin manufacturing capacity. However, M/s. Deepak Nitrite Limited, M/s. GAIL India Limited, and M/s. Gujarat Narmada Valley Fertilizers & Chemicals Limited have announced plans to start manufacturing of Polycarbonate resin.





## New Foreign Trade Policy 2023-28 - Decoded

On March 31, 2023, the Hon'ble Commerce Minister Piyush Goyal announced the new Foreign Trade Policy 2023, which is expected to boost exports amid slowing global trade. The new foreign trade policy has highlighted the vision to take India's goods and services exports to \$2 trillion by 2030. The new FTP came into effect from April 1, 2023.

The new policy will focus on the internationalization of trade in Rupees.

Directorate General of Foreign Trade (DGFT) Santosh Sarangi stated that India's total exports in FY

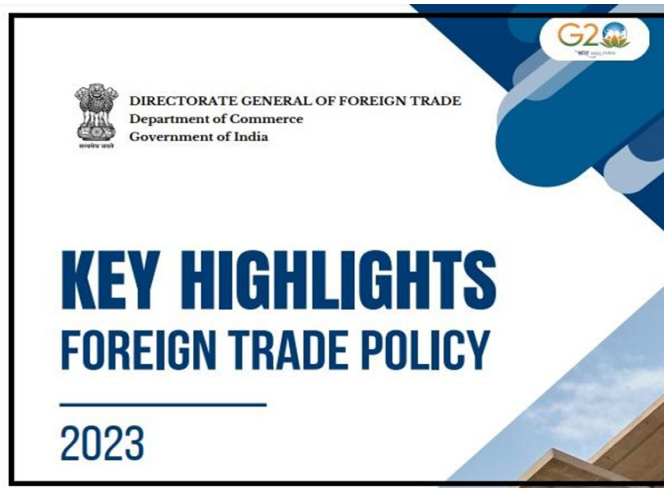
2023 is projected to cross \$760 billion as against \$676 billion in 2021-22. As per DGFT, India will likely cross \$765 billion in exports in fiscal 2022-23.

The new foreign trade policy will mark a move from incentives to remission. It will focus on export promotion through collaboration with exporters, states, districts, and Indian Missions. It will promote ease of doing business and focus on emerging areas like e-commerce and export hubs.

The DGFT added that though the new policy was expected to be in place until 2028, there will be no end date to the new foreign trade policy, it will be updated as and when required.

The government will engage in massive trade outreach globally in terms of sectors and nations in the coming months to push exports.

External Affairs Ministry has assured full support to promote trade, technology and tourism in India through foreign missions.



### Top Highlights of the New Foreign Trade Policy 2023-28

- 1) The government reiterated sector-specific targets to achieve the goal of \$1 trillion merchandise exports and \$1 trillion in services exports by 2030.
- 2) Under the new policy, Faridabad, Moradabad, Mirzapur and Varanasi have been declared as towns of export excellence for apparel, handicrafts, handmade carpet and dari, and handloom and handicraft categories, respectively. These are in addition to the existing 39 towns under the category.



3) Changes for trade settlement in Rupee introduced in FTP for grant of export benefits, DGFT said. Provisions for merchanting trade to be introduced under FTP.

4) The DGFT said that the FTP 2023 will encourage e-commerce export, which is expected to grow to \$200-300 billion by 2023.

5) Foreign Trade Policy 2023-28 has introduced an amnesty scheme for one-time settlement of default in export obligation, Sarangi said.

6) Under the new policy, the dairy sector has been exempted from maintaining average export obligation.

7) A special advance authorisation scheme has been extended to apparel, and clothing.

8) Under the new policy, the value limit for exports through courier services increased to Rs 10 lakh from Rs 5 lakh per consignment.

9) The ministry also rationalised the export performance threshold for recognition of exporters through status holders. This will enable more beneficiaries to achieve higher recognition and reduce transaction costs for exports.

10) FTP 2023 will encourage e-commerce exports and is expected to grow to \$200-300 bn by 2023.

11) Under the new FTP, designated zones with warehousing facilities will be created. These will be designed to help e-commerce aggregators for easy stocking, customs clearance and returns processing. Processing facility to be allowed for last mile activities such as labelling, testing, repackaging etc.



*The article is written by Mr. Anil Kumar Bhansali, Head of Treasury, Finrex Treasury Advisors LLP, has rich experience of Banking and Foreign Exchange for the past 38 years. He was a Chief Dealer with an associate bank of SBI and can be contacted on +91 99872 91278.*

### Sectors that will benefit from the new FTP

- PM Mega Integrated Textile Region and Apparel Parks additional scheme to claim benefits under CSP.
- The dairy sector gets benefits and will be exempt from maintaining the average export obligation.
- Battery electric vehicles and vertical farming equipment are added to the green technology product.
- Wastewater treatment and recycling, rainwater harvesting system added to green technology products.
- Rainwater filters and green hydrogen added to green technology products.
- Green technology products are eligible for reduced export obligation requirement under the EPCG scheme.



## 3D Printing - Transforming Product Design & Manufacturing

From aerospace to medical to consumer products, 3D printing is transforming the way we think about product design and manufacturing.

Having come a long way since 1980s, 3D printing today has matured as a technology that's used to produce everything from prototypes to end-use parts. With advances in materials and printing processes, 3D printing is now a viable option for a wide range of applications.

Additive Manufacturing has revolutionized the way we think about product development. With the ability to quickly produce functional prototypes, businesses can test and refine their designs before moving into production, reducing costs and improving efficiency.

Rapid Prototyping is a key advantage of 3D printing. By rapidly iterating designs, businesses can bring products to market faster than ever before. This is especially important in industries like medical device manufacturing, where time is critical.

Innovation is at the heart of 3D printing. With its ability to produce customized and complex designs, 3D printing is opening up new possibilities for businesses across industries.

Design Thinking, an important part of 3D printing facilitates the ability to produce highly detailed and complex designs and encourages designers to think outside the box.

Manufacturing Technology is constantly evolving, and 3D printing is at the forefront of this evolution. By using digital models to produce physical objects, 3D printing is revolutionizing the manufacturing process, reducing waste and improving efficiency. With advances in materials and printing processes, 3D printing is becoming more accessible and affordable, opening up new possibilities for businesses across industries.





## So, is 3D Printing a sustainable manufacturing method?

Sustainable 3D printing technology focuses on reducing energy consumption and waste production during the 3D printing process. One approach is to use 3D printers that consume less energy, such as those that use LED curing or infrared heating technologies. These printers can reduce energy consumption by up to 90% compared to traditional 3D printers that use high-powered lasers or heaters.

Another approach is to use 3D printing software that optimizes the printing process for energy efficiency. For example, the software can automatically adjust the printing speed and temperature based on the complexity of the design and the materials being used, which can reduce energy consumption by up to 30%.



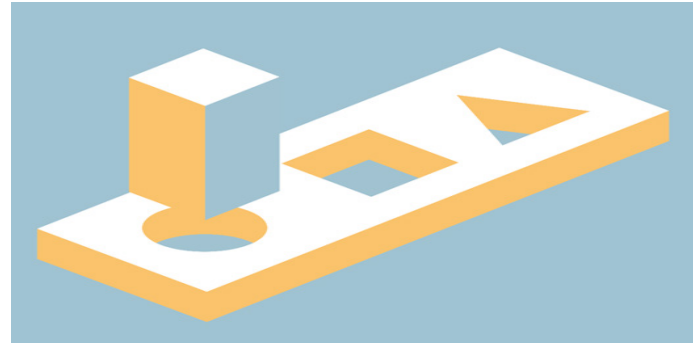
### Sustainable 3D Printing Methods

Sustainable 3D printing methods focus on reducing waste production during the printing process.

One approach is to use **3D printers that can print with recycled materials**. These printers use recycled plastics, metals, and other materials to create new objects. This approach not only reduces waste but also reduces the need for new raw materials.

**Another approach is to use 3D printing methods that produce less waste.** For example, some printers use a process called fused filament fabrication, which produces less waste than traditional printing methods. This method involves melting plastic filaments and extruding them through a nozzle to create the object. Any excess plastic can be reused in the printing process, reducing waste.

Another approach is to **use biodegradable materials for 3D printing**. Some examples of biodegradable materials for 3D printing include polylactic acid (PLA), which is made from cornstarch or sugarcane, and cellulose-based materials.



### Choosing the right material – does one size fit all?

Out of all the materials utilized for 3D printing, plastic is the most utilized as it is incredibly versatile and can be used for a variety of applications. Moreover, plastic 3D printing material is available in a range of colors, as well as a transparent option.

Basically, there are two types of materials used in 3D printing: thermoplastics and thermosets. While Thermoplastics are polymers that soften when heated and harden when cooled, Thermosets are polymers that harden immediately after they have been mixed with a hardening agent.

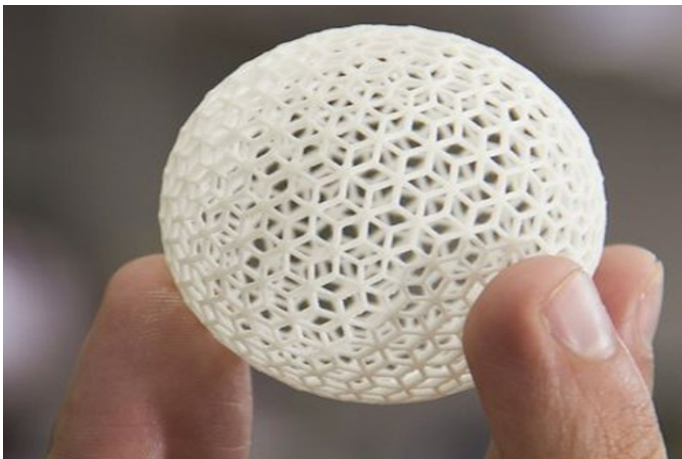
#### *Thermoplastic resins*

Thermoplastic resins are the most common materials used in FDM 3D printing. They are generally inexpensive and easy to obtain, and they come in a wide variety of colors. The most popular thermoplastic resins are ABS (acrylonitrile butadiene styrene) and PLA (polylactic acid). Other resins include polycarbonate, polystyrene, polyvinyl alcohol, and polyvinyl chloride.

#### *Thermosets*

Thermosets are used less frequently in FDM 3D printing than thermoplastics because they require higher temperatures during both printing and post-processing; however, they are more durable than thermoplastics and have applications in the aviation and aerospace industries.

These materials include nylon, polyester (PETG), polyurethane, and epoxy.



### Know your Materials

#### Nylon

Nylon is a strong material that can be used in both load-bearing and load-supporting components. It has a relatively high Tg of about 220°C, which means that printed objects made with nylon can be handled immediately after printing without any risk of deforming or warping due to thermal expansion or shrinkage during cooling.

Nylon is also resistant to many chemicals and is easy to paint by hand. However, because it has a low Tm (about 105°C), it cannot be melted again once it has been cooled down from printing temperature.

This means that it cannot be post-processed by melting again; instead, you must use an acetone bath to dissolve the parts away from the build platform if they are not sticking well enough for you to remove them cleanly with your hands or with pliers or tweezers.

Combining ABS with nylon gives the benefits of both materials: ABS for strength and nylon for durability without warping when cooled down quickly from printing temperature. The combination is called ABS/nylon composite and can be printed using the same settings as ABS alone.

#### Polyester

Polyester (PETG) is not suitable for load-bearing parts but it can provide improved toughness over regular ABS when used in load-bearing parts.

It has a Tg of about 90°C, which means that it is much easier to post-process than ABS and can be easily melted again after printing. It also has a slightly lower shrinkage rate than ABS and is therefore more suitable for printing large parts.

However, it tends to be more brittle than ABS and is less resistant to chemicals than nylon, so it may not be suitable for parts that will be in contact with some chemicals or liquids.

#### Poly(lactic acid) (PLA)

Poly(lactic acid) (PLA) is the most popular material used by 3D printers because it generally prints well on all types of 3D printer. PLA has a low Tg (about 60°C), so it deforms and warps very little when cooled down from printing temperature, which means that you can print many small objects without worrying about warping problems.

PLA also shrinks less during cooling than other materials and can therefore print large objects with little or no warping problems. In fact, you can print objects as large as you like with PLA because they do not need support material to hold them up while they cool down from printing temperature like other materials do; instead, they use a raft to get started on the build platform before sinking into the surface of the build platform as they cool down from printing temperature.

However, even though PLA does not warp much when cooled down quickly from printing temperature, it does tend to shrink quite a bit when cooled down slowly from printing temperature, which can cause problems for large, tall objects. To avoid this problem, many 3D printer operators use a fan to cool down the build platform after they have finished printing an object.

#### Poly(ethylene terephthalate) (PET)

Poly(ethylene terephthalate) (PET), commonly known as PET or polyester, is used by some 3D printers because it prints easily at lower temperatures than other materials; it also prints well on a wide range of build platforms. Like PLA and ABS, PET has a low Tg (about 50°C); however, it is more resistant to heat than PLA and can be heated up to about 230°C without breaking down or warping too much.

Because of this property, PET is often used with heated build platforms in order to improve adhesion between the layer being built and the layer below it.

#### ABS

Acrylonitrile butadiene styrene (ABS) plastic is a very common material used by 3D printers because it prints easily using extrusion-based printers at high temperatures that are higher than that of PLA or PET plastic. ABS has a high Tg (about 110°C), so it tends to warp quite a bit when cooled from printing temperature;



however, ABS can withstand higher temperatures than PLA without degrading too much. As such, ABS requires supports during printing in order to hold up tall objects while they cool.

ABS has a low melt viscosity, which means it flows readily and is good at adhering to itself without the use of a heated build platform.

### Polycarbonate

Polycarbonate (PC) plastic is another common material used by 3D printers because it can handle relatively high temperatures and prints easily using extrusion-based printers without supports; however, PC tends to have a low melt viscosity, which means it doesn't adhere well to itself as well as other materials do during printing—it requires the use of heated build platforms or rafts to print well.

PC has a medium Tg (about 80° C), so it warps more than ABS or nylon when cooled from printing temperature; however, its higher Tg allows for thicker layers that are less likely to warp on cooling than those printed in nylon or ABS.

### Polyvinyl alcohol (PVA)

Polyvinyl alcohol (PVA) is a special type of thermoplastic that is dissolved in water before it's extruded through an FDM printer. PVA has a higher Tg than other thermoplastics, so it doesn't warp when printed without a raft or heated build platform.

PVA is also used as a binder in wood-based 3D printing because it's strong but still dissolves in water.

### Polyvinyl acetate (PVAc)

Polyvinyl acetate (PVAc) is another type of thermoplastic that can be dissolved in water before being extruded through an FDM printer. It has a Tg of about 55° C, so it's stronger than PVA, but it also has a lower Tg than other thermoplastics, which means that it will deform if printed without support material.

A wide range of Plastic and Resin materials used in 3D Printing (Additive Manufacturing) and is developing very quickly as more is understood of the technology and the demand is growing. Each composite has its own benefits and drawbacks that make it more or less ideal for certain applications.

*Information sourced from Mitchellsson.co.uk*





## International News

### **LyondellBasell delivers renewable-based polymers for the medical device industry**

LyondellBasell (NYSE: LYB) recently announced that CirculenRenew polymers will be used in the housing of a female urinary catheter, called “LoFric Elle”, which is marketed by Wellspect HealthCare, a Swedish MedTech business. In an industry that is heavily reliant on fossil based raw materials for its plastic, this project is one of the first of its kind for medical devices. The LyondellBasell grade is ISCC PLUS certified and offers a mass balance certificate to allocate the bio-based raw materials to the product.

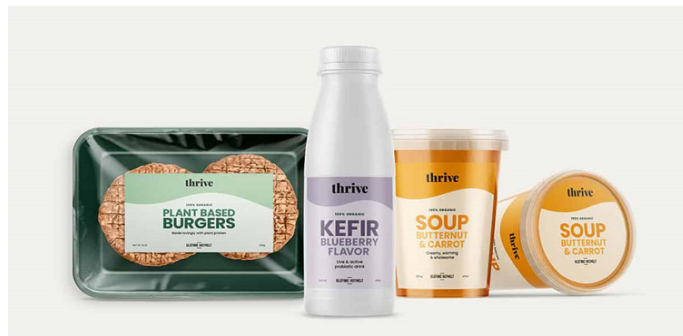
“At LyondellBasell, we want to support our customers in their sustainability ambitions. Our Circulen product family helps to make this possible. Our CirculenRenew polymers are sourced from renewable-based material, such as used cooking oil, that we get from our supplier Neste”, says Mathieu Lecomte, Marketing Manager at LyondellBasell. “CirculenRenew has the same properties as products sourced from fossil-based materials. It can hence also be used in medical device applications. Through the use of renewable-based material, CirculenRenew contributes to the reduction of fossil feedstock and greenhouse gas emissions over the product life cycle. This was an important aspect for our customer Wellspect HealthCare, who has the ambition to become a sustainability leader in its industry.”

LyondellBasell is advancing technologies and innovations that will help enable a circular economy. By 2030, LyondellBasell aims to produce and market at least 2 million metric tons of recycled and renewable-based polymers annually.

<https://www.lyondellbasell.com/en/news-events/products--technology-news/lyondellbasell-delivers-renewable-based-polymers-for-the-medical-device-industry/>

### **Avery Dennison and Dow Launch Breakthrough Hotmelt Label Adhesive to Enhance Packaging Recycling**

Dow (NYSE: DOW) and Avery Dennison have co-developed an innovative and sustainable new hotmelt label adhesive solution that enables polyolefin filmic labels and polypropylene (PP) or polyethylene (PE) packaging to be mechanically recycled together in one stream. The adhesive is the first of its kind on the label market and is approved by Recyclclass for recycling in the HDPE colored stream – Class B.



Hotmelt adhesives offer excellent performance in labels for chilled applications (such as food), but standard hotmelts reduce the usability of recycled PP/PE material. Because this new olefinic hotmelt is based on the same chemistry as PP/PE packaging, when it is combined with a polyolefin facestock, the label and packaging can be treated as a mono-material and recycled together. It therefore offers better recyclability than standard hotmelts without compromising performance.



The new adhesive's development was driven by Avery Dennison's design-for-recycling thinking and made possible by Dow's polymer science expertise. It is based on AFFINITY™ GA Polymers from Dow and sold by Avery Dennison under the name CF3050 in the Europe, Middle East, North Africa region (EMENA) region.

"The joint launch of this new olefinic hotmelt is a great example of how collaborating with partners across the supply chain, like Dow, is key to deliver innovations that help reduce waste, enable the circularity of plastics, and advance the circular economy," says Jarkko Pitko, senior research associate at Avery Dennison Materials Group EMENA.

"It is Dow's goal to deliver 3 million metric tons per year of circular and renewable solutions by 2030," adds Imran Munshi, global marketing manager, Dow Packaging & Specialty Plastics. "Collaborations like this will help accelerate our contributions towards a circular economy for plastic packaging."

Source: Packaging 360

### **Lego, Novo Nordisk Agree to Buy 'Green' Methanol**

Two highly successful Danish companies in very different sectors — medical device OEM Novo Nordisk and the world's largest toymaker Lego — have agreed to purchase e-methanol from European Energy A/S for some of their plastics processing operations. E-methanol is described as a lower-carbon alternative to conventional plastic production by European Energy, which produces the material on Danish soil based on renewable energy from wind and solar plants as well as biogenic CO<sub>2</sub>.



Novo Nordisk will substitute some fossil-based plastic with lower-carbon sources in its signature insulin pens and other medical devices. The Lego Group meanwhile will explore the potential use of e-methanol to make select elements in its portfolio. The toy titan from Billund expects to develop prototypes in the coming years with a view to commercialization in the longer term, said European Energy in its announcement.

The agreement will ensure delivery of e-methanol for part of the two Danish companies' materials production starting in 2024, said European Energy. The quantities that will be shipped were not disclosed.

The use of e-methanol is one element in Novo Nordisk's ambition to achieve zero environmental impact. "As a producer of plastic devices, we wish to reduce the use of fossil plastics by engaging with suppliers in our value chain that can provide the necessary solutions, such as e-methanol for plastic production," said Dorethe Nielsen, vice president of corporate environmental strategy at Novo Nordisk, in a prepared statement. She also hopes that this step will set an example and encourage more businesses to get involved in the decarbonization of plastics production.

Lego noted that e-methanol is the third sustainable material that it has adopted in its quest to develop lower-carbon plastics. Previously, it developed bio-polyethylene and made prototype bricks from recycled PET.

European Energy will begin producing 32,000 tonnes of e-methanol annually starting in 2024, reported Reuters. Shipping company Maersk agreed to buy half of that capacity last year for its vessels, 19 of which can sail on methanol, according to Reuters.

Source: Plastics Today

### **As Packaging Recycling Evolves, So Does the How2Recycle Label**

The How2Recycle sustainability label is evolving, with multiple projects queued up to keep consumers up to date on what's recyclable and to improve the quality and quantity of recycled materials.

The How2Recycle standardized labeling system began as a pilot program in the United States in 2012 and has also been used in Canada for several years. Its goal is to clearly communicate recycling instructions to consumers and reduce confusion by improving the reliability, completeness, and transparency of recyclability claims. How2Recycle is a project of the Sustainable Packaging Coalition (SPC), which is part of GreenBlue, a Charlottesville, VA-based nonprofit. Some 500 brand owners and retailers are members of How2Recycle, and tens of thousands of products currently display the label.

How2Recycle recently announced the next steps in its evolution, which include:

- Increasing consumer education and interaction with a more dynamic label.
- Developing strategic relationships with industry partners, including the Recycling Partnership, the Carton Council, and the Association of Plastics Recyclers.
- Launching a new packaging design collaborative with SPC and How2Recycle members to bring together brands, retailers, and design agencies to prototype future How2Recycle labels.
- Participating in changes to the US Federal Trade Commission (FTC) Green Guides. FTC has extended to April 24, 2023 the public comment period on potential updates to its Green Guides, which regulate environmental marketing claims. The How2Recycle label was designed to comply with the FTC Green Guides.
- Adapting to policy changes in California and other states that may affect recyclability labeling. How2Recycle aims to offer its members clarity on these policy shifts and will assess how the program needs to evolve to comply with any changes.
- Conducting market and consumer research to assure that How2Recycle — a program based on data — is working with accurate, up-to-date data. The program has commissioned several studies to address data gaps in areas such as consumer perception.

### *How the How2Recycle label meets the needs of today's consumers.*

How2Recycle has ongoingly evaluated and updated its label guidance in the past 10 years, recognizing changes in consumer awareness of recycling, end markets for recycled materials, and recycling legislation.

In May 2021, How2Recycle announced updated criteria for assessing end markets to determine whether a package is recyclable. And in July 2022, it upgraded the eligibility of certain rigid polypropylene packaging formats from “Check Locally” to “Widely Recyclable” in the United States.

“As a program, we need to ensure that we are continuing to evolve to meet the needs of today’s consumers while also accurately representing the changing recycling landscape,” says Karen Hagerman, director of How2Recycle. “The How2Recycle program emerged from a Sustainable Packaging Coalition working group, so it is fitting to include our membership in assessing the future of recyclability communication.”

Drawing on the experience of the How2Recycle and SPC membership will assure a comprehensive, detailed approach, Hagerman says, adding that the goal is “to explore the various nuances and needs that have emerged in this space,” such as integrating dynamic labeling options; compliance with future changes in legislation; and label placement, size, and language.

“We will continue to keep our membership updated throughout this process,” Hagerman says. “Alongside this work, we are pursuing increased consumer education and awareness of the label, as consumers play a critical role in ensuring that the packaging they interact with makes it to the right place.”

Source: Plastics Today

### **Translucent Surfaces Open New Avenues in Automotive Design**

Translucent plastics offer numerous new options for personalized light effects, according to resin supplier LyondellBasell. Automotive OEMs, especially in the electrical vehicle (EV) space, are looking for eye-catching light effects that open up new options for automotive designers.

LyondellBasell offers a series of translucent polypropylene (PP) compounds under the brand names Hifax and Hostacom. LyondellBasell’s advanced compounding technology allows manufactures to overcome challenges that are often linked to translucent applications, ranging from premature yellowing and low rigidity to limited impact resistance.

“We are capturing the growth in Asia’s emerging EV market. Translucent materials are a unique and important design element in vehicle interiors and exteriors,” said Joanne Swiggett, vice president of Advanced Polymer Solutions APAC and AFMEI at LyondellBasell, who spoke at Chinaplas 2023 last week. “Our Hifax and Hostacom translucent product series allows automakers to create outstanding optical effects with good light transmission and diffusion. These grades also offer good mechanical properties, as well as high durability for use in both car interior and exterior applications.”

Low coefficient of thermal expansion PP compounds are also in the development pipeline, according to Swiggett, who added that LyondellBasell is bullish on sustainability. “We have 220 projects in our innovation pipeline focused on sustainability, representing 20% of overall projects and 30% of resin volume.” LyondellBasell targets two million tonnes of recycled or renewable-based polyolefins by 2030, which corresponds to approximately 20% of 2022 polyethylene and PP sales.

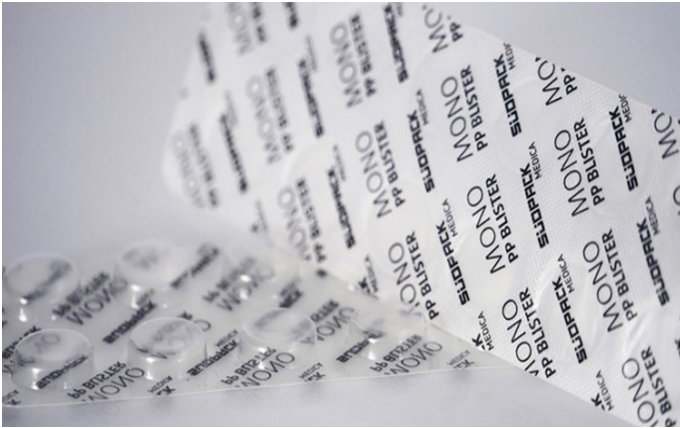


Source: Plastics Today

## Monomaterial Blister Packaging for Pharmaceuticals

Swiss-based sterile packaging producer Sudpack Medica announced an all PP blister pack for pharmaceuticals.

The PP-based top and bottom webs are manufactured in a unique coextrusion process, which makes it possible to add oxygen and ultraviolet barriers.



The mono-material product is compatible with existing recycling material streams in many areas. A life cycle assessment conducted by Sphera software showed that the packaging concept is associated with a greatly reduced climate impact as well as lower energy and water consumption compared to other popular blister solutions.

Sudpack will demonstrate its performance live at Interpack, May 4-10 in Dusseldorf.

Source: ptonline

### Space Saving, Fully Adjustable Vertical Coextruder

Boston Matthews has introduced a space-saving vertical jockey (coextruder) and main extruder production set-up. The extruders are situated on a common base, reducing the usual footprint to a minimum while saving production space.

The unit shown comprises of a 3-in. (75-mm) main single-screw extruder with a 1-in. (30-mm) coextruder. Boston Matthews offers a range of extruder sizes/outputs to meet the customer's specific requirements. This also includes options for the processing of fluorocarbons and high-temperature polymers such as PEEK. The vertical machine can be moved up and down, forward and back, and can be swiveled a complete 270°. This reduces alignment procedures to fine adjustments. The precision fine adjustment will help to simplify and reduce set-up time, while minimizing the risk of damage to the tooling during the process.



Both extruders are controlled by one central control system using the Boston Matthews Smart Control System. This is a color touch-screen PLC that provides total control, recipe storage, alarms, trending, network connectivity, management set security levels, production data export and production monitoring safety controls.

AC, direct-drive technology provides precision screw speed holding for the highest quality melt and output performance whilst at the same time ensuring maximum energy efficiency is obtained. Direct-Drive also is said to greatly reduces operational noise, dust and routine maintenance.

Source: ptonline.com

## Emerging Recycling Infrastructure to Address Flexible Plastic Film Growth

Flexible plastic films are growing as fast as the challenge of recycling them, but sustainable solutions are available through emerging infrastructure, according to PMMI Business Intelligence and AMERIPEN's collaborative report, "2023 Packaging Compass."

Only 1.9% of the U.S. public has curbside access to recycling flexible plastics, the report says, citing a 2021 report from The Recycling Partnership.

These materials can complicate the sortation phase of materials recovery by tangling and wrapping up in equipment, among other issues. Many community recycling programs have banned the collection of flexible film packaging due to this.

Instead, most post-consumer flexible plastics recovered in the U.S. are collected via retail drop-off programs, but consumer participation in these programs is low.

Close to 95 pounds of flexible and film plastic, including bags, pouches, and wrappers, are found annually in the average U.S. home, according to the Recycling Partnership report.

There is a belief that the U.S. could increase total flexibles recovery volume if municipalities could effectively incorporate these films into the curbside collection. Finding a way to collect films would improve the economics of recycling as well as access to valuable plastics.



The recycling community is quickly adopting artificial intelligence (AI) technology, which could help with this.

AI includes using robotic arms and other technologies to help sort and identify flexible films (among other materials) quickly and early in the sorting process to prevent damage to existing equipment and ensure recovery. This could help reduce concerns with the sortation of flexibles from curbside materials.

Chemical recycling could be another solution. It could help increase the quality of resin for reuse and permit the increased collection and reduced sortation requirements.

Chemical recycling is also believed to help increase access to U.S. Food and Drug Administration (FDA) approved recyclable content for food contact use – permitting the increased opportunity to reuse films for circular reuse rather than directing it to downgraded products. Investments in the collection, sortation, and processing of flexible films are emerging. The next few years will help provide an increased understanding of the potential impact of these technologies as well as opportunities and investments needed to improve collection and sortation.

But progress will happen faster if the packaging industry aligns these investments with the regulatory and legislative environment to support progress.

Source: packworld.com

### Oman's Polymer Park targets 150,000 t/y of plastic products by 2030

Ladayn Polymer Park, an industrial zone dedicated to the manufacture of multi-use plastic products in Suhar, has invited Expressions of Interest from investors seeking to operate from this first-of-its-kind cluster in the Sultanate of Oman

Set up as a joint partnership between OQ, the wholly government-owned global integrated energy, and the Public Establishment for Industrial Estates (Madayn), Ladayn Polymer Park is currently being developed on a 1 million m3 site at Suhar Industrial City. Polymer as feedstock for investors is envisioned to come primarily from OQ's multibillion dollar Liwa Plastics complex located nearby.



"The Park will make the most of the Sultanate of Oman's position as a major polymer producer to strategically grow the number and productivity of local converters and enhance the national polymer ecosystem, striving to become a leading global force in driving positive change in plastics innovation," said OQ in an introduction to Ladayn Polymer Park.

"It will further drive an increase in local demand for the upstream production of polymers, levels of technology used by industry, the value of products manufactured, business activity, and employment in the sector," it further stated.

Significantly, Ladayn Polymer Park has identified as many as 20 different polymer-based product categories that are suitable for investment in this cluster. These categories open up potentially hundreds of business opportunities linked to polymer conversion.

A sampling of these opportunities is as follows: Flexible Packaging (BOPE film, lamination film, high barrier films, pouches, labels, bags for food and non-food items, bubble wrap, compostable bags and cutlery, pharma and medical packaging; Rigid Packaging (for syringes, blood collection tubes, waste containers, cosmetic and pharmaceutical packaging; Textile & Nonwoven (wipes,



hospital bed covers, medical caps, gowns, surgical cloths, medical/surgical masks and medical gloves; Foams (foams for PP, PE and PU, insulation foams and packaging foams, protective foams, anti-shock foams), Compounds masterbatches (Colour masterbatches, functional masterbatches such as flame retardant, anti-microbial, anti-block etc); Glass fibre compounds; Pipes and Fittings; Fiber & filaments (staples, spun bond, strapping fibre, clothing, smart textiles); Construction & Infrastructure (storm water boxes, water management systems); Plastic Pallets; Bottles, Jars and Containers); Agriculture film; Industrial Packaging (raffia bags, non-woven bags, garment bags); Industrial Packaging (caps & closures, Food & Nonfood containers, storage boxes, crates, pallets, paint pails, cages, flowerpots, industrial containers, wash bins; Furniture: (design chairs, tables for indoor/outdoor) flooring, panels, doors, decking; and Safety nets.

Given this promising investment potential for downstream value creation, output from Ladayn Polymer Park is envisioned at around 150 kilotonnes of multi-use plastics products by the year 2030. The facility is being actively targeted at small and medium-size investors, as well as corporates.

Further, to help with the development of local manpower with the skillsets to work in plastics conversion industries, Ladayn has announced plans to collaborate with a private specialized plastic processing training institute.

“Through such an (arrangement), the Park aims to (develop) a quality, skilful, well-trained and dedicated workforce. It will also provide continuous development of required technical skills. In addition, it could introduce a strong polymer curriculum in different colleges and universities in the country,” it added.

Source: [zawya.com](http://zawya.com)

### Owen Mumford wins distinction in Red Dot award

Owen Mumford has been awarded a distinction in the Red Dot awards for innovative product design for its Aidaptus single-use auto-injector launched in 2021. Aidaptus wins the Red Dot award for the category Product Design 2023.

Designed, developed, and manufactured by Owen Mumford, Aidaptus is a single-use auto-injector created for the administration of a wide range of drugs and biologics which require subcutaneous delivery. Aidaptus features design elements that aim to benefit both drug companies and patients, which helped to secure the award. The auto adjust stopper sensing technology features a self-adjusting plunger that automatically adapts to different fill volumes in each syringe, with no change

parts required. The versatile design also accommodates both 1mL and 2.25 mL pre-filled glass syringes in the same compact base device. This provides pharmaceutical companies with a single solution for delivery of a variety of drug formulations. In addition, the compact design and simple 2-step injection process provide ease of use and confidence for those patients who require subcutaneous medication. The intuitive design is key to helping patients administer their own treatments in a home setting, helping to reduce the burden on health-care practitioners and services.



“Red Dot is one of the most prestigious design competitions that is highly competitive, and we are honoured to be globally recognised with distinction in the Product Design 2023 category,” said Jarl Severn, CEO Owen Mumford. “We have previously enjoyed this accolade for our Unifine Pentips Plus pen needle and today’s news further underscores our ongoing pursuit and commitment to excellence in design.”

“Our Aidaptus auto-injector platform has been designed to reduce complexity and provide a flexible solution for pharmaceutical and biotechnology companies who are developing a variety of drug formulations for subcutaneous delivery. It tackles the challenges of changes to drug formulation or injected volume and can therefore help reduce risk during drug development and lifecycle management,” said Michael Earl, director, Owen Mumford Pharmaceutical Services. “In addition, Aidaptus will help patients to self-administer their individual therapies for diseases such as rheumatoid arthritis, Crohn’s



disease and multiple sclerosis, using a simple and easy to use device.”

Aidaptus will be manufactured in factories in Malaysia and the new Owen Mumford production facility in Witney, UK which is due for completion later this year. The site is being developed in accordance with BREEAM guidelines, recognising the highest levels of environmental, social and economic sustainability performance. The new centre of excellence will play an important role in supporting the core principles of the organisation - doing business in a responsible and ethical way. In addition, Owen Mumford is collaborating with Stevanato Group for moulding and assembly of Aidaptus which gives customers the benefit of dual sourcing and security of supply.

Source: [medicalplasticsnews.com](http://medicalplasticsnews.com)



## India News

### Berry celebrates the opening of healthcare facility in India

Berry Global has marked the completion of its new healthcare manufacturing facility and Global Centre of Excellence in Bangalore, India with a special opening ceremony.

After the official ribbon cutting, customers and senior Berry personnel were honoured in a traditional Pooja ceremony followed by the traditional lighting of a lamp. Guests then had the opportunity to tour the new building, which will create around 500 local jobs in the coming years and improve regional and global access to a wide range of healthcare solutions.

“The opening of this impressive facility marks another major milestone in Berry’s worldwide healthcare operations,” commented Berry Global chairman and CEO, Tom Salmon.

“Our investment in a second factory in Bangalore further strengthens our ability to support healthcare companies with both regional expertise and global capabilities in the development of modern healthcare solutions. This will help to meet demand throughout Asia and beyond for patient-centric healthcare products, while at the same time creating new jobs that tap into the skills and knowledge of the local workforce.”

The 21,000sqm factory features precision manufacturing equipment, together with an ISO 8 class 10000 cleanroom, producing a wide variety of packaging products and medical devices for the ophthalmic, nasal, inhalation, dispensing, and self-injection industries.

Among the latest innovations that will be manufactured at the factory are the new Berry PneumoHaler breath actuated inhaler with dose indicator that helps to reduce asthma and COPD patient coordination errors and breathing variability; and the award-winning Activated Rispharm, a recyclable multidose antimicrobial dropper that is designed to help prevent eye microbial infections.

The Global Centre of Excellence will support the development of innovative solutions for both existing and new applications and markets, with the ability to respond quickly and effectively to new regulations and requirements. Central to much of the design work is to devise solutions that improve the patient experience in terms of usability, functionality, and medicine administration and adherence, while also taking into account the need for companies to meet ambitious sustainability goals.

With many of the world’s major pharma companies separating their operations into consumer health and pharmaceutical markets, a key focus for the Bangalore site will be to design patient-centric solutions for growing consumer health categories.

“This new facility ideally demonstrates Berry’s commitment to deliver its wide-ranging technical and design expertise on a local level, meeting the needs of customers of all sizes, from national and international businesses to local and start-up companies,” said Jean-Marc Galvez, president, Berry Global Consumer Packaging International.



“Specifically, we are ideally placed to support the forecasted growth for quality healthcare products in Asia, increasing their availability to many more people. We look forward to strengthening existing customer relationships and forging new partnerships in the introduction of innovative solutions that will benefit the lives of patient populations throughout the region.”

Source: medicalplasticsnews.com

### India's polymer demand rises 12% in FY '23 on post-pandemic economic recovery

India's polymer demand has risen by 12 percent in the financial year 2022-23, due to a sharp pick-up in consumer activities after over two years of the pandemic-induced economic slowdown. Also, moderating retail inflation has provided a breather to consumers and eventually boosted overall sales of retail products in the last few months. Polymer demand remained robust in the last financial year, as it is widely consumed across product sectors from packaging to automotive equipment.

Data presented by the industry leader Reliance Industries Ltd (RIL) to the company's investors and shareholders showed India's overall polymer demand at 17.1 million tonnes for the financial year 2022-23, compared to 15.3 million tonnes reported in the previous year. Polyethylene (PE) demand is reported to have increased by 8 percent to 7 million tonnes in the financial year 2022-23, while polypropylene and polyvinyl chloride (PVC) demand jumped by 6 percent and 32 percent to 6.4 million tonnes and 3.7 million tonnes, respectively, compared to their figures of 6.1 million tonnes and 2.8 million tonnes in the previous financial year.

Polymer demand in India (million tonnes)			
Particulars	Financial year		Growth (%)
	2021-22	2022-23	
Full year			
Polymer	15.3	17.1	12
Polyethylene (PE)	6.4	7.0	8
Polypropylene (PP)	6.1	6.4	6
Polyvinyl chloride (PVC)	2.8	3.7	32
Fourth quarter			
Polymer	4.1	4.9	20
Polyethylene (PE)	1.7	1.9	11
Polypropylene (PP)	1.6	1.7	8
Polyvinyl chloride (PVC)	0.8	1.3	67

Source: Reliance Industries Ltd presentation

During the fourth quarter of the financial year 2022-23 i.e. January-March 2023, India's overall polymer demand grew by 20 percent to 4.9 million tonnes as against 4.1 million tonnes reported in the corresponding quarter last year. The country's PE and PP demand shot up by 11 percent and 8 percent to 1.9 million tonnes and 1.7 percent, respectively, in the January-March 2023 quarter, compared to 1.7 million tonnes and 1.6 million tonnes in the same quarter the previous year. However, PVC demand during the quarter escalated by 67 percent to 1.3 million tonnes, as against 0.8 million tonnes in the comparable quarter the previous year.

Polymer deltas in India (US\$/tonne)		
Particulars	Financial year	
	2021-22	2022-23
<b>Full year</b>		
PVC-Naphtha/EDC	572	474
HDPE-Naphtha	426	362
PP-Naphtha	529	360
<b>Fourth quarter</b>		
PVC-Naphtha/EDC	450	482
HDPE-Naphtha	325	340
PP-Naphtha	412	367

Source: Reliance Industries Ltd presentation

### CPMA estimates

The apex industry body, the Chemicals and Petrochemicals Manufacturers' Association (CPMA), in its annual report published for 2022, projected India's overall polymer demand at 17.05 million tonnes for the financial year 2022-23, a rise of 7.2 percent from 15.9 million tonnes reported in the previous fiscal year. India's polymer demand had increased by 7.7 percent in the financial year 2021-22 from 14.78 million tonnes in the preceding year. CPMA estimates India's cumulative polymer production at 13.69 million tonnes, at 90 percent of factories' operational capacity in the financial year 2022-23, as against 12.86 million tonnes of actual output reported with the same operating rate in the previous financial year. Presently, India has a total production capacity of 15.14 million tonnes, a marginal increase from 14.23 million tonnes in the previous year.

Unfortunately, nearly a fifth of India's polymer demand is met through imports. In the financial year 2022-23, CPMA estimates India's polymer import at 3.93 million tonnes. Considering a total export of around 636,000 tonnes, India's polymer trade deficit is estimated at 3.3 million tonnes, according to CPMA. While polymer



exports declined substantially over the years, imports have increased.

### Global markets

As a product, the polymer is used in everyday life and therefore has very high growth potential, especially in sectors like construction, automotive, electrical, and electronics which have witnessed a manifold increase in plastic demand over the last few years. Contrary to the myth that plastic is a product for the packaging industry only, various articles made of rigid and flexible plastics are used in almost every walk of life. These articles are lightweight, flexible, and strong something equivalent to rigid metals. With their recycling value and therefore a big contribution to the circular economy, plastic is cost-effective and easy to carry, and its demand is likely to accelerate further in the future.

According to reports, the global polymer market is estimated to be worth US\$659.81 billion in the calendar year 2022 and is now poised to grow with a compounded annual growth rate (CAGR) of nearly 5 percent, reaching US\$1,046.15 billion by 2030. Another contributing factor is the increasing polymer demand from the construction industry, especially in emerging economies such as India, China, and Brazil, among others. Increased foreign direct investment (FDI) in the construction sector is set to provide a boost to the global polymer demand.

### The pandemic-induced stagnation

The global polymer demand remained stagnant with flat consumption recorded in FY 2019-20 and FY 2020-21. According to CPMA, India's polymer demand also stagnated at around 14.7 million tonnes during both pandemic years i.e. 2019-20 and 2020-21. Not only the demand, but its production also remained flat at around 12.4 million tonnes during FY 2019-20 and FY 2020-21, against India's overall capacity of 14.2 million tonnes.

The Covid-19 pandemic outbreak began in China in November 2019 and gradually spread to the world with passengers traveling from the infected country. Triggered by a robust demand from non-feed and food packaging, personal care, etc. the demand for polymer remained strong even during the pandemic years, barring reduced consumption from automotive and allied industries. On the other hand, polymer demand went up for manufacturing personal protection testing (PPT) kits, gloves, masks, and medical equipment, including syringes.

### Bright future ahead

Polymer demand in India is likely to remain robust in the next few years. CPMA forecasts India's polymer demand to record 6.4 percent growth to 18.14 million tonnes in the financial year 2023-24, with its production to remain at 14.84 million tonnes out of 16.08 million tonnes of overall installed capacity. However, India would continue to remain import dependent to the tune of up to 3.28 million tonnes this year due to lower availability from domestic sources. Hence, domestic producers see no dearth of demand especially in the wake of robust economic growth.

Source; Polymer Update

### No 100% biodegradable plastic in India, claims misleading: BIS

Amid growing claims by companies about their products using "biodegradable plastic" for marketing their brand, the Bureau of Indian Standards (BIS) on Wednesday said as of now, there is no 100% biodegradable plastic in India. It said firms making such claims or 'greenwashing' their products are liable to face action under "misleading advertisements" rules of Consumer Protection Act. Responding to a question from TOI, director general of BIS, Pramod Kumar Tiwari said, "It has not been established whether any plastic is actually 100% biodegradable. Research is still going on on this in the country and across the world. We had suggested to the Central Pollution Control Board (CPCB) and the environment ministry not to issue any plastic product as biodegradable and they have accepted it."



Officials said the tests of plastic products claiming to be biodegradable are underway at Central Institute of Plastics Engineering and Technology at Bhubaneswar and none of them has passed the test till now. They added that the government faces a tough challenge on how to check greenwashing by companies. Greenwashing is the practice of making products appear more sustainable than they really are and this involves strategic marketing ploys, misguided publicity materials or advertisements.

Currently, the government gives certificates only to “compostable plastic manufacturers”, which is different from certificates for manufacturing biodegradable plastic.

Scientists involved in tests that a product can be certified as “biodegradable” only when it’s found that after 90% of degradation, there is no adverse impact of the product or its ingredients on the environment. They added that there are also discussions across the globe whether “biodegradable plastic is a myth”.

In the case of compostable plastic, the materials are treated in controlled environmental conditions in industries such as “pits” to them break down into water, biomass, and gases such as carbon dioxide and methane.

Tiwari said in the absence of proof, any claim of certain plastics as biodegradable tantamount to misleading advertisement. The government has set up the Central Consumer Protection Authority to deal with misleading advertisements. As per the statutory guidelines, the manufacturers or advertisers must keep scientific evidence for the claims they make while advertising their products.

Source: msn.com

## Public procurement: Govt purchases from MSMEs cross Rs 4 lakh crore through GeM portal

Public procurement of goods and services by central government ministries and departments has crossed Rs 4 lakh crore via the business-to-government portal Government e-Marketplace (GeM), showed official data. While the portal took 1,771 days to reach Rs 1 lakh crore in gross merchandise value (GMV) since its launch in August 2016, the number of days taken to add another Rs 1 lakh crore GMV and cumulatively reach Rs 2 lakh crore was reduced by over 5.5x to 316 days. In comparison, Rs 3 lakh crore GMV was achieved in 234 days and Rs 4 lakh crore in 123 days on April 19, according to the data tweeted by GeM on April 20.



GMV is referred to the total value of goods sold, usually through an e-commerce channel over a certain duration. “Winning with trust! @GeM\_India marks another milestone in public procurement. PM @NarendraModi has ensured transparency & a level-playing field for MSMEs and small businesses,” Commerce Minister Piyush Goy-

al tweeted hailing GeM’s growth.

The GMV stood at Rs 4.01 lakh crore with 1.49 crore orders processed via GeM from over 60 lakh sellers including 8.69 lakh micro and small sellers at the time of filing this report, according to the data from the GeM portal.

The seller count grew from 52 lakh in October last year. In terms of the top buyer in 2022, the Ministry of Defence made the highest amount of purchases worth Rs 16,747 crore via GeM.

With respect to the top states, Uttar Pradesh led the tally with goods worth Rs 9,642 crore procured through GeM in 2022. In terms of training and development, 1,459 training sessions on cost-saving buying or running a business were conducted in 2022 and 93,050 people were trained. Moreover, 1,288 new categories and over 4.72 lakh products were added in 2022. With respect to sellers and buyers, 22,38,601 new sellers and 8,178 new buyers were added to the portal during the year.

Meanwhile, purchases by government enterprises from micro and small enterprises had hit an all-time high in FY23. According to public procurement monitoring portal Sambandh data, procurement worth Rs 58,429 crore was made by central public sector enterprises (CPSEs) from 2.16 lakh MSEs during FY23, growing by 9.3 per cent from Rs 53,423 crore worth purchases made from 2.25 lakh MSEs in FY22.

Source: FE

## Indian merchandise exports need to prepare for EU’s carbon tax challenge

The European Union’s carbon tax poses a new worry for India’s merchandise exports which are already grappling with a sluggish global economy, rising input costs and supply chain disruptions. This regulatory move is primarily aimed at protecting local European companies from being undercut by suppliers from countries with less stringent emission norms. However, it will increase the cost of compliance arising out of hiring energy auditors to estimate product-specific emissions and prepare the necessary documentation. That will cut into the profit margins of exporters.





## Climate Policy Package

The European Parliament recently passed a Climate Policy Package which includes a proposal to impose a carbon tax on energy-intensive products such as cement, hydrogen, iron and steel and aluminium imported into the EU. The aim of this policy is to encourage the reduction of carbon emissions by making it more expensive to import these products. Thus, starting October 1, the foreign suppliers to the EU will have to report about greenhouse gas emissions embedded in their consignments, and from January 1, 2026, they'll also have to pay for 'carbon border adjustment' that will jack up the cost of steel exports to the EU by 17-40 percent. It will hit as much as 27 percent of India's exports of iron, steel, and aluminium products worth \$8.2 billion that are destined for the EU (2022). What is more worrying is that the carbon tax can potentially be extended to more products, and many other countries in particular, Canada, Japan, the UK and the US are also contemplating similar emission control moves.

The supporters of carbon tax legislation argue that it is part of the EU's efforts to reduce its carbon footprint and meet its climate targets. By imposing a carbon tax on imports, the EU hopes to incentivise countries outside of the EU to reduce their emissions, while also protecting local businesses that have already made efforts to reduce their carbon footprint. They also contend that the EU's Climate Policy Package (CPP) represents a major step towards a more sustainable future.

## Non-tariff Barrier

In contrast, Indian companies - which are likely to be adversely affected by the border carbon adjustment mechanism - and a section of trade experts see it as a new form of non-tariff barrier to block the export of competitively priced merchandise from countries like India to EU. Media reports suggest that the Indian government is contemplating retaliatory measures, something similar to what it did to counter an increase in the import duties on India's steel and aluminium exports to the US. However, any retaliatory actions by the Indian government in the form of increased import duties on European products will generate bad press, especially given India's commitment to the Paris climate accord.

There are also suggestions to re-designate goods and services tax (GST) in part or full on steel and aluminium as a carbon tax to neutralise the adverse impact of the EU's border carbon measures. This is a flawed argument as GST, being a domestic consumption tax, can't be imposed on exports of made-in-India steel or aluminium. Besides, GST is also applied to imported products, so European steel or aluminium products coming into India can't escape them.

## Border Carbon Measures are WTO Compliant

Yet another option for India is to initiate a WTO complaint against the EU's carbon tax while arguing that it's a non-tariff barrier aimed at blocking imports to support competing domestic businesses. However, article XX (b) of the General Agreement on Trade and Tariffs (GATT) allows countries to implement trade restrictions, such as tariffs or quotas, that would otherwise be in violation of global trade rules, in order to protect the environment if they are applied to both imported as well competing domestically produced goods. In other words, border carbon measures are WTO-compatible.

Moreover, the EU may use the same tactics as India — for instance, in the WTO disputes with respect to India's cane and sugar support measures, and the imposition of import duties on ICT products despite India being a signatory to the Information Technology Agreement — in defending its carbon tax by relying on the non-functional WTO Appellate System to avoid complying even if India wins at the panel level.

To conclude, there is not much that the Indian government can or should do to protect affected Indian businesses, except maybe signing FTAs with countries that have no plans to impose carbon taxes in the near future and help them diversify away from the developed countries. But that's easier said than done. Besides, markets of developed countries in Europe and North America are too lucrative to let go. The Indian government can try to seek a longer transition period to comply with the European Union's border carbon adjustment measures under its free trade deal which is currently under negotiation. But, that again will be difficult to pull off.

Against this backdrop, affected Indian companies can take a few proactive measures to prepare themselves for tougher emission control norms being imposed in their key export markets such as the EU or UK. For instance, increased reliance on cleaner renewable energy sources to power manufacturing units and to reduce their carbon footprints is one such measure. Steel makers can consider switching from blast furnaces to electric arc furnaces, and finally to green hydrogen that will help them minimise the damage caused by border carbon adjustments or carbon tax. That's really the way forward.

Source: FE





## 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, Taraulins, 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

**The Plastics Export Promotion Council added the following companies/firms as new members during March 2023. We would like to welcome them aboard!**

Sr. No	Name of the Company	Address	City	Pin	State	Director Name	Email
1	Aarya Plastopet	Anagha , Ashwta Nagra, Behind Government Tp H C, Bhadravathi,	Shivamogga	577301	Karnataka	Hosadurga Nagaraj Hemavathi	srinivasa2294@yahoo.com
2	Airo Lam Limited	Block No.355, Nanapur Road, Dalpur Village, Tal. Prantij,	Dist.Sabar-kantha	383120	Gujarat	Pravinkumar Nathalal Patel	airolam@yahoo.com
3	Candytoy Corporate Private Limited	Survey No. 446/1/2/1 Min-1 And 443/1(Part) Village - Badiyakeema	Indore	452001	Madhya Pradesh	Gaurav Mirc-handani	toycorporation.india@gmail.com
4	Clear Polyplast India Private Limited	404, Acme Ind. Park, W. E. Highway, Off I. B. Patel Road, Goregaon (East),	Mumbai	400063	Maharashtra	Umesh Devkisan Mundhra	accm.off@crystalcontainers.com
5	Deejay Multipacks Private Limited	No: 10 & 8/3a, Vepery Church Road, Vepery	Chennai	600007	Tamil Nadu	Anshul Agarwal	djmpl.ho@gmail.com
6	Ecolastic Products Private Limited	Plot No. 205/ 8 & 9 Ida., Phase II., Cherlapally, Hyderabad, Telangana, Rangareddy	Hyderabad	500051	Telangana	Sasidhar Chinta	teja@ecolastic.in
7	Elson Packaging Industries Private Limited	Gidc Vapi, A 1 14, Bhadakhmora, Bhadakhmora, Gidc Vapi, Valsad,	Valsad	396195	Gujarat	Milesh Ashok Mody	milesh@el-songroups.com
8	Impera Flexipack	Survey No. 171, Devliya Road, Tankara, Morbi	Morbi	363650	Gujarat	Dadhania Krunal Rajeshbhai	krunalpatel4602@gmail.com
9	India Thermoplastics Engineers	Plot No 93, Block B, Sector 5, Dsiidc Industrial Area Bawana, North West	Delhi	110039	Delhi	Kawal Mahajan	kawalmahajan@yahoo.com
10	Indo Spun LLP	12, Floor-7, Plot-207, Embassy Centre , Jamnalal Bajaj Marg, Nariman Point	Mumbai	400021	Maharashtra	Avdhesh Thakur	commercial@indospun.com
11	J B Ecotex Limited	Block No 195, 196, 197 National Highway 8, Opp Gujarat Poly Fils, Near Rose Garden Hotel, Village Dhamdod, Taluka Mangrol,	Surat	394125	Gujarat	Shreya Arya	connect@jbecotex.com
12	Kamsons Polymers Private Limited	1003 Embassy Chamber, 10th Flr, Rd Rd, Cts-E/85 859 B-2 Plot No.5, Opp Simran Plaza, Khar West	Mumbai	400052	Maharashtra	Navin Raman Mehra	navinmehra@gmail.com
13	Keshawin Bio-Polymers Private Limited	Unit 6, New Metalage Industrial Compound, Subhash Road, Jogeshwari East,	Mumbai	400060	Maharashtra	Keshavi Arvind Mehta	keshavi@hotmail.com
14	Krriyan Containers Private Limited	No.268 Part A, Hebbal Industrial Area, Hebbal	Mysore	570016	Karnataka	Ashwinikumar P Hemdev	exim@dars-hangroup.org
15	Magic Blades Private Limited	Shop No.215-II, Plot No.7 Lsc II Aggarwal Tower Inder Prastha Extn.	Delhi	110092	Delhi	Neeru Sharma	magicblades910@gmail.com
16	Mehta Flex LLP	B/48 , New Empire Industrial Estate, Kondivita Road , Andheri East,	Mumbai	400059	Maharashtra	Kantilal Mehta	flexfilm@abcm-films.com

## New Members

17	Micro Machinery Manufacture	Survey No.30/1, Plot No.B2, B/H Ganga Forging, Nh-8b, Shapar/ Veraval	Rajkot	360024	Gujarat	Ashantkumar Ramjibhai Vaishnav	info@micromanufacturers.com
18	Mundra Tradewing	501, Sunil Enclave Pcs Ltd, Pereira Hill Road, Andheri East,	Mumbai	400099	Maharashtra	Jaykumar Anil Mundra	mundratradewing@gmail.com
19	Ojas Plast	Sarvey No. 137/2 Paiki 1, Tal Tankara, Jabalpur	Morbi	363650	Gujarat	Mukesh Vanubhai Kundariya	info@ojasplast.com
20	Prozonc Extrusions Private Limited	Plot No. 3, Sy No. 312, Bollaram Road, Bachupally,, Medchal Malkajgiri,	Hyderabad	500090	Telangana	B Jayarama Krishna	prozoncupvc@gmail.com
21	Rakesh Trade Centre	Sector No 9 Flat No 306 Building No A22, Shree Shiddhivinayak Chs Ghansoli	Navi Mumbai	400701	Maharashtra	Rakesh Dilip Wangde	info.rtc2015@gmail.com
22	Rita Enterprises	16,Manohar Nagar	Kanpur Nagar	208027	Uttar Pradesh	Sanjay Yadav	sanjayyadav.yadav8@gmail.com
23	Sai Plastic	A-136, Swarnim Industrial Park, Bujrang Dhamtvan Road Daskroi,	Ahmedabad	382430	Gujarat	Bharatbhai Jagjivandas Patel	saiplastic2006@hotmail.com
24	Shinkwang Electronics Private Limited	Flat No. 800, 8th Floor Sehyog Building 58, Nehru Place	New Delhi	110019	New Delhi	Shalendra Kumar	devraj कुमार84@gmail.com
25	Sidwin Fabric Private Limited	S.No.898 At-Dhundhar, Gombhoi Harsol Road	Sabar Kantha	383030	Gujarat	Sureshbhai Ramanbhai Patel	info@sidwinfabric.com
26	Twin Engineers Private Limited	J-524, Midc Bhosari, ,	Pune	411026	Maharashtra	Ashutosh Prabhudas Bhupatkar	tarak@twinengineers.com
27	Vt Initiative	B 103 Ram Rahim Garden OM Nagar, Vasai West	Vasai	401202	Maharashtra	Vinjumuru Tirumala Venkateshwara Rao	vt.initiative@gmail.com
28	Ynj Enterprise	B-49 Girdhar Park Opp Panasonic Batteries, Makarpura	Vadodara	390010	Gujarat	Parul Jayesh Bhatt	ynjenterprise9@gmail.com