

PLEXCONCIL - The Plastics Export Promotion Council

# PLEXCONNECT<sup>®</sup>

Edition 24, June 2021

# 2

ANNIVERSARY

*Anniversary Special*

**Women in Plastics**

**Interview with Shantanu Deshpande,  
Specialty Polyfilms**

**In focus - Tamil Nadu  
Plastic Industries Park**



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We are turning two this month!!! Dear members and readers, it gives me much pleasure to inform you that we are celebrating Plexconnect's 2nd Anniversary this month. The magazine which started as just a seed of an idea, is now blossoming into a beautiful tree. On behalf of the team at Plexconcil, I would like to thank everyone who has made this journey possible. We are grateful to all members who have taken time out to share their perspectives and knowledge with us and for enriching the content of our magazine, month after month. Do keep it coming and we look forward to much greater participation in years to come.

This month's issue is even more special to us as we have taken this opportunity to salute the invaluable contributions of our elite squad. The women leaders in our business. Female entrepreneurs and professionals, with their intuitive leadership and sharp business acumen have emerged as inspiring mentors, guides, and colleagues. Gender balance is an important subject today and as a progressive industry, we must acknowledge and ensure unbiased meritocracy for the growth of our people while providing a conducive and safe work environment for everyone. Meet 5 of the most powerful women in plastics, just a few of the numerous female leaders of our industry.

Over the years the plastics industry has leap frogged to become a powerhouse in manufacturing and services. We may have a long way to go, but undoubtedly, with the vision of our industry veterans, dynamism of the younger generation and support of our Govts, we have achieved many a milestone that is the bedrock our plans for further progress. Meet Shantanu Deshpande of Specialty Polymers that has acquired 2 patents for PE based Meat Wrap and Fresh Produce Film, besides having developed numerous products with pipeline plans to develop many more environmentally friendly plastics. At Plexconcil, our endeavour towards the progress never stops. In the past month, we have been organizing several knowledge based webinars that are critical to improving business practices besides addressing key issues with the Govt. We have also taken the current slow down in business to talk to our various panel members and chart our strategies to promote our exports in

these segments. The first Buyer Seller Meet, as a result of these discussion is due to take place in the end of June. We are organizing a BSM with UK & Europe for the Consumer and Houseware products and welcome your wholehearted participation at the same.

Due to the lockdown, we were unable to post the March export figures in our previous issue, though we have shared the same in this issue. During March 2021, India exported plastics worth USD 1.0 billion, up 48.9% from USD 672 million in March 2020. Cumulative value of plastics export during April 2020 – March 2021 was USD 9,855 million as against USD 10,000 million during the same period last year, registering a negative growth of 1.4%.

All this and more, as always, from Plexconnect for the month of June! While we do hope that times ahead bring renewed optimism for all of us, until then, let's keep our pledge to remain safe and healthy.

**Warm regards,**

**Arvind Goenka**  
**Chairman**



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### Writing Instrument Panel Meeting held on 05.04.2021

The Council had organised writing instrument product panel meeting on 5.4.2021 under the Panel chairmanship of Mr Vimalchand Rathod, Director, C/o Flair Pen & Plastic Industries Pvt Ltd through virtual mode. Export performance of the products panel for the period April to February 2021 was reviewed. Major issues & concerns which are hampering the export trade were also discussed in the meeting.

### Gujarat Regional Committee – 3rd Meeting held on 05.04.2021

3rd Meeting of Gujarat Regional Committee was held on 5th April, 2021 virtually on Cisco Webex Platform. Export promotion activities being undertaken by Council were discussed during the meeting. Export related concerns were also discussed during the meeting. Deliberations were also made regarding initiatives for increasing engagement with various plastic associations, area wise association and non-members from Gujarat region.

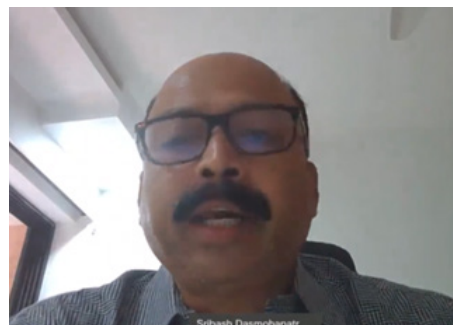
### Webinar on “How to start Export in current times?” – 09.04.2021

The Plastics Export Promotion Council (PLEXCONCIL) in association with Gujarat State Plastic Manufacture's Association (GSPMA) organised a Webinar on “How to start Export in current times?” on 9th April, 2021. The objective of the webinar was to encourage entrepreneurs from Micro, Small and Medium Enterprises to enter into export market and provide guidance with essentials of Export-Import.

During welcome address, Mr. Sribash Dasmohapatra, Executive Director, Plexconcil said that Plexconcil has over the years worked hand in hand, with several plastics manufacturers, processors and merchants across the country. Our aim is to collaborate closely with people and help in identifying challenges and opportunities that form the foundation of our aim to strengthen the growth of Plastic industry.



**Mr Shailesh Patel, President, GSPMA**

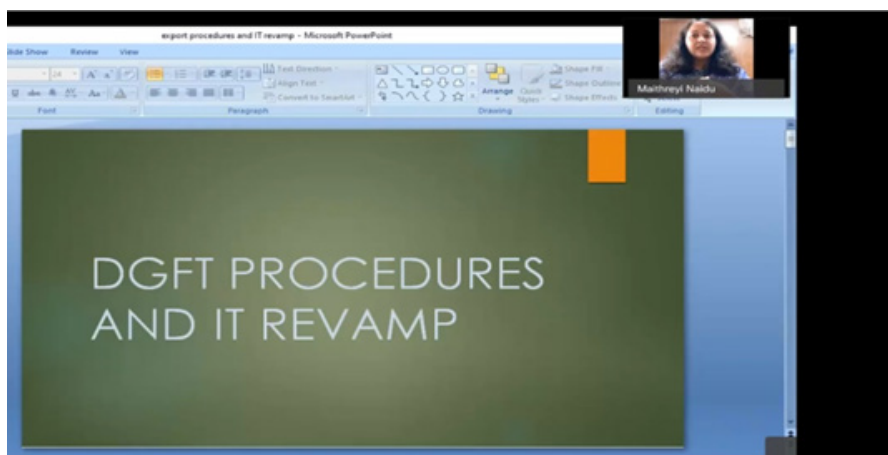


**Mr Sribash Dasmohapatra, Executive Director, Plexconcil**

Mr Shailesh Patel, President, GSPMA said that Indian entrepreneurs have capacity, capability and intelligence to take India's share in the Global export market of plastics from ~ 1.0% to a higher number and such initiatives of GSPMA and Plexconcil will help MSMEs to start exports and boost exports of existing exporters.

Shri R Muthuraj, ITS, Additional DGFT, RA Ahmedabad informed participants about new DGFT office of Ahmedabad and briefed regarding recent trade notices pertaining to foreign trade and District Export hub initiative.





### **Presentation by Ms Maithreyi Naidu, ITS, Asst. DGFT, RA Ahmedabad**

Ms Maithreyi Naidu, Assistant DGFT, ITS, RA Ahmedabad made a detailed presentation about Basics of Export, resource required to become an exporter, policies and schemes of DGFT to boost exports, Role of District Export Plan and Basics of the new DGFT website. During the webinar, several questions raised by entrepreneurs were answered by the speaker.

### **Interactive Video Conference on Daman District under DGFT's "District as Export Hub" initiative – 16.04.2021**

To promote exports at District level, the Directorate General of Foreign Trade (DGFT), Govt of India has introduced "Districts as Export Hub Initiative". The broad objective of this initiative is to understand the export profile of districts, identifying sectors having export potential and also to identify all interventions (soft & hard) required to facilitate trade/export eco system in the District.

In this regard, PLEXCONCIL participated in video conference organized by FIEO on 16th April, 2021. Participants from District Industries Centre, Daman Industry Association and other stakeholders from the District were also present. The Council was represented by Mr Naman Marjadi, Assistant Director, Regional Office- Ahmedabad and Mrs Bharti Parave, Asst. Director, Trade & Policy, Mumbai. Several inputs and suggestions were given by council regarding boosting plastic exports from the region.

### **Raw Materials Panel Meeting Held on 24.4.2021**

The Council had organised Raw Materials product panel meeting on 24.4.2021 under the Panel chairmanship of Mr Alok Tibrewala, Director, C/o Swastik Plastalloys Pvt. Ltd. through virtual mode. Export performance of the products panel for the period April to February 2021 was reviewed. Major issues & concerns which are hampering the export trade were also discussed in the meeting.

### **Meeting on the proposed RBSM scheduled during Plastindia 2022 – 26.04.2021**

In order to discuss the various aspect of the RBSM, the Council had organised the above meeting on 26th April, 2021. The aforesaid meeting was attended by Mr Arvind Goenka - Chairman along with Mr. Nilotpal Biswas – RD and Mr Krunal Goda - Senior Manager (Exhibitions).



## WEST

- Representation to O/o. DGFT, regarding Non-tariff measures (SPS and TBT) issue being faced by our exporters to be raised in the forthcoming WTO SPS/TBT committee meetings
- Representation to ITS, Deputy DGFT regarding non- tariff barrier imposed by USA to Indian products
- Representation to O/o. DGFT regarding the concern raised by M/s. Oswal Extrusion Limited of Advance authorization
- Representation to The National Standard Body of India regarding implementation of DVS standard on dual laminate and BS EN 13121-3 standard for designing of FRP Equipment in India
- Representation to DCPC regarding council members concern on India–Canada Comprehensive Economic Partnership Agreement (CEPA)
- Representation to EP(CAP) division regarding issues/items for inclusion in the agenda for 25th meeting of Central Zonal Council – Eastern
- Representation to DG Shipping regarding demand of Terminal Handling charges by port terminal and Shipping lines
- Representation to FT LAC division regarding extension of issue of Certificate of Origin (CoO) from 60 days to 120 days under India-Chile PTA in case of emergency
- Representation to Embassy of India, Riyadh, Saudi Arabia regarding non receipt of export payment from M/s. NATIONAL AQUACULTURE GROUP – Saudi Arabia
- Representation to O/O. The Commissioner of Custom (export) , Tughlakabad regarding release of NOC from BRC cell department of M/s. Mangla Handles to Drawback department
- Representation to ICEGATE regarding IGST refund issue of M/s. Om Enterprises, M/s. Polyest Plastics Pvt. Ltd., M/s. Mittal Technopack Pvt. Ltd.,



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## Women in Plastics



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Disposables Pvt.  
Ltd (AS)

**Kantha Amarchand,**  
Senior Vice  
President, Farcom  
Cable Systems Pvt  
Ltd. (KA)



**Khushboo Doshi,**  
Executive Director,  
Rajoo Innovation  
Centre Llp (KD)

**Rinku Appalwar,**  
CFO, Emmbi  
Industries Limited  
(RA)



**Piya Thakkar,**  
Director, Network  
Polymers Pvt Ltd.  
(a Mechemco  
Group Company)  
& Vice Chairman,  
FRP Institute (PT)

*Behind every successful woman is HERSELF.*

Women, who represent half of humanity have been playing significant roles in our industry and our societies for eons. As leaders and mentors, they traverse the complexities of business and elegantly balance their lives, supporting, nurturing and empowering other women around them. On its second anniversary, Plexconnect presents this elite squad of the Plastics Industry, as we celebrate these powerful business leaders who refuse to give into stereotypes, breaking through the glass ceiling, their powerful voices heard across the industry and their inspired leadership, shaping the lives of those that surround them. We bring you 5 incredible women and insights into their inspiring journeys.

*(Interview excerpts)*

**What was your inspiration behind choosing a career in the plastics industry?**

**AS:** Born, brought up and married into a conservative family, it wasn't an option for choosing a career in plastics but rather it was the need of the hour back then to support my husband, who was into manufacturing of Medical Disposables. It was he who recognised and acknowledged my willingness, devotion and entrepreneurial qualities to run the business systematically. Being a housewife for the previous 9 years and a mother of two small children, it was a new realm of struggle as I started this new path of medical industry. Along with manag-

ing the house and kids, I had to learn across new terms, systems & technology to have a greater understanding of this industry.

**KA:** In the 1990s the inspiration to take up a career for women rooted in tradition-bound families was a rare or accidental occurrence! There were inspiring women in art, music, politics, etc. but not in Industry as such in India. I just started looking for a job and entered FARCOM which was very renowned and the first Indian company specialized in flat cables technology. FARCOM started working towards being an all-in-one industry which included integrating the cable compound manufacturing as well. I entered FARCOM during their R&D phase in PVC manufacturing. It was a great platform for me. I didn't stop with the assigned office work but worked out the algorithm to widen my field of work to grow with my simultaneously company at that time and understood the different facets of plastics and their industrial use.

**KD:** My Father – Mr. C N Doshi Founder of Rajoo Group.

**PT:** I attended the composites industry exhibition in India (ICERP) and in Paris (JEC Show) and was very impressed with the applications of composites and the potential composites have. This greatly motivated me to pursue a career in this industry; particularly when I saw top notch scientists of our country like Dr. R. Chidambaram (atomic energy chairman and scientific advisor to G.O.I.), and the rocket man, late Hon'ble Dr APJ Abdul Kalam as chief guests at the ICERP.

RA: My mum was a homemaker, and while we were always well-supported, I had first-hand seen the struggle that women faced when they were not financially independent. It wasn't only about money; it was about the power to make choices on one's own terms. When I was in my first year of my Bachelors' degree, I took math tuitions to support myself. I knew that when I graduated, I wanted to do something in manufacturing. Honestly, plastics happened by chance - my husband, and co-founder, Makrand is from Chandrapur where there are a lot of cement manufacturing factories. Makrand knew that there was a huge market for cement packaging, and that is how we got into woven sack trading. 3 years later, we started Emmbi and the rest, as they say, is history!

**In typically male dominated industries, what are the real opportunities for women to rise to leadership roles?**

AS: It could be said that industries are mainly dominated by males and the presence of females is quite for namesake in any segment which in India especially, is hindered by household responsibilities and duties. Real leaders do not wait for real opportunities, they make the best of what they can. I think the entire gender bias should not be dragged up here as the hidden sub-context of the entire discussion which shifts it towards a more of a social issue.

KA: Maybe you have to acquire the so-called 'male' qualities - keep an eye on new / better ways of doing things, on the alchemy of developing products and the markets, be ambitious, assertive, and willing to do hard bargains.

KD: While girls are taught to play it safe, smile pretty and get all A's, boys are taught to play rough and swing high. "In other words, we are raising our girls to be perfect, and raising our boys to be brave!" Such differences in upbringing begets Emotional intelligence - the ability to recognize emotions in self and others and relate, which is something that has recently gained momentum as essential leadership behaviour. This is something that comes more naturally to women than men. To truly create a great place to work and to get the best out of employees, demonstrating emotional intelligence as a leader is critical.

PT: I think things are very different in current times. There are several opportunities for women if they are willing to take up the roles which used to be typically male dominated in the past. Not only do many companies have women at the helm today, but some of the top countries have women Presidents and Prime ministers and are extremely successful in driving these countries. More women are graduating in various engineering disciplines and getting jobs in otherwise traditionally male

dominated professions. Women leaders bring in a different perspective and approach to modern day problems which give their companies another dimension and an advantage.

RA: Frankly, and while I do not mean to be a pessimist, the opportunities are limited, and also greatly vary from one company to the next. I think it is important for women to carefully vet a company before they take up a job - see if there are women in leadership positions, check on policies for mothers, and try to speak to some women working there. In addition, we need to start making a business case for why gender diversity is important - there's already so much research that shows that having a diverse employee base adds to a company's bottomline; so, if you see that and still choose not to hire women or minorities, it's because of your social bias, not because you're protecting your company.

What would be your advice to young women who wish to enter into male dominated professions?

AS: It is not that easy to enter into male dominated professions but, if you like to accept challenges and you are willing to fight back no matter how high the tides are then you should not be afraid of any gender bias, because what matters is skill. Your skill and calibre along with perseverance and diligence will always bear the results you could have ever wished for.

KA: Women are all-rounders, multi-taskers and we can seamlessly transition between different roles in our personal and professional lives. We should never be intimidated by a male-dominated profession. If you desire, you will make it happen. So, do not doubt yourself. Moreover, in any career, we need to give our best and this applies to both men and women.

KD: To the young women I would like to say that believe in yourself, be confident and always be true to yourself. Respect womanhood and perform the duties it comes with.

PT: It is not really the profession that is male dominated. I think if they have the skill set and commitment there are equal opportunities for women in almost all professions. My advice would be to follow one's passion no matter what. And to not be apprehensive or fearful to venture into a male dominated industry if you're interested in it. Take any setbacks that come your way in your stride and don't let others' opinions (without solid reasoning) weigh you down.

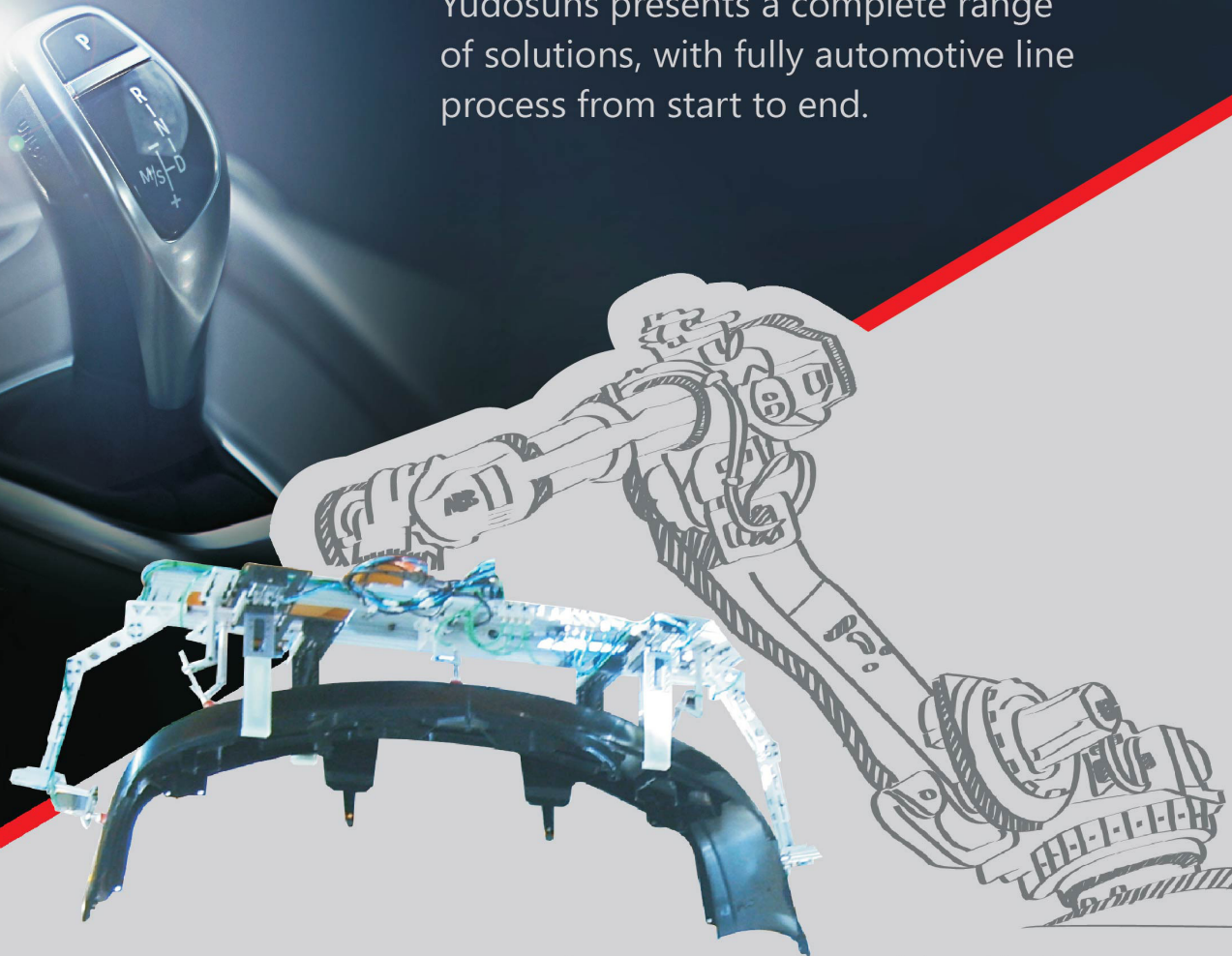




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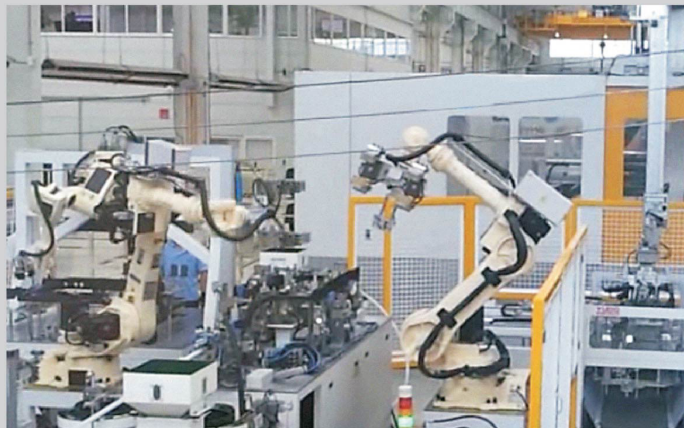
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RA: Find a mentor! Someone who will help you as you rise through the ranks or pivot in your career. Also, find male allies in the workplace. However much we want this to change, men are currently on the top seat, and so one needs to be able to create alliances that can help one break the glass ceiling. And if you are the first or only woman to rise in your company, do not let yourself be tokenized - make sure you're not the last, and that you leave the place better than you found it.

## **As a female leader, what have been your most significant barriers? How did you overcome these?**

AS: For me personally the most significant barrier in my journey was society which was not exactly kind to me since society is not quite kind when it comes to accepting changes. But gradually as I worked diligently through the years, my hard work paid off and was reflected well in the company. I saw the change and even now when I am answering your questions over here, I feel I am bringing a change. I have mentored a number of women over the years in different roles and promoted their talents, recognised their work, and given training in the same way as men to empower and build their confidence. There have been other barriers too in my life but, now when I look back upon them, I feel it is quite unjust to label them as barriers because what they actually do is bring a balance in a woman's life. Balance is necessary to distinguish oneself from a machine.

KA: In the initial 10 years of my career, the barriers were mostly external – the legal system, logistics, finance, negotiations, building new vendor relations, hustling the unfair competitions – but you need strategic thinking and resilience to handle them. Even internally, in the Organisation, you have to learn to work with your competitive colleagues. The family as such was not a barrier since it just allowed me to go ahead in pursuing my career.

KD: Progress does not mean parity. Working in a climate where you have been historically excluded — like in manufacturing, corporate boardrooms, or even in Engineering — can lead women to question their abilities. While observing what causes self-doubt, particularly for women in male-dominated fields, I have observed that there are numerous factors at play. Chief among them: gender bias that comes in both explicit and subtler forms. The end result is that highly skilled women succumb to stereotype-driven expectations. It begins early when girls as young as six stop believing that girls are the smart ones, while boys continue to believe their gender is gifted. As women get older, these stereotypes discourage them from pursuing careers thought to be typically reserved for men. "Acceptance" is first step towards overcoming any barrier! Though I have not really faced such barriers, I feel that once we accept the limitation as an individual, one can always chart out further

ways and means to overcome the same.

PT: I am fortunate to have had immense support from my colleagues in my organisation and the industry in India and overseas. In general, there are apprehensions. However, over time people get used to it and start accepting.

RA: To begin with, we have to start by acknowledging that there is a problem. In the last Fortune 500 list there were more men named John than there were women. In manufacturing, and plastics too, it is not just that the industry is male-dominated, but also that the leadership is too. For example, in our industry association, IFIBCA, I am currently the only active woman leader. Here, my most significant barrier was learning how to be vocal - you tell yourself it is easy, but it can be terrifying. It is like peeling off a band-aid though, you just have to do it once. I also faced barriers with regard to family planning and being so involved with my career. After my daughter was born, I took a year off from work, and if it were not for my husband's push, I am not sure I would have so wholeheartedly returned. We also took the decision to not have a second child, because we were not sure that we would be able to do justice to all our responsibilities. So, to all the unmarried women - find a spouse who is ready to be a champion for your career! It is not that you will not succeed otherwise, but this just makes it so much easier.

## **What does Women's empowerment mean to you? As a leader, how do you envisage a greater role for women in your organization?**

AS: Women empowerment for me is ensuring equality in terms of dignity, pay and role in an organisation without any gender bias and purely based on the skill set and diligence of the person. Motivating women to change the current stigma of a male dominated workplace and ensuring fair grounds on which their hard work and dedication is assessed and evaluated with men could be the way which can help women achieve a greater role not in my organisation itself but also, society.

KA: Empowerment here means you become the master of what you are assigned to do and if you want to grow with the organization, you follow some path, and if you are free to move about there are many paths. Better to acquire higher knowledge in your line of work. You cannot ignore a few commitments at home and still have to make a choice. Inside an organization, it is your work and competence that empower you.

KD: We have been living in a male dominant world for too long. There were these preconceived notions where women were supposed to do a particular kind of work and in many ways suppressed. Times are changing, now you see a lot more women coming out and proving

that they are no less than their male counterparts and sometimes even better. We still have a long way to go but change has started, we will see a lot more women stepping out for work and prove their prowess. We as a company have strict policies for gender equality and non-discrimination. We aim to have a 50% female work force by 2030 to support it. In fact, I am reminded of what Swami Vivekananda said "The best thermometer to the progress of a nation is its treatment of its women. There is no chance for the welfare of the world unless the condition of women is improved."

**PT:** Women empowerment is extremely important to me. Our own organisation has grown with the contribution and hard work of women in key / important departments, and this will certainly continue.

**RA:** Women's Empowerment means that women should be able to take more decisions, and to navigate their life - whether personal or professional - on their own terms. Currently, we see a lot of women in roles at the bottom of the chain, clerical jobs in the corporate world, or labour on Indian farms, women are doing the brunt work and not being given the opportunities to rise above it. Women need to be more confident in their ideas and what they are proposing - don't end your sentences with a questioning tone, be assertive. I envisage a greater role for women at Emmbi through improved policy making for our current staff, as well as investment in girls pursuing STEM education through our CSR budgets, so we are able to increase women's participation in the pipeline for the future.

**What can the plastics industry do to attract a greater number of women into its workforce?**

**AS:** Creating a safe and healthy workplace, equal pay for equal work, locomotive facilities, flexible working time for female workers are some of the very basic yet important measures which can be taken up to attract a greater number of women into the plastics industry.

**KA:** We need to provide equal opportunities; a level playing field and ensure pay on par with Industry standards. All the Plastic training institutes every year send out 90% resumes of only Men to companies. Either these institutes are not women friendly or something is missing. This has to be corrected at Grass root levels. Unless you provide training to women in Plastics technology, how will the industry absorb them? There should be better concessional interest rates from Banks to women entrepreneurs. The Government did start Allotment of industrial lands to Women entrepreneurs at concessional price but this was not regulated properly and did not reach the genuine entrepreneur.

**KD:** Plastics Industry should motivate women professionals by giving exposure to various technical fields and should not be limited to back office desk jobs i.e. HR, finance and administration. We do not often see women on the shop floor in the Indian industry compared to other developed countries like USA Europe etc. Indian Plastics Industry has not witnessed single female machine operator so far! However personally I strongly feel that women can run any kind of machine if given exposure and safe working environments. Today it is all about automation and knowledge, women are flying airplanes and leading space flights. It is not just about might or strength, but about intelligence and education.

**PT:** The industry can sponsor a women's scholarship programme in engineering schools such as ICT, MIT etc. where courses specific to the industry are offered. The modern plastics Industry requires job skills like product designing, packaging, automation, IT support, advertisement, branding, human engineering, etc. where women have proved to be very good.

**RA:** Lots! To begin with, improve the work culture on the shop floor to help women employees be more comfortable - cleaner toilets, menstrual leaves, etc. Start them young - take more training and on-campus seminars to help women believe that there is a place for them in the industry. Train recruiters to avoid inherent biases in recruiting so that people are on boarded for their talent and skills.

**Who (women, especially) has been your inspiration and what have you learned from them/her?**

**AS:** My mother, who taught me hard work, honesty and dedication. My mother-in-law who supported my work and taught me how to avoid external influences which could affect my work. My husband who went through thick and thin with me and helped me get accustomed to the workplace and the corporate life.

**KA:** When I began my career, the ratio of women working was very small but growing in numbers in the IT field. I had some inspiration from the new entrepreneurs of those days. However, in my case, it was all a search in the woods and finding my way.

**KD:** Research shows that when women are exposed to powerful female role models, they are more likely to endorse the notion that women are well suited for leadership roles. My mother-in-law who is a Paediatrician has been my inspiration as a woman. She not only inspires me but also helps to navigate adverse emotions which arise out of work & personal life. Balancing professional & personal life will be a challenge for any working woman and she has not only inspired me to overcome domestic challenges but always hand holds me in easing

out domestic task and rise to achieve the ultimate goal.

PT: I have been inspired by many women leaders like Indra Nooyi, Kiran Mazumdar Shaw, Angela Merkel, etc. However, one of my biggest inspirations has been the past President & CEO of JEC GROUP: Mrs. Frédérique Mutel. Over the course of my career, I have seen her take JEC to new heights with exhibitions across four continents and the build the strongest network for the global composites industry. Her dedication, knowledge, involvement, attention to detail and effort to build and maintain a rapport with the entire industry has been key to her success. Apart from this I am also greatly inspired by my aunt, Padma Shri Bhawana Somaaya who is an Indian film journalist, critic and an author of several books. Her work ethic, sincerity, hard work and unique perspective on things are admirable.

RA: I am inspired by a lot of women - my mum, who raised us to be independent against all odds, my daughter, who pushes me to think of intersectionality in feminism; my best friend, Manu, who has braved a career in aviation and raised two stunning kids. But also, strong voices like Faye D'Souza, Roxane Gay, and Gauri Shinde, who are constantly redefining the change that women can bring.

---

**Where can we find you on a Saturday or Sunday morning? What would you be doing?**

AS: You can find me cooking a nice hearty meal for my family, enjoying some fresh air with my family over a cup of tea, chatting about the week and trimming my bonsai plants at my terrace garden.

KA: You will find me at home relaxing with my family! Other activities for the weekend mornings would be cleaning, trying a new dish, or baking to indulge and catching up over a call with family and friends.

KD: Sunday - one will always find me in my own space - my home, spending time with my family. Sunday is one such day when personally I do not prefer to step out from my space and have family time including "Me time".

PT: On a Sunday morning you would find me spending time with Family / friends / working out.

RA: I am pretty old-school when it comes to the 6-day work week, so Saturday is basically a weekday for me. But Sundays are lazy - I sleep in, hangout with my daughter/husband, watch Bollywood movies, and cook, sometimes!

# Did You

# Know?

## Facts

All of plastics in the world is used annually just 3-4 % of Petroleum Oil

### Oil and gas uses

About four percent of annual total use of oil and gas worldwide is for plastic production.

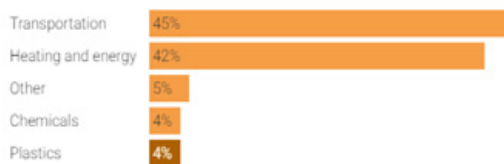
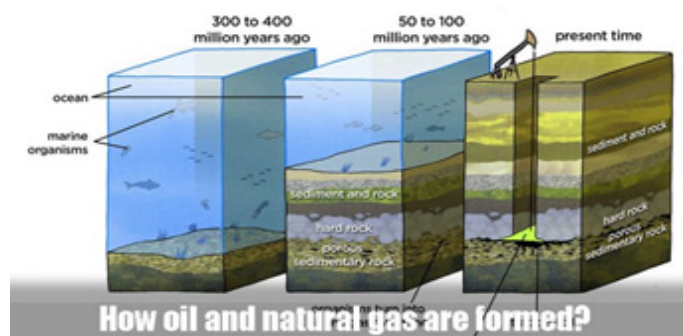


Chart: The Conversation, CC-BY-ND • Source: [British Plastics Federation](#) • [Get the data](#)

India's White (Milk) Revolution and Gold (Edible Oil) Revolution was largely possible due to Plastics packaging



Petroleum is also a natural product. It is a result of biodegradation of plant and animal remains under high temperature and pressure for hundreds of years.





Same weight of glass and plastics, package 10% and 53% of products



## Life cycle assessment by IIT Delhi\* of Jute packing vs Plastic packing for Atta

- a) Energy savings with Plastics is a whopping 81% for manufacturing, packaging & transportation, while;
- b) water consumption/footprint of Jute fibres during is humongous 2.6 million litres per ton, while for plastics it is almost nothing!! And all the while you thought natural fibres are Ecofriendly !



Biodegradable petroleum based Plastics are consumed by microbes in 1 to 4 years\*\* in high solids environment. While innocuous Banana Orange peel may take 1-2 years to biodegrade# in open conditions!



India, other developing nation and most of the developed world do not have Industrial Composting fields to create conditions for composting plastics as per test method ISO 17088!



*These facts have been shared by the kind courtesy of Pranay Kumar, Chief Environment Officer, Vasudhaecofriends projects (P) Ltd., New Delhi who brings with him 23 years of experience and has been an active advocate and supporter of Sustainability. He is a member of Plex-concil's Youth Committee as well as a Member of AS-SOCHAM's Sustainability Council in addition to having been part of research teams on several sustainability projects.*

\*Center for Polymer Science, IIT Delhi \*\* [www.biod.in](http://www.biod.in) #The Guardian , 23rd September , 2009, Andrew Gilchrist



# NIGERIA

## Economic overview

Nigeria is located in the south east of West Africa sharing land borders with Benin, Cameroon, Chad and Niger. It has an area of 923,768 square kilometres and a population of 206.1 million. The economy of Nigeria has benefited immensely from elevated oil prices - Nigeria is the largest oil producer in Africa. However, collapse in crude oil prices and the coronavirus pandemic has deeply affected the country's economy. Despite the challenges, it is important to bear in mind that Nigeria is Africa's largest economy and holds good trade potential for India's exports.

As of May 7, 2021, the S&P's rating for Nigeria is B- (stable); Moody's rating stands at B2 (negative); and Fitch has a reported rating of B (stable).

Nigeria is a part of the Economic Community of West African States (ECOWAS) regional group comprising fifteen countries namely, Benin, Burkina Faso, Cabo Verde, Côte d'Ivoire, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Niger, Senegal, Sierra Leone, The Gambia, and Togo.

## Trade overview

Nigeria is India's largest trading partner in Africa. In 2020, India and Nigeria engaged in bilateral trade worth USD 9.29 billion. During the year, India's exports to Nigeria were valued at USD 2.95 billion in comparison to India's imports worth USD 6.34 billion resulting in a trade surplus of USD 3.39 billion to Nigeria.

The major items of export (2-digit HS) from India to Nigeria include vehicles (USD 481 million), mechanical machinery (USD 434 million), pharmaceutical products (USD 409 million), electrical machinery and equipment

Economic indicators		2018	2019	2020
Nominal GDP	USD Billion	421.7	448.1	429.4
Nominal GDP per capita	USD	2,153	2,230	2,083
Real GDP growth	%	1.9	2.2	-1.8
Total population	Million	195.9	201.0	206.1
Average inflation	%	12.1	11.4	13.2
Total merchandise exports	USD Billion	52.9	53.6	33.5
Total merchandise imports	USD Billion	36.5	47.4	52.9

Source: IMF, TradeMap

(USD 266 million), and plastics (USD 168 million). However, there is just one major item of export (2-digit HS) from Nigeria to India: mineral fuels (USD 6.2 billion).

**Jaykumar Nair, Sr. G M – Commercial, Garware Hi-Tech Films Limited (Formerly Known as Garware Polyester Ltd)**

With Indian manufacturers having installed the latest technology offering international quality at competitive pricing, besides the cordial relationship that we as a country enjoy with Nigeria, there is high level of confidence in the product range offered by Indian manufacturers which can build up long term business with continuous growth opportunities. The same coupled with quick clearance of import cargo at Nigeria ports will shorten the overall lead times (as some customers inform that it takes three to five weeks to complete import formalities and clear the containers). However, some of the biggest challenges faced by exporters currently are 1. extremely high freight cost, 2. drop in frequency of vessels sailing to Lagos port and 3. Long delays in clearing cargo at destination port, sometimes more than one month.

Having said that, Nigeria is the biggest and a growing economy in Africa and India is well placed to supply the growing demand for raw materials. With anti - China sentiment gaining popularity, Indian manufacturers can plug this gap and can replace Chinese manufacturers. Large business groups in Nigeria particularly in flexible packaging and related plastic industries are owned by Indians who definitely prefer to import their requirements from their motherland. Today, with the number of business initiatives and policies in India today designed to facilitate and promote overseas businesses and considering India is the largest importer of petroleum products from Nigeria, we have a win-win for both the economies. Especially since oil is the feedstock for the plastic industry, Nigeria can feed India with oil and India can feed Nigeria with all plastic raw material requirements.

Doing business with Nigeria has become challenging in recent times as local plastic manufacturing is growing in order to reduce import dependence. Secondly, the Nigerian currency has been depreciating against the USD making imports more expensive. This could be one of the reasons that customers turn towards buying from domestic manufacturer/s to cover currency risks. High freight charges and longer lead times due to shipping issues are not helping much either.

Within plastics, the trade is in favour of India with exports worth USD 185.40 million to Nigeria and a trade surplus of USD 185.13 million. India's plastics exports to Nigeria primarily comprise of the following:

- Plastic sheets, films, plates etc (37.4%)
- Plastic raw materials (34.1%), and
- Houseware (11.0%)

Nigeria's annual plastics imports are valued at USD 2.8 billion. Its plastic imports are largely catered to, by China (24.6%), United States (11.0%), South Korea (10.5%) and Saudi Arabia (10.3%). However, India also has a good standing in some of the plastic product imports by Nigeria:

- Plastic sheets, films, plates etc – Market share of 26.8% share (Rank 1)
- Houseware – Market share of 65.0% share (Rank 1)
- Stoppers, closures, lids etc – Market share of 15.4% share (Rank 1)
- Packaging items – Market share of 14.9% share (Rank 3)
- Medical disposables – Market share of 7.6% share (Rank 3)



## Trade potential

Our internal research indicates that India's export of value-added plastics to Nigeria has the potential to grow by nearly USD 665 million. Product categories, within value-added plastics, that have immense export potential for export to Nigeria include:

Product Category	Nigeria's import from India	Nigeria's import from world	India's export to world	Trade potential for India
	USD Million	USD Million	USD Million	USD Million
Plastic sheets and films	69.3	309.7	1,333.7	217.0
Medical disposables	6.7	94.2	638.6	87.5
Masterbatches	15.4	88.4	1,154.4	61.9
Self-adhesive sheets and films	2.1	68.7	109.3	41.6
Electrical items	3.2	107.2	168.1	36.0
Pipes, tubes and fittings thereof	1.0	36.9	171.1	35.8
Packaging items	5.1	34.3	731.2	29.2
Leathercloth	0.6	56.6	211.3	20.1
Stoppers, closures, lids etc	2.5	16.6	78.3	14.1
Floorcoverings	0.2	12.5	33.4	12.2

Source: TradeMap, Plexconcil Research

### Debasish Dutta, Vice President – Commercial, Abdos

Every country has its own challenges and opportunities and according to us, on the whole, doing business in Nigeria has been generally good.

However, despite Nigeria being India's largest trading partner in the African continent Plastic items other than medical essentials are in negative list for import into Nigeria. Hence, most of the plastic items fall under banned or restricted category. This needs representation at Government level to increase plastics exports to Nigeria. Proper DTAA & other Bilateral Treaty is also needed to explore the potential of petroleum products for plastics.

Meanwhile, any import of materials into Nigeria requires Form M which acts as a permit for the import of materials. Getting Form M issued for Plastic products has its own challenges as most of the items are restricted in the category. Further, even if Form M gets issued the same may not be "Valid For Forex" which means an importer in Nigeria cannot apply to Central Bank of Nigeria (CBN) for allocation of Forex for payment to its supplier. Hence, the importer will be forced to buy Forex from parallel market at more than 20% of scheduled CBN price for Forex which will push the cost of import into Nigeria. However, considering the challenges, suitable product category can be explored for exporting from India.

Having said that and despite our Govt's efforts to attract foreign investments into the country through its various business policies, the chances of Nigerian investments coming into India is very low since today, given the economic climate in Nigeria, the country itself needs financial support for self-sufficiency to reduce imports.





THE PLASTICS EXPORT  
PROMOTION COUNCIL

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Others

For Membership :Mr. Kuldeep Singh | +91 22 40170000 | [kuldeep@plexconcil.org](mailto:kuldeep@plexconcil.org)

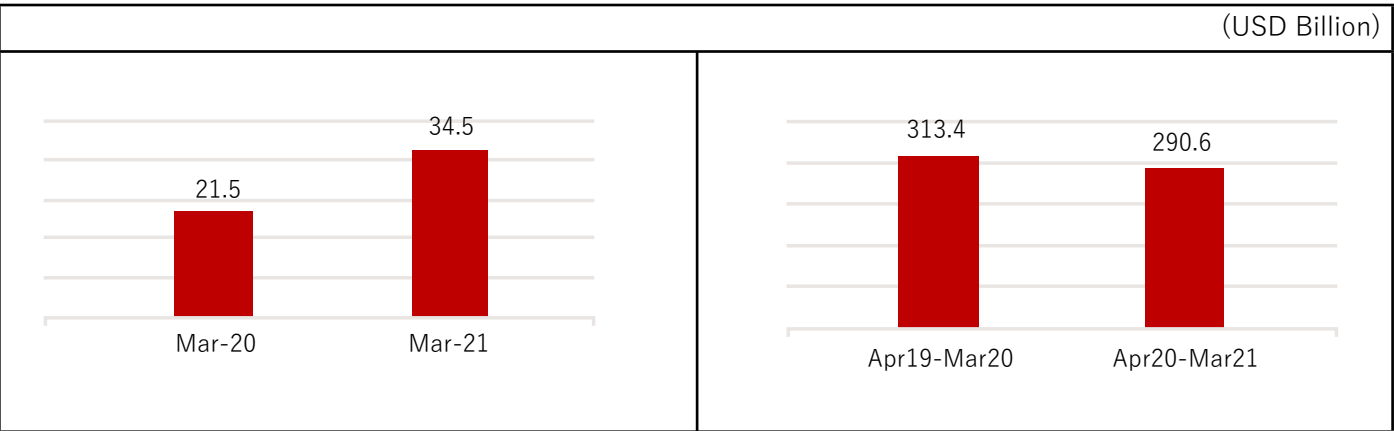


# Export Performance - March 2021

## TREND IN OVERALL EXPORTS

India reported merchandise exports of USD 34.5 billion in March 2021, up 60.3% from USD 21.5 billion in March 2020. Cumulative value of merchandise exports during April 2020 – March 2021 was USD 290.6 billion as against USD 313.4 billion during the same period last year, reflecting a decline of 7.3%.

Exhibit 1: Trend in overall merchandise exports from India

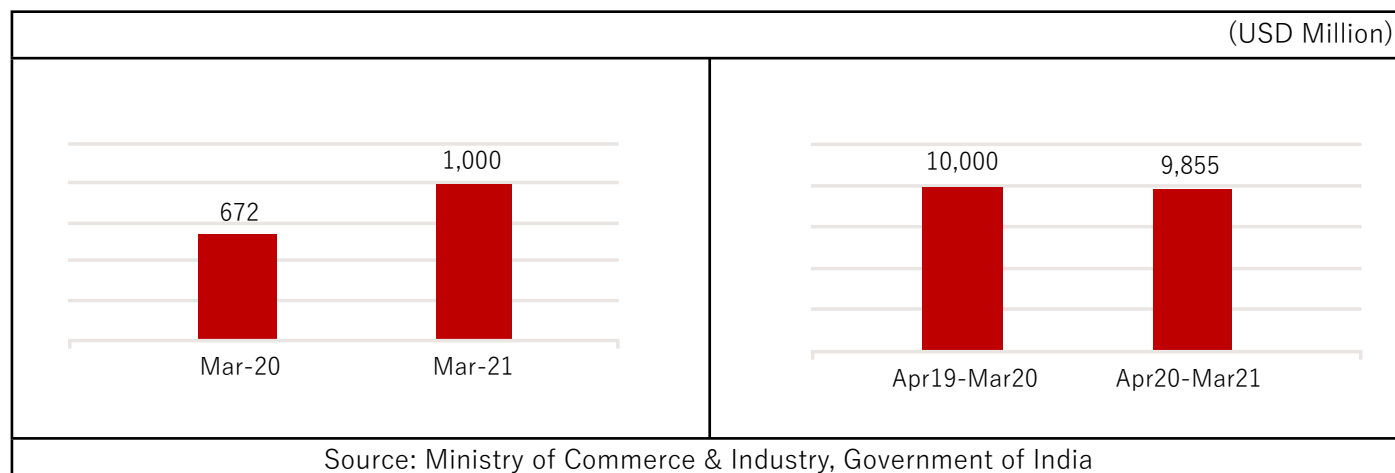


Source: Ministry of Commerce & Industry, Government of India

## TREND IN PLASTICS EXPORT

During March 2021, India exported plastics worth USD 1.0 billion, up 48.9% from USD 672 million in March 2020. Cumulative value of plastics export during April 2020 – March 2021 was USD 9,855 million as against USD 10,000 million during the same period last year, registering a negative growth of 1.4%.

Exhibit 2: Trend in plastics export by India



## PLASTICS EXPORT, BY PANEL

In March 2021, all the product panels, particularly, Raw materials; Polyester films; Floor Coverings, leathercloth & laminates; Woven sacks / FIBCs and Miscellaneous products witnessed a strong growth in exports. It is important to mention that the Human hair panel reported a 102.8% jump in exports.

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

Panel	Mar-20	Mar-21	Growth	Apr 19-Mar 20	Apr 20-Mar 21	Growth
	(USD Mn)	(USD Mn)	(%)	(USD Mn)	(USD Mn)	(%)
Consumer & House ware	43.0	57.1	+32.9%	593.8	520.4	-12.4%
Cordage & Fishnets	12.8	19.4	+51.8%	171.8	175.3	+2.0%
Composites / FRP products	19.4	35.1	+81.3%	324.4	308.2	-5.0%
Floor Coverings, Leather cloth & Laminates	30.6	56.2	+84.0%	433.8	492.8	+13.6%
Human Hair & Related Products	25.6	51.9	+102.8%	263.8	383.6	+45.4%
Miscellaneous Products	101.6	176.2	+73.5%	1,553.1	1,550.5	-0.2%
Pipes & Fittings	13.5	22.5	+66.4%	182.2	188.2	+3.3%
Polyester Films	91.7	146.5	+59.7%	1,427.4	1,528.5	+7.1%
Plastics Raw Materials	219.6	286.2	+30.3%	3,455.5	3,348.0	-3.1%
Rigid Packaging & PET Preforms	22.9	33.7	+47.5%	331.0	326.7	-1.3%
Woven Sacks / FIBCs	75.5	99.4	+31.6%	1,057.1	884.7	-16.3%
Writing Instruments	15.5	15.6	+0.5%	206.2	148.3	-28.1%
	671.6	999.7	+48.9%	10,000.1	9,855.3	-1.4%

Source: Ministry of Commerce & Industry, Government of India



Export of Consumer & house ware products increased by 32.9% in March 2021 due to higher shipment of Toys of plastics (HS code 95030030); Tableware and kitchenware of plastics (HS code 392410); and Electrical switches of plastics (HS code 85365020).

Cordage & fishnets export were up 51.8% in March 2021 on account of improved sales of Twine, cordage, ropes and cables of polyethylene or polypropylene excluding binder or baler twine (HS code 56074900); and Other made-up fishing nets (HS code 56081190).

Export of Composites was up by 81.3% due to increased sales of Articles of plastics and articles of other materials of heading 3901 to 3914, n.e.s (HS code 39269099).

In case of Floor coverings, leather cloth & laminates, exports in March 2021 were up 84.0% as Indian exporters managed higher sales of Textile fabrics impregnated, coated, covered or laminated with plastics other than PVC or PU: Other (HS code 59039090); Decorative laminates (HS code 48239019); and Other coverings of PVC (HS code 39181090).

Export of Human hair & related products clocked an impressive 102.8% growth due to strong sales of Human hair, dressed, thinned, bleached or otherwise worked (HS code 67030010) to China. India's human hair exports have witnessed a significant increase in the current year.

Miscellaneous products export increased by 73.5% in March 2021 due to higher sales of Optical fibres, optical fibres bundles and cables (HS code 90011000); Other sacks and bags of plastics (HS code 39232990); and Polypropylene articles, n.e.s (HS code 39269080).

Export of Pipes & fittings witnessed a growth of 66.4% due to improved sales of Other rigid tubes, pipes and hoses, and fittings thereof of PVC (HS code 39172390); Rigid tubes of polyethylene (HS code 39172110); Flexible tubes, pipes and hoses, having a minimum burst pressure of 27.6 MPa (HS code 39173100).

Polyester films witnessed an increase of 59.7% in exports in March 2021 due to higher shipments of a variety of products including Flexible plates and sheets of polypropylene (HS code 39202020); Other plates and sheets of polypropylene (HS code 39202090); Flexible plates and sheets of PET (HS code 39206220); and Other self-adhesive plates and sheets of plastics (HS code 39199090).

Plastics raw materials export was up 30.3% in March 2021 due to higher sales of Polypropylene (HS code 39021000); Other acrylic polymers in primary forms (HS code 39069090); and Polytetrafluoroethylene or PTFE (HS code 39046100).

Rigid packaging & PET performs export witnessed an increase of 47.5% due to improved sales of Other items of plastics for the conveyance or packing of goods (HS code 39239090).

Export of Woven sacks and FIBCs gained 31.6% during March 2021 on account of higher sales of Flexible Intermediate Bulk Containers or FIBCs (HS code 63053200). India is a significant exporter of FIBC to Europe and North America.

Export of Writing instruments was up a marginal 0.5% in March 2021, mainly on account of stability in sales of Ball-point pens with liquid ink (HS code 96081019).



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

HS Code	Description	Apr 19-Mar 20 (USD Mn)	Apr 20-Mar 21 (USD Mn)	Growth (%)
39076100	Polyethylene terephthalate: having a viscosity number of 78 ml/g or higher	718.2	-	NM
63053200	Flexible intermediate bulk containers	672.7	708.5	+5.3%
39021000	Polypropylene, in primary forms	510.8	675.3	+32.2%
39012000	Polyethylene with a specific gravity of $\geq 0.94$	410.6	299.7	-27.0%
39232990	Sacks and bags, incl. cones, of plastics (excl. those of polymers of ethylene): Other	371.1	381.0	+2.7%
39011010	Linear low-density polyethylene (LLDPE)	349.2	114.9	-67.1%
39269099	Articles of plastics and articles of other materials of heading 3901 to 3914, n.e.s: Other	319.3	303.8	-4.8%
67030010	Human hair, dressed, thinned, bleached or otherwise worked	254.1	367.2	+44.5%
90011000	Optical fibres, optical fibre bundles and cables (excl. made-up of individually sheathed fibres of heading 8544)	232.2	238.9	+2.9%
48239019	Decorative laminates	205.8	212.7	+3.3%
39206220	Plates, sheets, film, foil and strip, of non-cellular polyethylene terephthalate, not reinforced, laminated, supported or similarly combined with other materials, without backing, unworked or merely surface-worked or merely cut into squares or rectangles (excl. those of polymethyl methacrylate, self-adhesive products, and floor, wall and ceiling coverings of heading 3918): Flexible, plain	205.1	203.0	-1.0%
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	176.4	102.9	-41.7%
39269080	Polypropylene articles, not elsewhere	171.8	197.2	+14.8%
39232100	Sacks and bags, incl. cones, of polymers of ethylene	156.1	161.2	+3.3%
39076990	Other, polyethylene terephthalate	155.3	159.3	+2.5%
39239090	Articles for the conveyance or packaging of goods, of plastics (excl. boxes, cases, crates and similar articles; sacks and bags, incl. cones; carboys, bottles, flasks and similar articles; spools, spindles, bobbins and similar supports; stoppers, lids, caps and other closures): Other	153.2	142.9	-6.7%
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 (excl. of cellular plastic; self-adhesive products, floor, wall and ceiling coverings of heading 3918): Other	151.0	97.9	-35.2%

39202020	Plates, sheets, film, foil and strip, of non-cellular polymers of ethylene, not reinforced, laminated, supported or similarly combined with other materials, without backing, unworked or merely surface-worked or merely cut into squares or rectangles (excl. self-adhesive products, and floor, wall and ceiling coverings of heading 3918): Flexible, plain	145.9	189.5	+29.8%
39011090	Polyethylene with a specific gravity of < 0.94: Other	138.8	48.2	-65.3%
54072030	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: Dyed	138.3	51.1	-63.0%
90015000	Spectacle lenses of materials other than glass	133.9	117.3	-12.4%
96081019	Ball-point pens	121.3	86.2	-28.9%
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 (excl. self-adhesive products, and floor, wall and ceiling coverings of heading 3918): Other	120.0	120.0	+0.0%
39046100	Polytetrafluoroethylene, in primary forms	103.8	101.4	-2.4%
90183930	Cannulae	95.4	99.8	+4.6%
39241090	Tableware and kitchenware, of plastics: Other	90.4	82.9	-8.3%
96032100	Tooth brushes, incl. dental-plate brushes	86.4	70.3	-18.6%
39069090	Acrylic polymers, in primary forms (excl. polymethyl methacrylate): Other	85.0	122.6	+44.2%
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 (excl. those of polymethyl methacrylate, self-adhesive products, and floor, wall and ceiling coverings of heading 3918): Other	80.1	101.4	+26.5%
95030030	Tricycles, scooters, pedal cars and similar wheeled toys; dolls' carriages; dolls; other toys; reduced-size ("scale") models and similar recreational models, working or not; puzzles of all kinds: tricycles, scooters, pedal cars and similar wheeled toys; dolls' carriages; dolls; other toys; reduced-size ("scale") models and similar recreational models, working or not; puzzles of all kinds: of plastics	78.5	78.9	+0.5%
56074900	Twine, cordage, ropes and cables of polyethylene or polypropylene, whether or not plaited or braided and whether or not impregnated, coated, covered or sheathed with rubber or plastics	77.2	79.9	+3.5%

59031090	Textile fabrics impregnated, coated, covered or laminated with polyvinyl chloride (excl. wall coverings of textile materials impregnated or covered with polyvinyl chloride; floor coverings consisting of a textile backing and a top layer or covering of polyvinyl chloride): Other	76.3	67.7	-11.2%
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 (excl. polycarbonates, polyethylene terephthalate and other unsaturated polyesters, self-adhesive products, and floor, wall and ceiling coverings in heading 3918): Other	74.8	74.0	-1.1%
59039090	Textile fabrics impregnated, coated, covered or laminated with plastics other than polyvinyl chloride or polyurethane (excl. tyre cord fabric of high tenacity yarn of nylon or other polyamides, polyesters or viscose rayon; wall coverings of textile materials impregnated or covered with plastic; floor coverings consisting of a textile backing and a top layer or covering of plastics): Other	72.4	152.2	+110.4%
39204900	Plates, sheets, film, foil and strip, of non-cellular polymers of vinyl chloride, containing by weight < 6% of plasticisers, not reinforced, laminated, supported or similarly combined with other materials, without backing, unworked or merely surface-worked or merely cut into squares or rectangles (excl. self-adhesive products, and floor, wall and ceiling coverings of heading 3918)	68.0	59.4	-12.7%
39140020	Ion-exchangers based on polymers of heading 3901 to 3913, in primary forms: Ion exchangers of polymerisation	67.3	64.6	-4.0%
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 (excl. of cellular plastic; self-adhesive products, floor, wall and ceiling coverings of heading 3918): Flexible, metallised	66.2	76.4	+15.4%
39219096	Plates, sheets, film, foil and strip, of plastics, reinforced, laminated, supported or similarly combined with other materials, unworked or merely surface-worked or merely cut into squares or rectangles (excl. of cellular plastic; self-adhesive products, floor, wall and ceiling coverings of heading 3918): Flexible, laminated	64.0	87.7	+37.0%
39199090	Self-adhesive plates, sheets, film, foil, tape, strip and other flat shapes, of plastics, whether or not in rolls > 20 cm wide (excl. floor, wall and ceiling coverings of heading 3918): Other	63.3	77.7	+22.7%
39072090	Polyethers, in primary forms (excl. polyacetals): Other	63.2	80.8	+27.9%
39241010	Insulated ware of plastics	60.3	59.3	-1.6%



39073010	Epoxy resins	59.8	50.4	-15.8%
39259090	Building elements for the manufacture of floors, walls, partition walls, ceilings, roofs, etc., of plastic; gutters and accessories of plastic; railings, fences and similar barriers, of plastic; large shelves, for assembly and permanent installation in shops, workshops, etc., of plastic; architectural ornaments, e.g. friezes, of plastic; fittings and similar products for permanent mounting on buildings, of plastic: Other	56.2	26.5	-52.8%
39095000	Polyurethanes, in primary forms	54.8	57.8	+5.5%
39100090	Silicones in primary forms: Other	52.8	40.2	-23.9%
39235010	Stoppers, lids, caps and other closures, of plastics: Caps and closures for bottles	50.1	55.5	+10.8%
39129090	Cellulose and chemical derivatives thereof, n.e.s., in primary forms (excl. cellulose acetates, cellulose nitrates and cellulose ethers): Other	49.9	59.1	+18.5%
39119090	Polysulphides, polysulphones and other polymers and prepolymers produced by chemical synthesis, n.e.s., in primary forms: Other	49.1	59.4	+21.0%
39031990	Polystyrene, in primary forms (excl. expansible): Other	48.7	26.2	-46.1%
39269069	Articles of plastics and articles of other materials of heading 3901 to 3914, n.e.s: Other	47.9	36.4	-23.9%



## Interview with Shantanu Deshpande, Director, Specialty Polyfilms India Pvt. Ltd.

**How has the Polyfilms market in India evolved over the years? Tell us about the new trends and developments in the segment?**

The Packaging Industry in India is expected to enlist a CAGR of roughly 26.7% during the period (2021-2026). It is one of the most grounded developing areas in the country and the world. The worldwide polyethylene film market is relied upon to reach \$ 167.83 billion by 2025. There are many factors that have contributed to this growth. The ascent of the Indian working class with disposable income, the expansion of coordinated retail, the development of export business, and India's rising e-commerce business area are few of the many factors that are further facilitating the demand for Polyfilms in the market. Even while being affected by the Covid-19

pandemic, the Polyfilms business continued to remain on its toes to meet the all-time high demand for packaged food and essential goods.

Government authorities have recently given a draft guideline under which there can be a restriction on the single-use of non-recyclable plastics. This has prompted significant players zeroing in on manageable alternatives and business outside India.

Specialty Polyfilms since its inception has been focusing on sustainable packaging and is catering to the Indian market majorly with its proven pallet wrapping films - Securap which is a tacky film used in wrapping around products such as heavy goods, sheets, glass bottles, steel coils, rod bundles, fabric yarn, paper reel or general-purpose wrapping of products of any shape and size to provide a firm grip on the packaged food wrap films and Protective/ Masking films.

The biggest market, by resin type, is LLDPE. LLDPE is a favored resin type, because of its properties like high mechanical strength, transparency, polished appearance, improved fixing property, and low manufacturing cost. LLDPE performs well when mixed with different resins and near future will see a rise in the application of these even more.

### **What factors drive demand for your products?**

Our major products are catering to fresh/frozen food & beverage & export oriented industries. The demand for these sticky packaging films is driven by the favourable properties that they have. They are lightweight, low cost,

and corrosion resistant, have a high product-to-package ratio, and have sustainability benefits. Adaptable bundling request is predominantly determined by the food and drinks area (71% of utilization). The market is only expected to grow further as the variety of foods packed increases to cater to the varied ethnicities of the different countries.

Developments in per capita income, changing way of lifestyle, development of consumer society and health consciousness are some of the key demand drivers of the industry. Greater competition, need for labelling of quality, quantity, maintaining the price of goods and at the same time increasing the shelf life of the products drives the interest of our items in the market. Growing middle-class, the opening of shopping malls, customer-friendly and growing retail markets, increasing industrial output and strong exports have likewise helped the advancement of the packaging industry.



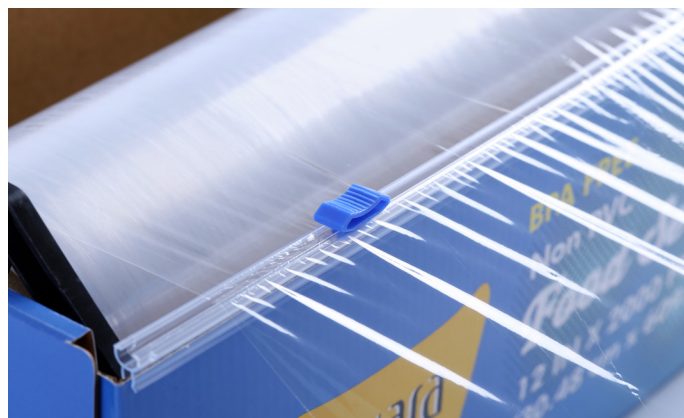
Our major customers outside India are the big retail chains, distributors and packers of food. There is a good chance that you might find cling film rolls on US & European market shelves manufactured by us.

While departmental retail is a key driver of our packaging product in the foreign markets, domestic demand for pallet wrapping film is being generated by the cement industry, pharma, auto component and construction industries.

## What applications are the likeliest to drive demand for the product in coming years?

While the greater part of the significant businesses faced this challenging pandemic phase, the packaging industry continued to play a crucial role in adding value to various manufacturing sectors. This was done by ensuring the preservation of quality and enhanced shelf life of various products, which is essential for F&B and the pharma business. Under the influence of the COVID-19 pandemic, there has been an all-time high demand for packaged food, medicine and other essential goods.

The sticky/cling films market is simply expected to develop further as the variety of packed food is increasing to cater to the varied ethnicities of the different countries.



Advances will be invigorated by expanded retail exchange and industrial activity, as well as export markets. Pallet wrap, due to its superior unitizing qualities and advanced mechanized application processes for mass packing, will include most of the interest and demand.

Technological advancements to enhance the longevity of film and the growing demand for bio-based/sustainable films are two dynamic factors that are expected to drive growth in the global film market in the coming years. The expanding uses of Polyfilms in the medical and drug businesses will likewise stimulate the market.

## What is the significance of new environmental policies and standards in the industry? How is it likely to impact the future use of the products/ manufacturing/ applications?

In domestic market, some rules like the one issued by Pollution Control board, that we cannot sell plastic films having thickness below 50 micron and the product above it should have printed information, is one of the recent environmental policies that has significantly changed the business. Since Stretch wrap pallet films are quite cost competitive, these policies impact our market position.



To match international standards, we need to keep a track on the important certifications that are required to sell products globally. Hence, we are a BRCGS Packaging Materials, SA 8000, SMETA Pillar 4 certified company. We fully comply with food contact regulations of the US, EU & UK as well as strictly adhere to international standards of process control, quality conformance, workplace safety, employee welfare and continual improvement in quality management systems.

It is a continuous process that we need to keep a tab on and modify our products according to the standards.

To stay competitive and relevant, you have to do it like in any other industry. Our research & development team has to work round the clock to present the best offering that follows all the environmental policies and standards.

Your company has been recently granted 2 patents in India and other countries. Tell us about the same.

As just mentioned, we believe in fostering the culture of innovation and investing a lot in research and development. Hence, due to a collective effort of our team, Specialty Polyfilms has been granted two patents: One for Polyethylene-based Meat Wrap and Fresh Produce Film (Patent No. 350275), and another for Polyethylene-based Foodservice/Catering Film (Patent No. 350533) by Patent Office, Government of India.

Specialty Polyfilms with the mission of making the world switch from the most hazardous plastics to the healthier alternatives is successfully replacing the incumbent PVC film prevailing in the industry for the last 40-50 years with the environment friendly & 100% recyclable polyethylene-based film.

Patent awarded Polyethylene based Meat Wrap & Fresh Produce Film is manufactured through a specially engineered combination of select food-grade polymers and process innovation that results in a product which is free from any taste or odour.



These are soft films with very high optical transparency and permeability with anti-fog properties, providing a see-through packaging of food products. These films are microwave safe and also do not crack even at sub-zero temperature up to  $-30^{\circ}\text{C}$ . They are used to wrap case-ready trays of meats like fresh cut chicken, pork, etc., as well as fresh vegetables like lettuce, beans, tomatoes, baby corn, cucumber, mushroom, etc., and fruits like apples, pears, etc.

What are the benefits that your patented products would offer over similar other products in the industry today? Patent awarded Polyethylene based Meat Wrap & Fresh Produce Film is manufactured through a specially engineered combination of select food-grade polymers and process innovation that results in a product which is free from any taste or odour.

Meat & fresh Produce film have excellent breathability that considerably increases the shelf life of packaged fresh food. These are soft films with very high optical transparency and permeability with anti-fog properties, providing a see-through packaging of food products. These films are microwave safe and also do not crack even at sub-zero temperature up to  $-30^{\circ}\text{C}$ . They are used to wrap case-ready trays of meats like fresh cut chicken, beef, meat, pork, etc., as well as fresh vegetables like lettuce, beans, tomatoes, baby corn, cucumber, mushroom, etc., and fruits like apples, pears, etc.

These films are replacing the other non-recyclable packaging films made from PVC. Our films are not only sustainable, migration free, environmentally friendly but also very cost effective.



**What is the importance of creating IP protected processes/ products? How would this help manufacturers in the country?**



To have the option to develop at a worldwide level and stay ahead of the competition, protection of Intellectual Property Rights ought to be the essential concern. For example, patent assurance can give an exclusive right to creation, be it be a product or a process.

Issuance of IPR is particularly significant in the manufacturing sector as it permits the products to be recognized/ distinguished from that of others. IP enhances value of our company, which gives authentic ownership over the product. Each business ought to rely on intellectual property rights and should invest in getting these rights. Development or say innovation is the most essential part for a manufacturing organization. However, if innovation is first, then intellectual property (IP) has to be the second.

IPR assumes a fundamental role in manufacturing businesses. The progressions that drive this industry are R&D, innovation and process efficiencies. These require satisfactory patent protection to keep a competitive edge.

The manufacturing business produces different sorts of products and utilizes different industrial processes to deliver their products. Each industry in the manufacturing arena consists of an innovation team that constantly thinks of new products, works for them and achieves success after a lot of hard work.

These products are an after effect of their intellect-driven mind. Accordingly, any reasonable person would agree that the manufacturing industry lives and breathes on innovations.

**What would be your advice to other manufacturers considering patenting their processes/ products? What is the support that they would need?**

The value of any organization is progressively founded on the organisation's capability to offer high-value-added products at a competitive price. Globalization and exchange liberalization has made it essential for manufacturing organizations to not only be competitive in the domestic markets but also remain internationally competitive.

For competitive manufacturers it is important to continually improve their proficiency, decrease production expenses and upgrade the standing of their products by investing in R&D, developing new and top-notch engaging products.

This requires manufacturers to make significant investments and without patent protection, there is a strong risk that investments in R&D, product differentiation and marketing will be wasteful.

Protected innovations empower small to medium companies to become elite. It also helps them to prevent any misuse of their hard-earned innovative products thus creating an appropriate incentive for investing in improving their competitiveness.

New patent seekers need to check if they have everything at their end to get the process or product patented. Conditions for a product or process to be patented are:

- Replacement of incumbent outdated product/ process
- New thing
- Mass application
- Eco-friendly

They can take help of the patent attorney who can guide them with the process and the requirements.

**What are your biggest export markets? What are the emerging opportunities for Polyfilms manufacturers and exporters in the country?**

Currently we are exporting to 25+ countries including the USA, UK, Australia, New Zealand, major European countries like Germany Italy, Ireland, Spain etc. and growing our presence in South African market too.

In regions like the United Kingdom, Ireland, Australia, New Zealand and the United states, the growing awareness of environmentally friendly products and government regulations has started a race to phase out the use of non-recyclable PVC film.

Growing interest in green products, healthier lifestyles and growing concern to protect environment is leading to a shift towards bio-plastics. These plastics are significantly made of renewable materials like bio mass and save up to 40% energy in production as compared to their petrochemical counterparts. They play a crucial role in further advancement of the plastic industry and as a result, businesses are focusing on adoption of such eco-friendly products.

Packaging manufacturing industries can use this as an opportunity to look for gaps that can be filled with our innovative products.

Request for products like bio-degradable films, color changing films, compostable films are some of the emerging opportunities that will gain momentum at a much larger scale in the near future.

**What are the challenges faced by your industry? How can these be remedied?**

Crude contributes heavily in deriving plastics, and these days the availability of raw material is an issue which leads to fluctuation in crude prices and other infrastructural issues. Along with prices of crude, the exchange rate too has led to an increase in price pressure and lower profits despite the high-volume demands. If we talk about India, it depends heavily on crude imports for satisfying its growing plastic raw material needs. Covid-19 has highly disturbed the present circumstances. Our raw material costs have gone up by over 65% due to several reasons prevailing in the international markets. The packaging material cost has also increased by more than 32%. Adding insult to the injury, sea freight has also almost doubled in last 4 to 5 months. This involves a lot of international factors and we expect these to ease down in the coming months.

India's machine building capabilities are good in entry & medium areas of extrusion, moulding, etc. but not in highly sophisticated machines meeting industry 4.0 standards. All these machines are being imported after paying heavy taxes. New players in the industry find it difficult to find the right match and get it home for use. We need more machine making companies in India that can help us with world-class machines.

Other issues are bringing attention to the Environmental impact. Plastics, being a polymer derived from crude, are comprised of long chains of carbon. It takes very long for them to decompose. Improper disposal of plastics prompts groundwater contamination, aggravation in soil microbial action and releases cancer-causing synthetics in the environment leading to health issues among people. Both governments, as well as industry, need to oblige to this issue and enlighten the consumers to follow the custom of reusing waste plastic items. So, in a nutshell, challenges like environmental issues, changing government regulations, inadequate supply of raw material, rising freight and exchange rates and shortage of good quality of machinery both for manufacturing and for testing remain one of the major challenges faced by our industry today.

**You have developed 6 new products and patented 2. What are your plans for the future?**

There are a lot of products in the pipeline like stretch-shrink film, color-changing film that will indicate the staleness of the food by changing color, compostable film and full range of bio-degradable products.

As we penetrate in our existing markets, we are exploring geographies we have not yet reached out to and cater to the requirements of the wider audience with our sustainable packaging options.





## POLYMER PRICE TRACKER (DOMESTIC MARKET) APRIL 2021

High Density Polyethylene (HDPE)			<ul style="list-style-type: none"> <li>HDPE prices in the domestic market eased somewhat in April 2021 after an increase of Rs 7000 per MT in March 2021 and Rs 9000 per MT in February 2021.</li> <li>In April 2021, HDPE prices increased by Rs 3000 per MT in the first week of the month but later fell by Rs 1000 - 1500 per MT around mid-month and by Rs 2000 - 3000 per MT in the last week of the month.</li> </ul>
Feb-21	Mar-21	Apr-21	
Linear Low-Density Polyethylene (LLDPE)			<ul style="list-style-type: none"> <li>LLDPE prices in the domestic market fell by Rs 3000 per MT in April 2021 after an increase of Rs 7000 per MT in March 2021 and Rs 13000 per MT in February 2021.</li> <li>In April 2021, LLDPE prices first increased by Rs 2000 per MT but later fell by Rs 2000 per MT around mid-month and by Rs 3000 per MT in the last week of the month.</li> </ul>
Feb-21	Mar-21	Apr-21	
Low Density Polyethylene (LDPE)			<ul style="list-style-type: none"> <li>LDPE prices in the domestic market were up by Rs 7000 per MT in April 2021 after an increase of Rs 6500 per MT in March 2021 and Rs 2700 per MT in February 2021.</li> <li>In April 2021, LDPE prices witnessed an increase in the first week of the month. Thereafter, no price change was announced.</li> </ul>
Feb-21	Mar-21	Apr-21	
Polypropylene (PP)			<ul style="list-style-type: none"> <li>PP prices in the domestic market fell by Rs 3000 per MT in April 2021 after an increase of Rs 14500 per MT in March 2021 and Rs 6500 per MT in February 2021.</li> <li>In April 2021, PP prices did not witness any price change initially. Thereafter, prices fell by Rs 3000 per MT in the last week of the month.</li> </ul>
Feb-21	Mar-21	Apr-21	
Polyvinyl Chloride (PVC)			<ul style="list-style-type: none"> <li>PVC prices in the domestic market were up by Rs 2500 per MT in April 2021 after an increase of Rs 12500 per MT in March 2021 &amp; Rs 2500 per MT in February 2021.</li> <li>In April 2021, PVC prices witnessed an increase around mid-month. Thereafter, no price changes were announced.</li> </ul>
Feb-21	Mar-21	Apr-21	



# Running into Resin Shortages?

## Here Are Five Plastic Alternatives to Consider When Designing Products

Supply-chain disruptions have left no part of our industry untouched over the last year. While there is light at the end of the tunnel in our fight against COVID-19, it is apparent the fallout will continue for some time. The impact is only heightened with the recent Suez Canal blockage and a shipping container shortage.

The disruptions have combined to create a significant material shortage, increasing prices or downright halting the production of plastic-based components. Fortunately, the tremendous innovation we have seen in material development provides options for product developers willing to explore alternatives for commonly used resins. During material shortages, substitution options are available based on desired material properties and the intended function of produced parts. (An extensive list is available on the Protolabs website.) Each lesser-known plastic could work as a replacement for commonly used plastics such as acrylonitrile butadiene styrene (ABS), polycarbonate (PC), and polypropylene (PP).

### Polysulfone (PSU)

This resin is an amorphous, transparent, and pale-amber high-performance thermoplastic that exhibits good melt stability, which permits fabrication by conventional thermoplastic processing methods. PSU also has outstanding mechanical, electrical, and thermophysical properties, as well as excellent chemical and hydrolytic stability. The characteristics come together to make the resin a tremendous fit for components that are exposed to steam and hot water, like plumbing components, sterilizable plastic parts for medical devices, and membranes for water treatment, gas separation, and more.

Semi-aromatic polyamides like PPA are often a cost-effective alternative to the more expensive, fully aromatic aramids. Featuring a combination of aromatic and aliphatic groups, PPA greatly reduces moisture absorption, which results in few dimensional changes and more stable properties. The material is a great fit for products that must withstand prolonged exposure to harsher chemicals and higher temperatures. With that, common applications are motor parts, coolant pumps, bearing pads, resonators, and more.

### Polyphenylene sulfide (PPS)

PPS features a very high melting point and poor solubility, requiring special processing to manufacture parts out of the resin. But in the end, PPS has outstanding heat and chemical resistance, good dimensional stability, and high tensile and structural strength due to its aromatic ring structure. Parts made with PPS also feature flame-retardant capabilities and exceptional electrical properties, making it a widely used polythioether. Com-



mon applications include electrical and electronic parts, and mechanical parts in automobiles and precision engineering.

## Polyphenylene oxide (PPO)

PPO touts excellent tensile and impact strength while showing resistance to many chemicals, including steam and water; however, it is sensitive to stress cracking. PPO also poses a problem with melt processing because of its high glass-transition temperature. With that, it is often blended with high-impact polystyrene (HIPS) to be used in applications across the automotive and electronics industry, including pump parts, fan impellers, catalyst supports, and more.

## Syndiotactic polystyrene (SPS)

Known by its trade name Xarec, the plastic alternative is the first syndiotactic polystyrene (SPS) resin. The innovative structure allows for a variety of highly sought after characteristics. SPS is resistant to hydrolysis; chemically resistant to corrosion by various acids and alkalis, including automobile oil and antifreeze; and also resistant to heat. It also features a low specific gravity, reducing the weight and cost of parts. SPS is a fit for electronic components for various hybrid electric vehicles, as well as an essential component for everyday home appliances. Furthermore, it is viewed as a sound environmental choice.

We know it's frustrating when a material supply is low — especially when you've designed molded parts for a specific plastic — but hopefully these alternatives can help you bridge your part design and manufacturing past the material gap.

Source: Plastics Today

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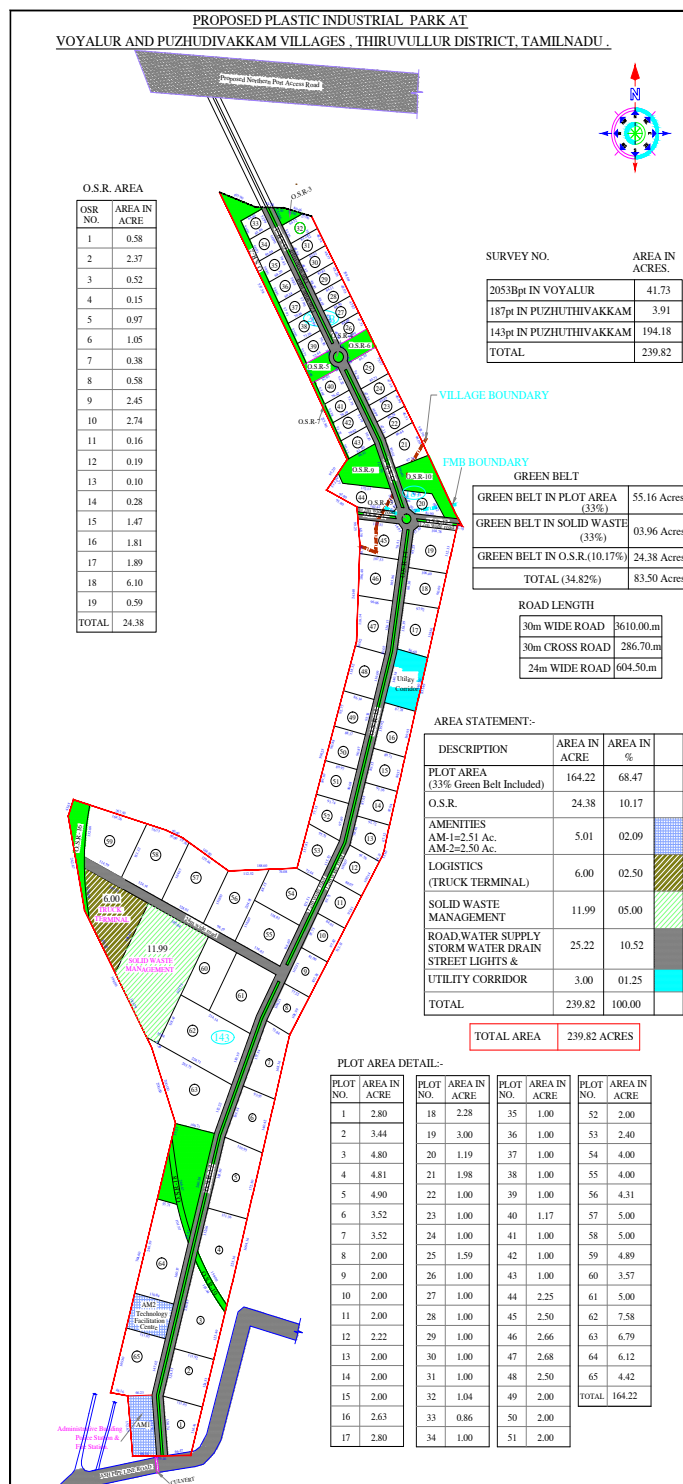
# Tamilnadu Polymer Industries Park Ltd

(A Government of Tamilnadu Enterprise)

Tamilnadu Polymer Industries Park is a novel venture taken up by the Government of Tamilnadu to develop an ecosystem for manufacturing in the Polymer sector. Tamilnadu Polymer Industries Park Limited has been set up as a Joint Venture between TIDCO and SIPCOT under the scheme of setting up of Plastics Park of Department of Chemicals and Petrochemicals, Ministry of Chemicals and Fertilisers, Government of India. The Park spread over 239.82 Acres is being established at Puzhuthivakkam and Voyalur villages in Ponneri Taluk, Tiruvallur District. The Project comprising development of basic and special infrastructure works has a total investment outlay of Rs.217 Crores.

## Location Advantage

- Proximity to Ennore, Kattupalli and Chennai Ports.
- Athipattu railway station - 3.3 Km.
- The SH - 56 road - 12 Km.
- The NH - 16 road - 22 Km.
- Chennai International Airport - 45 Km.
- Proposed Northern Port Access Road will augment further connectivity.





## Project Specifications & Advantages

With a well-established, state of the art environment for the industry, in tandem with good connectivity, the TN Polymer Industries Park is a boon for the Polymer industries. It is self-contained with all services and dedicated infrastructure for the growth of polymer industries on the region.

- Spread over 239.82 Acres in Puzhuthivakkam and Voyalur villages in Ponneri Taluk, Tiruvallur District.
- Total investment outlay of Rs.217 Crores.
- The park is very close to Ennore and Kattupalli port
- The entire extent of land is in possession of TIDCO.
- Chennai has a strong polymer industries base.
- Proximity to LNG terminal.
- Availability of skilled manpower at competitive rates.
- Conducive work culture.
- Comprehensive Cluster development with:
  - i. Research & Development facility
  - ii. Warehousing facility,
  - iii. Uninterrupted power supply
  - iv. Truck Terminal facility
  - v. Skill development facility and presence of Central Institute of Petrochemicals Engineering & Technology (CIPET)

The Park shall also provide plug and play facilities for investors and feature incubators for start-ups in the field of polymer technology.

## Earth filling work



## 24m Row Road Portion

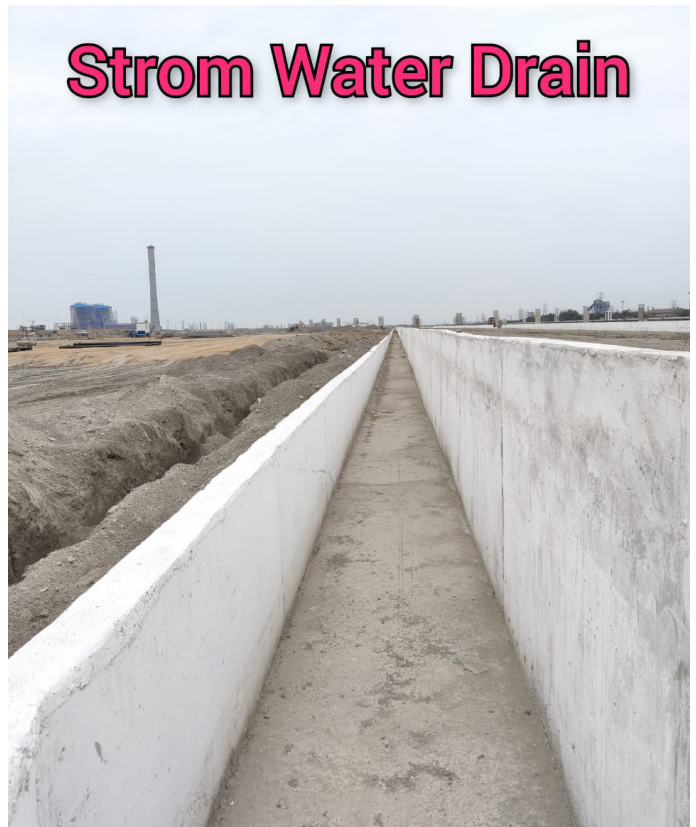


Infrastructure facilities at the Park includes well-laid internal road systems, Storm Water Drainage systems, surplus ground water, O&M framework and complete security.

## Water supply Pipeline work



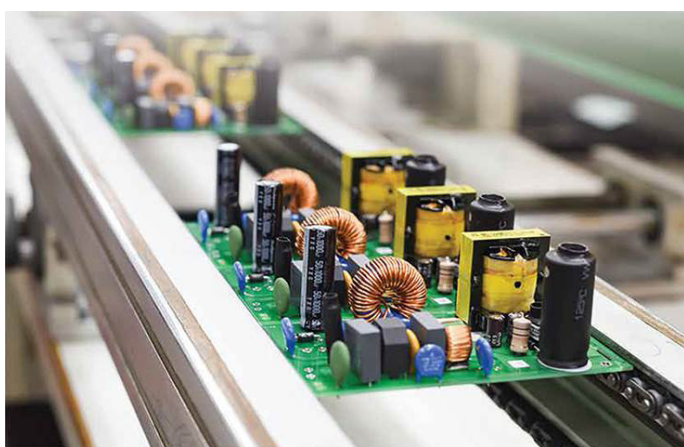
## Storm Water Drain



## Why Invest in Tamil Nadu?

Tamil Nadu is a diversified and well-known industrial state, having witnessed spectacular growth in the three decades since India liberalized its economy. This growth was supported by its locational advantages, state investment in infrastructure and logistics, a predictable business environment, and a stable system of governance due to key local stakeholders.

Tamil Nadu is a hub for major manufacturers in India – particularly in the automotive and electronics industries. It holds the position of being India's largest tire manufacturer, first in wind energy production, and second in terms of electronics hardware manufacturing.



In 2018-19, Tamil Nadu's export volume stood at US\$30.5 billion, contributing 9.25 percent to India's total exports. The state was also responsible for 45 percent of India's auto exports and accounted for 35 percent of India's auto component exports.

Tamil Nadu is the third largest exporting state of India. Automobiles, leather, readymade garments, and footwear are among the most exported commodities from the state.

### Advantage Tamilnadu

- Fastest growing State Economy in India
- State with the Largest manufacturing, Services as well as consumption
- One of the top four recipients of Foreign Direct Investment (FDI)
- Stable political climate with a pro-active and investor friendly Government
- Most urbanised state with peaceful living conditions and low crime rate
- State of the art infrastructure across the State
- Leader in the availability of healthcare and educational facilities
- Highly skilled and diverse workforce with excellent labour relations
- More than 63 Fortune 500 Companies have their operational presence
- Four international airports (Chennai, Coimbatore, Tiruchirappalli and Madurai); two domestic airports (Salem and Thoothukudi) and Puducherry (UT) domestic airport is also within the reach from the park.
- A total road network of 2.13 lakh kms.
- Power surplus state with 30.2 GW installed capacity
- 15.2 Tbps bandwidth availability
- 23 large Government Industrial Parks, 3 Japanese Industrial Townships, more than 4 large private industrial parks
- Tamil Nadu is home to 41 operational special economic zones (SEZs), 39 industrial clusters, and five industrial corridors.

### TN Polymer Industry

Tamilnadu is a leader amongst the south Indian states in terms of plastics production and consumption. The Park is expected to generate great economic development in the area creating direct employment to the tune of 7000 persons and indirect employment of about 30,000 persons. The total investment in the park is estimated at about Rs. 3000 Crores.

- More than 9 lakh tonne Plastics consumption in Tamilnadu.
- Approx. Rs.18,000 crore revenue generated by plastics related business in the State.
- More than 10 lakh Direct and indirect employment provided by 8000+ small and medium enterprises.
- Plastic manufacturers from Chennai are known for specialty plastics and especially those for automobile, electronic, hardware sectors, etc.



## About the Investors



TIDCO, a Government of Tamilnadu Enterprise, was incorporated as a Limited Company in the year 1965 to identify and promote the establishment of large and medium scale industries within the State of Tamilnadu in association with the private sector. The company's authorized share capital is Rs.1250 million of which Rs.720 million has been issued and entirely subscribed by the Government of Tamilnadu.

TIDCO facilitates large industrial and infrastructure projects in Tamilnadu involving large investments and huge employment potential. TIDCO is the Nodal Agency for the development of Chennai Bengaluru Industrial Corridor (CBIC), Chennai Kanyakumari Industrial Corridor (CKIC), Western Corridor (Kochi – Bangalore Industrial Corridor) and Defence Industrial Corridor projects. TIDCO has in several joint venture projects across various sectors such as Chemicals, Fertilizers, Pharmaceuticals, Textiles, Iron and Steel, Auto Components, Food & Agro, Floriculture, Engineering, Petroleum and Petrochemicals, infrastructure projects like IT/ITES Parks, Bio-Tech Parks, Special Economic Zones (SEZ), Road Development Projects and Agri Export Zones etc.,



**SIPCOT**  
Govt. of Tamilnadu

State Industries Promotion Corporation of Tamilnadu Ltd (SIPCOT) was established in the year 1971 to develop industrial growth in Tamilnadu. The organization major thrust areas is on area development activities and is involved in the formation of industrial complexes, providing comprehensive infrastructure facilities to industries to set up their units.

SIPCOT has so far developed 21 Industrial Complexes in 12 districts and 7 Sector specific Special Economic Zones (SEZs) across the state. SIPCOT also acts as a Nodal Agency for the Government of Tamilnadu in the sanction and disbursement of Structured Package of Assistance to large industrial units.

SIPCOT has rendered fruitful services to the state by identifying, developing, maintaining industrial areas in backward and most backward talukas of the State, which had potential to grow. SIPCOT's role in supporting industrialization in the State is not only quantitative but also qualitative.

### Availability of Industrial Plots in the Tamilnadu Polymer Industries Park

The Project provides graded site with road works including pavements, drainage, pipe culverts and water supply distribution system.

#### Component wise Progress of works:

- 1. Site Grading:** Completed.
- 2. Road Works including pavement, drainage, pipe culverts, road furniture and appurtenances:**
  - Road: Sub grade & GSB for the Road works have been commenced. Sub-grade completed upto 1.7 km out of 2.28 km (75%) in 30m RoW and 0.605 km out of 0.605 km (100%) in 24m RoW. GSB completed upto 1000 m (44%) in 30m RoW and 500 m (83%) in 24 m RoW.
  - Drain: Total length of 5770m of Drain work is completed
  - Box Culvert: One Box Culvert at entrance to the plot (i.e. at 30m RoW) and Second Box Culvert at 24m RoW is under completion.
  - Hume Pipes: All 8 locations along the 30 m RoW and at 1 location along the 24 m RoW, totaling 9 locations have been laid. Duct Chambers are also completed at either ends with Brick Masonry which will be raised upto above filled Ground level.

## Over Head Tank



## 30M Row Road Portion



## Underground Sump



### 3. Water Storage and Distribution system

- Overhead Tank: Side wall Lift concreting completed and fabrication of reinforcement Shuttering for II Lift is under progress.
- Underground Sump: Roof slab laid and under curing. Checked for Hydro testing and found to be water-tight.
- Pump room: Pump Room completed fully including plastering, fixing of door & window and Electrical fittings, except painting & Power supply connection.
- Pipe Laying Work : laying work to individual plots is under progress.

### For enquiries, please contact:

T. Madhavan, GM – Projects

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## Affordable Technologies:

The unexplored realm between Jugaad and Exotic technologies



**Vikram Bhaduria**  
MD, ALOK Masterbatches

Every entrepreneur or business owner I meet yearns for the next big idea. There exists in each of us, a thirst to do something new, something unique. But we will not do anything new if we keep doing tomorrow what we were doing yesterday. Yet, most of us continue doing the same things and hope for a miracle.

Often enough, the opportunity stares us in the face but we miss it as we are looking in to where we are instead of looking around. In a country of a billion plus, I believe we have such an unexplored opportunity waiting to be charted by those brave enough to look around and ahead.

In India, the past decade has seen a rapid proliferation of information through mobile and media. Our countrymen and women have a peek into the popular culture, lifestyle, news etc. It has created an aspiration in the

population. An aspiration for basic amenities like dignified sanitation, safe public transport, affordable medical care etc. While these sound like table stakes to the well-heeled few, such are the facilities that are often out of reach for our masses.

With a purchasing power parity or PPP of Rs.10,000 a month we are not looking at deep pockets and high disposable incomes. They cannot afford the pricey and exotic foreign technologies and have to make do with the unreliable Jugaad technology. There is a vast unoccupied space between these 2 poles that is waiting to be occupied by those who move first. For those willing to fulfil these aspirations with the help of affordable and durable technologies, this is a competitively calm blue ocean that offers an instant and appreciative clientele of a billion plus consumers.

To look and act beyond the routine it is imperative that a culture of Innovation and Research be incorporated in the DNA of our companies. Only then can one hope to capitalise on this unclaimed opportunity.

Another unrecognised asset within our reach is the vast talent pool available to us in India. We push out more than 1.5 million engineers every year. This is more than the combined figures of USA and China.

The above mathematics looks simple and encouraging. A vast aspirational market and access to a large technical talent pool, there is no reason why our entrepreneurs cannot develop affordable technologies and durable products. Products that are Safer, Affordable and Sustainable. Products that will “Add Good” to the lives of our population.

In theory, our engineers and researchers should be churning out newer products by the minute and our industry should be bringing these products to the people who should be enjoying a better quality of life.

However, the reality is quite the opposite! Two recent news pieces show us the ramshackle state of affairs of the Indian innovation story. SCOPUS, a scientific research database reported that Kenya has more researchers per 10,000 people than India!

This was closely followed by Mr. Narayanmurthy of Infosys technologies statement that India had failed to generate a single “earth shaking” invention in the past 60yrs!

On the other end of the spectrum, 2 of the largest technology companies in the world, Microsoft & Google are headed by Indian CEO's. The Silicon Valley on the US west coast to the petrochemical industry in Texas and NASA in the East Coast, all are being run with more than significant contributions from the Indian educated engineers and researchers.

Our engineers who flourish in foreign lands, flounder in their own motherland. Barring a few who get vacuumed by the burgeoning IT industry or the top notch manufacturing companies, a vast majority has to compromise on their careers. Given the lack of challenging opportunities and low pay scales in manufacturing, it is not surprising that manufacturing is no longer the 1st career choice for most engineers. As a result we see chemical engineers writing software codes or mechanical engineers working in transaction advisories.

There exist 3 distinct islands today:

- A billion people who want to improve their quality of life
- A vast talent pool of tech graduates who want a work environment that will challenge their technical and innovative spirits
- A large number of SME's looking for newer opportunities

What is needed is to bring the 3 together in harmony for a win-win situation for all.

A lack of a thriving R&D culture has brought us to this pass. While we are naturally innovative, exemplified by our Jugaad technology, we have not spent enough time and money on R&D to extrapolate these innovations into durable, safer and marketable product lines. As a country, we spend only 0.9% of our GDP on research. China, a manufacturing economy not predisposed towards research, spends 2%.

A culture of grassroots research will be a winner for all stakeholders in the system. Research that is not just focused on high end spectrum of IT and electronics but also at the basic human needs of our people. Research that accords Dignity of life for our people, research that affords them a better quality of life, research that ensures that we do not devastate our environment in our quest for progress.

The businessman in me sometimes questions this seemingly large & non-productive investment. I remind him of the iPhone & China story. The manufacturing powerhouse of China makes 3.6% of the value of every iPhone sold in the world. Japan who quietly supplies the technology for iPhones pockets 32%!



## Mega Trends and Plastics Packaging

As the human world is going through the devastating dual impact of Covid and Climate Change, it is enforcing habits and habitats which would become the turning point like the coming of the Industrial age. We are already experiencing the impact of the information age and changing patterns of consumption, health, education, food preferences and of course the all-encompassing packaging!

Plastics have become the pioneer amongst all form of packaging, saving billions of lives in the form of food, medicines, emergency equipment packaging and more. Even the so called sustainable agro/paper based plates need the humble polyethylene layer to protect it from heat and liquid migration.

So, what are the mega trends shaping the world of Packaging and Plastics. The author will start with first layer of patterns and trends and maybe in future will delve into each aspect deeply.

Mega-trends shaping the world currently are as follows (not in any particular order):

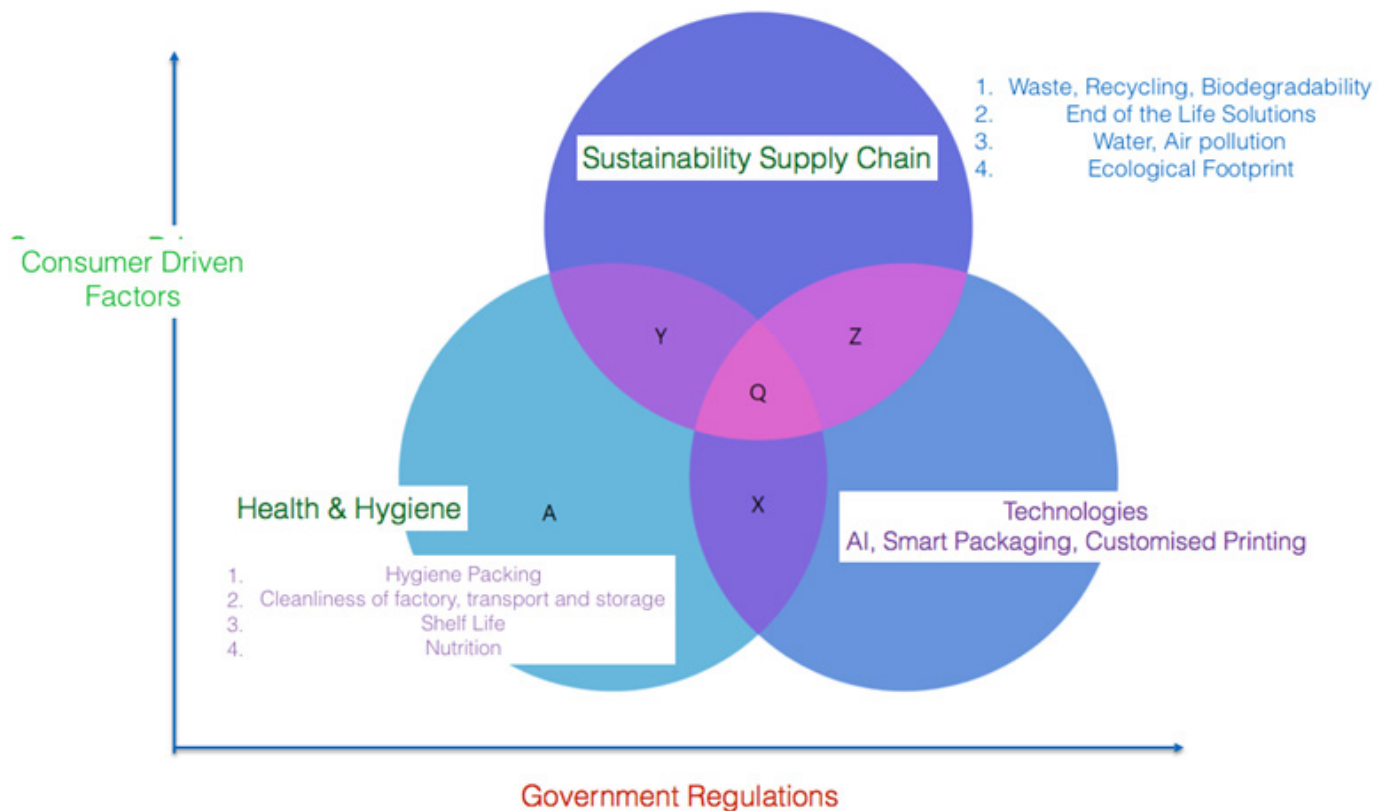
1. Climate Change and Water Scarcity
2. Energy revolution: Solar, Hydrogen, Electric Vehicles
3. Health and Hygiene
4. Explosion of E & M commerce & Digitisation
5. Sustainability across supply chain
6. Technologies : Artificial Intelligence, Biotechnology, Microbiology, Cryptocurrency
7. Underserved markets Exploding i.e. West Africa, South East Asia
8. Elderly population rising (China, Japan) and stagnation of population growth (except in most of Africa)
9. Skills, Skilled workers' training



## The New Normal

Each of these trends is interlinked, impacting each other and ultimately influencing and even transforming our views and choices, depending on what geographies we live in or travel to, what technologies directly, indirectly, knowingly and unknowingly we use, age group we belong to and the severity of the impact of climate change on every day life.

## The New Normal





**Packaging through the eyes of consumers:** Now, if we narrow the focus on packaging, and attempt to know how consumers of packaging look at it through different aspects, the packaging and allied industries would stand to gain. A survey conducted by Mckinsey Health suggests that Hygiene and Shelf life are currently the top priorities in packaging.

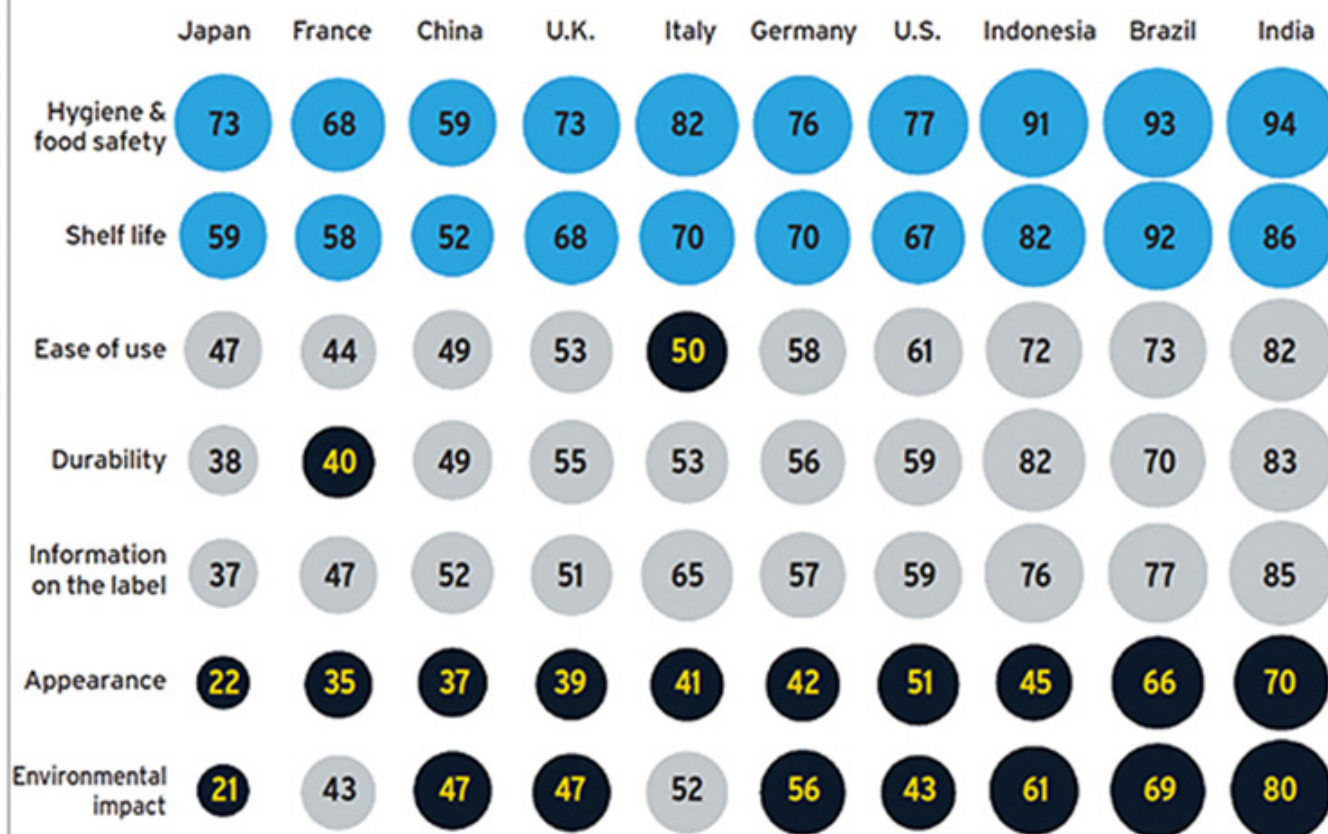
Based on this research conducted across the world, the report indicates that the Environmental impact of Packaging is not a concern Right now during Covid times. This is natural as people wish to be safe now. But if see the developing nations like India, Environmental impact is still a high priority. Environmental concern might trump Health and Hygiene as Covid recedes and Hygiene standards become uniform across the nations. Environmental impact is not an issue in developed nations currently as they have devised and reached set environmental standards two three decades back!

SOURCE: MCKINSEY PACKAGING SURVEY (AUGUST 2020)

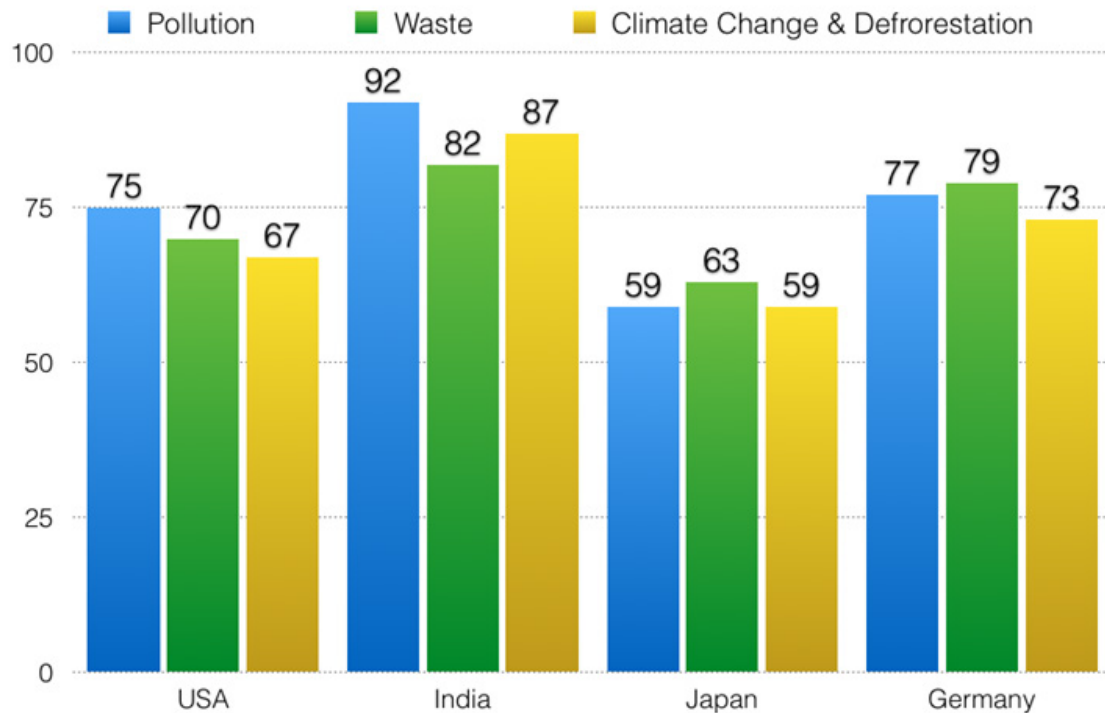
## HOW IMPORTANT IS PRODUCT PACKAGING AROUND THE WORLD?

% of respondents who indicate "extremely" or "very strong"

RANKED TOP 2   
RANKED BOTTOM 2 



## Customers Viewpoints: Environmental Impact Concern



Furthermore, the environment concerns because of packaging is almost equally spread among a number of factors. Almost 70% are extremely or very concerned about the Waste, Climate change, Air and water pollution, deforestation etc

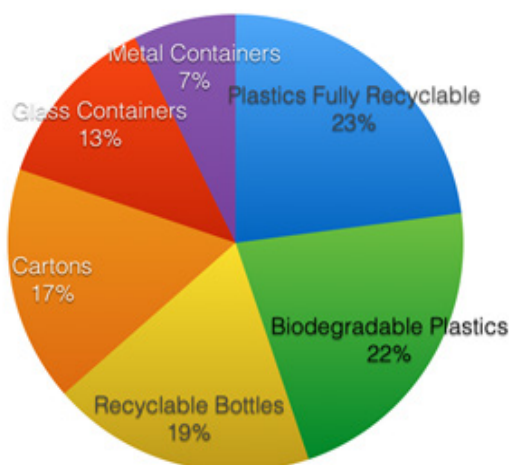
### Preferred Packaging materials

Customers also opined about the packaging material perceived and preferred by them in near future. Biodegradable Plastics and Recycled Plastics are almost equally preferred by them. Recycled plastics bottles as preferred pack over Glass, Paper and cartons.

The key take-ways from these studies are: 1) Customers seems more informed than the industry would like to believe with the high proliferation of social media, online newspapers and apps guided by Artificial intelligence 2) Customers still prefer plastics over other packaging materials, despite the aggressive and ill-informed campaigns by vested and /or misguided interests. Flexibility, lightness, strength, ease of packing and recently introduced property of biodegradability and industry's push on recycled plastics are the main reasons influencing these consumer decisions. 3) Packaging & allied Industries should **embrace sustainability across the supply chain**, rather than a "side-business " or "burdensome compliance and CSR activity "



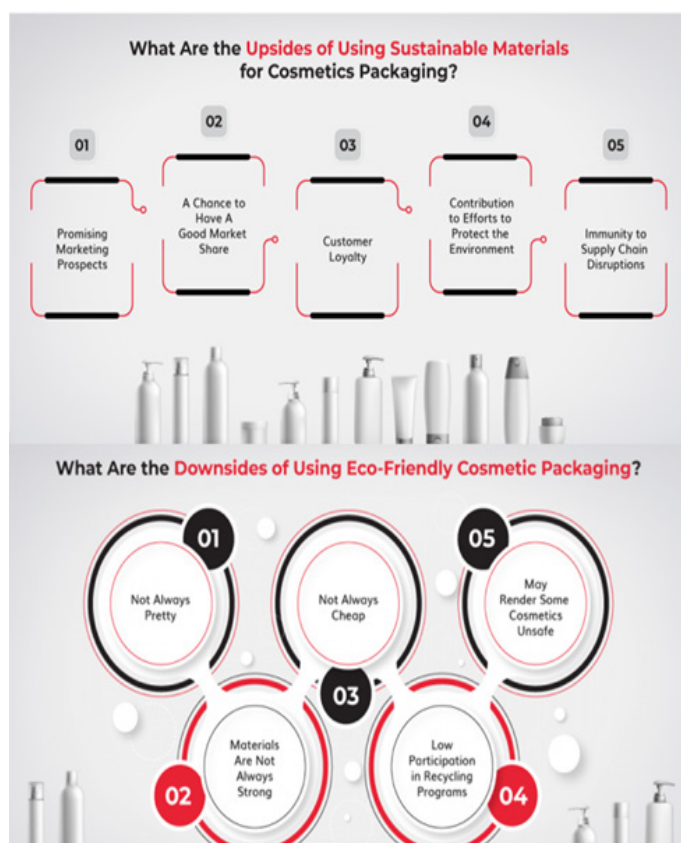
## Customers Viewpoints: Future Preferred Packaging



### A Case Study: Cosmetics with Sustainable Packaging



So, what entails sustainable packaging in present times? Many manufacturers, consumer industries like food, cosmetics and other FMCG are more sometimes confused and worried in balancing the act between sustainable packaging and aspects like aesthetics, customer loyalty and most importantly cost impacts. Let's take a look at upside and downside of sustainable packaging for especially the Cosmetics Industry which is heavily reliant on Packaging not only to ensure product hygiene and safety, but also very importantly, Marketing!



Increased market, higher pricing prospects, customer loyalty, contribution to a safe and sustainable environment, immunity to supply chain disruptions, resulting increased profitability definitely beat a few disadvantages such as minuscule cost increase, and some compromise on aesthetics in a few cases. Other factors can be overcome through further research and development which would need to go beyond the content and would have to include continuous focus on sustainability, cost and aesthetics as we progress!

## Willingness to pay for sustainable packaging



Many industry participants are asking themselves whether consumers will pay for green. A survey on consumers in the USA has three important findings here:

**Will Pay More** (Across all end-use segments): **60 - 70%**

If products didn't cost more, buy more Sustainable packaging: **52%**

Buy additional sustainably packaged products: i) if more available in stores, ii) available for more products, and iii) better labeled (to indicate green packaging).

**Interesting: Price** isn't the only thing that drives volume; you must also ensure that consumers **know** they are buying more sustainable packaging and that sustainable choices are widely **available** across products and categories.

### So what have we learnt from above consumer interests

- Consumers are more or less equally interested in recyclable and recycled plastic packaging and in fiber-based packaging.
- Overall, consumers want plastic film and rigid packaging to be recyclable or to include higher levels of recycled content.
- Consumers expect more Biodegradable packaging to be introduced.
- **Elephant in the room is Quality.** Quality of content and Quality of packaging would determine the future of a company.

### Conclusion

Quality will determine whether a company will forge ahead in the future or give way to more sustainable and quality conscious companies, especially in India, where quality is victim of L1 or Lowest cost policy of the government and industry alike. Environment Sustainability would not only **bring new and more customers but increase profitability.**

### So as companies we should ask ourselves:

1. Do you foresee a shift in Packaging Material in your focus markets based on anticipated consumer perception and regulatory changes?
2. What are the potential growth opportunities for which you would be uniquely positioned to provide winning solutions?

*This Article has been provided by Pranay Kumar, Chief Environmental Office, Vasudhaecoprojects Lts. New Delhi. For further inquiries, please contact him on [pranay@greenworksbiz.com](mailto:pranay@greenworksbiz.com)*

### Interview with India Fishnet Manufacturers' Association (IFMA)



**Mr. Shafiulla, Vice President, IFMA & CEO, Glofil Fibres & Plastics**

**Tell us about your Association. What are its goals and objectives?**

Our association is nearly four to five decades old since inception and it was formed with the core objective of representing the interests and concerns of the fishnet manufacturers across the country. From a very humble beginnings, today IFMA represents manufacturers from the various parts of the country. We have nearly 400-500 members mostly from Tamil Nadu, Karnataka, Maharashtra & Gujarat. The association's journey has been rather eventful and we have enjoyed many achievements over the years. Today, the IFMA probably has second or third generation of the manufacturers managing this Industry and over the years, we have seen notable changes among our members who have with time recognized the Association's efforts and endeavours for improving Industry viability. IFMA is actively involved with the industry and constantly strive to not only address concerns / grievances, but also ensure the upliftment of the industry with regard to production capability, technology upgradation, exploring new markets besides representing to GOI on all policy matters.

In early 1940-50s, the fishnet manufacturing industry was predominant in Europe, US, Korea & Japan. In 1970s-80s when the costs became prohibitive in these countries, the Industry had moved to South East Asia to countries such as Philippines, Thailand, Vietnam & Malaysia where the industry witnessed a huge boom. In early 90s when the economy in SEA region crashed, the

industry once again shifted to India and China. Currently, India and China, that have emerged as the world's manufacturing hub for fishnets currently. In terms of manufacturing capacity, China is the leader at No 1 rank, while India ranks number 2. India's manufacturing capacity stands at 35000 tonnes per annum with Nylon at 25KT, HDPE at 7 KT and others at 3 KT while China manufactures about 45000 tonnes per annum. Nevertheless, fishnets manufactured in India are of far better quality as compared to China and we definitely lead in that space.

Having said that, our VISION (GOAL) is to become No. 1 in the world. We are already at 70% of China's capacity and we are confident that it will not be long before we reach our goal. Indian Fishnet Industry is striving to achieve its GOAL through its superiority in QCD and capacity parameters. In fact, a leading Japanese machine manufacturer, recognizing the high quality of fishnets manufactured in India, has also invested in supplying upgraded machines to Indian manufacturers. This has not only helped elevate the quality and consistency standards of our industry, but also enhanced our output capacity.

Furthermore, I would like to add that we still have a lot of scope for technological enhancements in the industry. Also, as our industry is intrinsically linked to the fishing industry, we believe that the more we are able to evolve and grow the fishing industry itself, the more growth opportunities will be there for the Indian fishnet manufacturers. Our association recognizes this very vital link and we are working holistically towards the benefit of all its stakeholders.



### **What are the key factors that have been driving the demand for the product segment in India/ globally?**

As mentioned earlier, the growth of the fishnet manufacturing industry is very closely tied to the growth of the fishing industry itself. To understand it better, in fishnets, there are two kinds of products available; mono-filament (Nylon) that is better suited to inland fishing, coastal fishing etc ; and multi-filament Nets (nylon fishnet, mono long lines, HDPE nets) that are typically used in deep sea/ Coastal fishing.

Globally, especially in developed countries like the Scandinavian countries, Japan, etc., fishing activities involve deep sea and farm fishing. Also, in these parts of the world, fishing is highly advanced using modern methodologies, technology and practices. India comparatively is still very traditional, and our fishing industry is focused on low key operations. Hence the demand pattern is different for the domestic market as compared to international markets. Domestically demand for mono fishnets is high while our exports are mainly in the form of long lines & multi fishnets. The fishing industry in international arena is corporatized with heavy investment in technology and equipment. That presents huge opportunities for export of multi-filament fishnets.

The global fishnet market has been growing at a CARG of roughly 2% or less. This is mainly due to the fact that the waterbed is stagnant and the quantum of exploitation of the sea decides the level of fishing activity. This impacts demand for nets. India has experienced much better growth compared to the global average and stands at roughly 6-8%. This is largely due to the fact that over the years, fishnet manufacturers have recognized and aligned themselves to global demands. We expect that this trend would continue for the next 10 to 20 years. We also must leverage our prowess and maintain our growth levels by garnering as much global market share as possible by focusing on our product quality and faster cycle time of order to supply. Eventually, we forecast a shift of this manufacturing base to African countries which will emerge better and cheaper as demonstrated by the trends in the last 50 years.

### **What are the latest technological developments in the product segment?**

We have come a long way in terms of technology. New high-speed machines are being launched and these will ensure higher machine productivity besides consistency in mesh size, higher knot strength, etc. Indian fishnet manufacturers largely use Japanese machines and the quality of nets produced from these machines are significantly superior.

Besides, many experiments are being undertaken for use of value-added synthetic fibres which will enhance the durability and quality of nets.

### **What are major export destinations? What are the emerging opportunities?**

If you look at our export track, other than companies like Garware and Tuff Ropes, who have been exporting for long, MSMEs in the past generally refrained from exports. Exports by this sector was limited to availability of surplus after domestic supply. Our export share of total production was only about 6-7% of total capacity compared to China where manufacturers exported at least 30-35% of their stocks. Also export planning by the manufacturers in the past were largely to fulfil export obligations. Over the years however, having recognised the key for growth, Indian fishnet manufacturers have accelerated their export initiatives now and understand the need for servicing the expanded market including global markets.

Africa has huge import potential, and we are doing very well there. We also export to the Middle East, Sri Lanka and small quantities to Europe. However, the MSMEs' presence is not very high in USA, Australia, New Zealand that mainly import from China and Thailand. We need to focus on these countries as we have excellent potential and opportunity. We just have not made a concerted effort to explore these markets. The profit ratio from export in the initial stage will always be lower as compared to domestic market. However, once our product superiority is established, a premium can be claimed. Furthermore, export customers demand consistency in cost, quality and delivery. In cost and quality terms, we meet the expectations of the global market. However, we were not consistent in delivery as most exporters used to be driven by the dynamics of the domestic markets. This mindset is now changing, and many manufacturers now plan their production to meet both export and domestic demand. I am confident that with this evolving outlook, our exports will be significantly higher in coming years and even comparable or greater than China.

## **What are measures/ policies needed to drive exports of Fishnets from India?**

### **Role of the Government**

Many initiatives are being taken by the GOI and State Governments and these have certainly been very helpful. Having said that, our states and GOI need to look into the following:

- Exclusive ministry both at centre & state level for promoting fishing. A comprehensive policy must be made by GOI involving all stakeholders. Fishermen must be encouraged to go for deep sea, farm fishing with adequate resource support like deployment of larger vessels having adequate storage system and supply of high quality fishing requisites through formation of cooperative bodies
- GOI must institutionalise supply chain management of catches both for domestic & export market
- To make Indian Fishnet Industry dominant in Global arena, State-of-art technological developments must be shared with the industry through constant interface
- Enhanced capital subsidies, soft loans with concessional rate of interest for working capital requirements may be provided. Also, exporters may be encouraged with additional MEIS benefits, duty draw back benefits to neutralise cost disadvantage Indian manufacturers have as compared to China.
- Hon GOI must encourage large business houses to invest in synthetic filament manufacture as fishnet Industry is very heavily reliant on international supplies for raw material

All coastal states must have intensified focus on both the fishing and fishnet manufacturing industries and must institutionalise target based developmental initiatives and review system.

Indian Fishnet Industry has protected its market in India through Anti-dumping duty imposed on Chinese Nets. However, China is trying to circumvent the same by re-routing their exports through Malaysia and Thailand and therefore GOI must recognize such tactics and impose ADD on imports from such countries as well. We believe that our industry's rights need to be protected and a level playing field created for growth. Our market size is huge, we have the longest coastline in the region, and our export potential is excellent. Hence it would be a fair to ask from the Govt to support our industry.

We also need to create more awareness and educate the fishing community on modern methodologies and advancements in fishing. This is something that countries like Sri Lanka and Scandinavian countries are doing and their Governments are actively involved in ed-

ucating the fishing industry on new developments. We also need to help organize this sector with refrigeration, logistics, large boats/ trawlers, new technologies, distribution network, buy back arrangements, soft loans etc. Greater and better fishing activity translates into greater demand for fishnets.

### **Which countries/ regions are major competitors to the industry? What are the advantages they have?**

We have a conducive atmosphere in India. However, our exports are still low as compared to China who is our biggest competitor. China has lower cost of finance, higher Infrastructure facilities, and concessional resource support from their Government. Our Govt must understand this gap and must provide added support to provide a level playing field for Indian Net producers. Also, the GOI could help educate the industry of the long-term benefits of exports and extending global outreach. Today, we are very heavily reliant on the domestic market, which is vulnerable to conditions such as monsoons, etc. Enhancing export activity is important to keep up the steady growth that we have enjoyed over the past nearly a decade now. And we have immense of global opportunity today.

### **What are the typical challenges faced by the industry in India/ Indian exporters?**

India is very heavily dependent on China for raw material import and in the past over a year, due to the pandemic situation and the stand-off between India and China, raw material prices have skyrocketed. Supplies are compromised too. This is perhaps one of the biggest challenges that we face today. Our manufacturers are struggling to manage their raw material requirements. It is now time that the Govt and polymer producers in the country to take serious note of the difficulties faced by industry and enhance their capacities to meet our increasing demand. In fact, our association has been in touch with GSFC to expand their NFY production capacity in India. Currently we import these. The Govt should encourage producers to increase capacities and support our industry.

Currently, our growth is very good. However, as many manufacturing sectors in India, fishnets manufacturers have also been facing major financial challenges. They need soft loans and working capital and the govt should extend more such support for the industry.

We also need to increase the awareness level among the industry of export benefits and extending global outreach. This is currently low.

Presently, there are a lot of new technologies available across the world. For example, Garware manufactures

some very specialized nets that improve resistance to corrosion. Such technologies and new developments are not accessible to the entire industry and is available to only those companies that have deep pockets or their own patented processes or products. However, we need to bring in new technologies to uplift the entire industry's manufacturing capabilities. The Govt can play a big role in this effort.

The govt needs to also consolidate the fishing community and form cooperatives so that the sector can become organized and enabled as that would also enhance the fishnet manufacturing industry.

**What has been the impact of the pandemic on the industry since the past year? What has the Association been doing to help the industry?**

The pandemic has foremost greatly impacted raw material availability. Prices have soared. Manufacturers are struggling and fishermen are not accepting the increase in prices.

Ironically, there was a huge spurt in demand immediately after the first wave subsided and activities resumed domestically. The entire ecosystem was very conducive. However, today, prices have almost doubled, and fishermen are being cautious of making any new purchase. The second wave has further exacerbated the situation as the fishing industry has also hit a low making it difficult for all stakeholders. Since price volatility in the industry is highly prevalent, this trend is likely to continue for the next few months. The scenario is grim due to lowered demand as fishermen are more cautious in their buying.

Our association has been actively making representations to the Govt on enhancing sources of raw material. Hon GOI has provided support with GST level at 5 % for fishnets and the industry is making further representations for rationalised duty structures. Furthermore, the Govt has provided more soft loans to the industry. However extended moratorium may be considered by GOI for repayment as the impact of Pandemic is still continuing. Obligations of EPCGS and Advance Licenses may be extended by an additional one year to tide over the crisis.

IFMA is very active in places like Nagercoil where we have been encouraging manufacturers to adopt pandemic SOPs and exchange of ideas through continual interface meetings.

**What is the significance of recycling and use of recycled material in fishnets? What are your views on efforts that are being made or should be made in this direction?**

Once fishnets are used, it can only be recycled through de-polymerization or compacting process. When depolymerized lactum is converted into chips, they become non-virgin and are not ideally suited for fishnet manufacturing due to drop in properties and quality. However, such chips can be re-used in engineering plastics as a filler component. Yarn manufacturing needs only virgin chips. However, nets can be mended. Mono nets last for 6 months and multi-filament nets can last upto 2.5 years and can be repaired. Having said that, we recycle about 70-80% of damaged nets and these are compacted and sent to recyclers.

**How can Plexconcil assist/ support the activities of IFMA in furthering its goals and objectives?**

Plexconcil acts as a link between the GOI and fishnet manufacturing community. Presently, Central and State Ministries look for productive ideas for business growth and export share. Plexconcil can play a bigger role as an enabler by creating awareness of export benefits, technology developments, incentives and promotional schemes announced by GOI.

Since 2010 until today, there has been a lot of change in the industry's mindset. We have come a long way and there is much greater focus on exports. Organizations such as Plexconcil have made their impact and one can see it. However, more efforts will help expedite our efforts towards export growth.





## Sacks and Bags of Plastic

Sacks and bags of plastic includes all types of woven and non-woven products of plastics that are in the shape of sacks, bags and cones as classified under Sub-heading 392321 and 392329 of the Harmonized System (HS) of Coding. Such sacks and bags of plastic are used in both industrial as well as consumer packaging applications. World-wide import of Sacks and bags of plastic is between USD 16-17 billion per year.

- In 2019, top-5 exporting countries of Sacks and bags of plastic were: China (24.1%), Germany (7.3%), United States (6.3%), Viet Nam (5.7%), and Thailand (4.3%).
- Likewise, top-5 importing countries of Sacks and bags of plastic were: United States (18.8%), Japan (8.6%), Germany (6.5%), United Kingdom (6.1%), and France (4.5%).

India is among the top-10 exporters of Sacks and bags of plastic in the world. In 2020, India exported 260,773 tonnes of Sacks and bags of plastic valued at USD 500 million to the world. United States was the major destination for India's export of Sacks and bags of plastic.



Destination Country	Value (USD Mn)	Destination Country	Qty. (Tonnes)
United States	136.97	United States	70,431
United Kingdom	38.76	United Kingdom	19,186
Netherlands	26.09	Netherlands	10,570
United Arab Emirates	17.38	Ethiopia	9,802
Ethiopia	16.46	United Arab Emirates	9,256
Spain	15.22	Spain	8,279
Germany	14.28	Sudan	8,260
Sudan	12.21	Germany	6,917
France	10.85	Chile	5,146
Chile	9.38	France	5,078

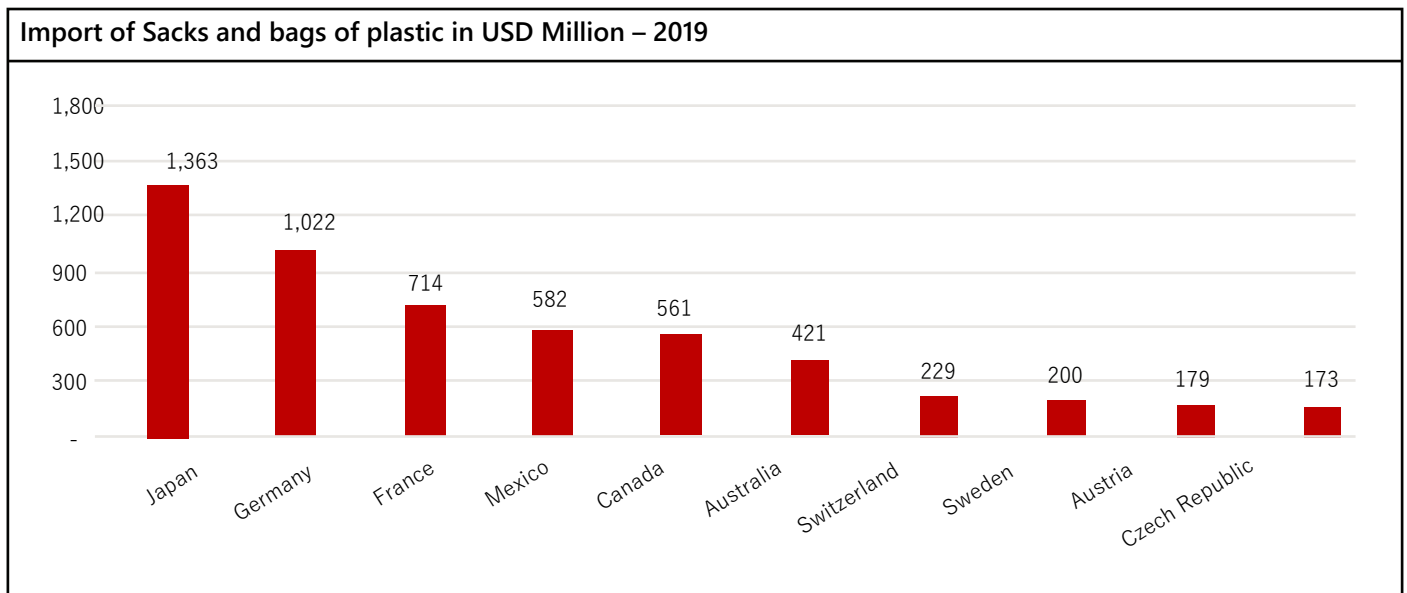
Source: Department of Commerce, Govt. of India, Plexconcil Research

India is also an importer of Sacks and bags of plastic. In 2020, India imported 6,184 tonnes of Sacks and bags of plastic valued at USD 42 million from the world. China was the major source for India's imports.

Source Country	Value (USD Mn)	Source Country	Qty. (Tonnes)
China	11.10	China	2,591
United States	7.69	Nepal	631
France	3.35	United States	525
South Korea	2.45	Italy	446
Italy	2.13	Turkey	220
Hong Kong	2.13	South Korea	211
Germany	1.85	Hong Kong	198
Turkey	1.54	Germany	196
Nepal	1.51	Sri Lanka	165
United Kingdom	1.18	Bangladesh	150

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

Our internal research indicates that Indian manufacturers of Sacks and bags of plastic have immense potential to export to destinations like Japan, Germany, France, Mexico, Canada, Australia, Switzerland, Sweden, Austria, and Czech Republic.



Source: Trade Map, Plexconcil Research



# UKCA and CE Marking:

## Clearing up the confusion

In this article Nigel Flowers, MD Sumitomo (SHI) Demag UK, explores the various safety certifications such as the CE mark, CA mark and UKNI and thanks to Brexit, what the various changes mean for those supplying moulding systems, periphery equipment and robotics to customers located in Great Britain or Ireland.

For over 25 years, machinery, injection moulding cells included, have been subject to the CE (Conformité Européenne) marking process when put into service in the European market (EU and EEA). The mark, designed to ease the free movement of machinery and show conformance with one or more European product safety Directives, just got a whole lot more complex.

Following Brexit, from 1 January 2021, the UKCA (UK Conformity Assessed) marking will replace the long-standing CE marking for goods sold within England, Wales and Scotland. As there's no hard border in Ireland, free movement of people and goods continue to apply, as does the CE marking. Adding a further layer of complexity, in Northern Ireland a third logo – UKNI – will be used when goods subject to CE marking are performed by a GB Authorised Body (as per Article 7(3) of the Northern Ireland Protocol). Additionally, EU recognised notified bodies can also certify goods for the NI market.

So, what do all these certification changes mean for a European-based machinery builder like Sumitomo (SHI) Demag supplying moulding systems, periphery equipment and robotics to customers located in Great Britain or Ireland? With a transitional UKCA period due to expire on 1 January 2022, UK companies are rapidly trying to decipher certification responsibilities, commercial risks and legal liabilities.

Managing Director Nigel Flowers teams up with CE specialist Derek Coulson to reassure and examine the future landscape of UKCA machinery certification and how to avoid sleep walking into a minefield of risks. With the first steps post-split agreed, both review the grey areas, new rules pertaining to the role of importers, and how future safety certifications align to the national sovereignty aspect of Brexit as well as international safety standards.

### Subtle splits

Found on everything from plastic toys to medical devices, lightbulbs to robots, the CE mark has for many businesses and consumers been a recognisable bedrock of safety. The introduction of the UKCA mark doesn't change this, notes Nigel. *"Aside from several subtle changes to the text in documents to reflect UK legislative requirements, the transposition to UKCA right now is largely an administrative change. The biggest impact will be determined by the location of the manufacturer."*

Any UK company that exports into the EU must now appoint a responsible person or entity to act as the person to compile the technical file for CE marking. This entity – any EU person or company – must be physically located within the EU.



This requirement has been removed from the UK legislation. There is now no requirement for a non-UK supplier to identify a UK person to compile the Technical File. It can now be undertaken by the original manufacturer in any country. The concern, emphasises Derek, is that UK Health & Safety Authorities will not be able to obtain Technical Files. *“This means the End User must ensure that any equipment supplied meets all requirements and is safe, before putting it into service,”* said Derek.

The CE Mark, designed to ease the free movement of machinery and show conformance with one or more European product safety Directives, just got a whole lot more complex.

### CA for Check All

In July 2021, EU Regulation 2019/1020 will require all non-EU based suppliers of CE Marked goods to supply through an importer or fulfilment centre, who must hold Technical Documentation, or they must have an EU Authorised Representative to fulfil the tasks for them. This EU AR must be identified on the Declaration and in some cases the manufacturers plate. This requirement will not apply in England, Scotland or Wales, but will be for suppliers to Northern Ireland. An English, Welsh or Scottish manufacturer must have an EU Authorised Representative from 16 July, 2021 if they wish to supply to Northern Ireland.

For UK CA Marking, where a Declaration of Conformity (DoC) or Declaration of Incorporation (DoI) previously referred to ‘harmonised standards’ with EN prefixes, these must now refer to ‘designated standards’. The standard numbers should be prefixed with BS to indicate they are British Standards.

While CE marking requires machinery instructions to be written in the language where each machine is used, UKCA marking insists the manual be written in English.

The change with the greatest risk implication relates to status. UK distributors bringing in equipment manufactured in the UK are now defined as ‘importers’. The compliance responsibility to adhere to the UKCA regime rests here. *“If something safety-related happens, the party that’s located in the jurisdiction – in this instance the UK importer – takes on the liability,”* highlights Derek.

“It all sounds fairly straightforward. And it is, providing EU and UK safety certification standards remain completely aligned to each other,” says Nigel. Although divergence is not anticipated right now, it could happen in the future. It’s why most global companies, Sumitomo (SHI) Demag included, advocate working towards inter-

national ISO safety standards rather than national ones.

### Grey areas

Ireland is where the situation gets a little more muddled. With the Northern Ireland rules allowing for free movement of people and goods across Ireland, most of the rules stay aligned to the EU CE marking.

Derek explains: “Machine builders exporting to Ireland from the EU, as Sumitomo (SHI) Demag does, will continue to CE mark their machines exactly as before with the technical files compiled by an EU person. If an EU-based subsidiary, importer, representative or distributor is prepared to take on this role then the documentation can simply be updated accordingly. The manufacturer must trust any importer, as the Technical File contains Intellectual Property.”

In instances where EU machine builders previously using a UK Notified Body for the conformity assessment of Annex IV machines, this should have been transferred to an EU Notified Body. Most of the UK Notified Bodies now have EU subsidiaries or parent companies. However, where a CE marked product is put into service in Northern Ireland, if it has been assessed by a UK Authorised Body, the UKNI marking must also be used with the CE Marking.

Serving a large and expanding injection moulding customer base across North and Southern Ireland, Nigel clarifies that having a new registered office in Ireland helps. Additionally, having a nominated signatory in Germany, provides Sumitomo (SHI) Demag customers with reassurance that all future Declaration of Conformity (DoC) or Declaration of Incorporation (DoI) documents will comply with all these new certification regimes.

### Cell certifications

For most new injection moulding systems commissioned for UK customers, Sumitomo (SHI) Demag will aim to import entire cells, including robotics and periphery equipment like runners and cooling systems from Germany or Japan. As the importer, the UK team accepts the responsibility of the Technical Files, making the issuing of a UKCA Mark seamless.

Incorporating equipment, such as robotics, from a different machinery supplier does raise further certification complications. With the onus of responsibilities potentially shifting to the end user - the moulding company, or the integrator. Nigel explains *“Under the scope of the Supply of Machinery (Safety) Regulations 2008 and amendments, it became mandatory for a complete robotic cell to carry the CE marking. Providing it was added to a safe machine a Declaration of Incorporation*

*could be issued. However, the duty of certification, even before Brexit, rested with the customer or integrator. That still applies."*

Additionally, creating a complex assembly of machinery may present other safety hazards. In effect creating a new cell. *"It's not enough to assume that having the CE or UKCA Mark affixed to each piece of equipment means the entire cell is certified,"* observes Derek.

The sale of second hand or used moulding machinery in the UK will continue to be covered by *The Provision and Use of Work Equipment Regulations, (PUWER) 1998*.

Currently the process is moving from conformance with EU Directives to a virtually identical regime under UK statute. However, it does place greater onus on importers compared to distributors, especially in relation to compliance. *"Although the changes are subtle, there are some definite shifts in legal responsibilities on the horizon,"* ends Nigel.

Having supplied a comprehensive CE compliance service for many years, Sumitomo (SHI) Demag assures customers that it will continue to provide this valuable service. Being based in Ireland, Derek's organisation - Hold Tech Files Ltd – is also well-placed to assist manufacturers to navigate the different certification processes, including all of the grey areas, and is able to compile EU and UK certification Tech Files and act as EU Authorised Representative.

Source: Interplas Insights



# NEWS

## International News

### **Mitsui Chemicals, Neste and Toyota Tsusho collaborate to start Japan's first production of renewable plastics from 100% bio-based hydrocarbons**

Mitsui Chemicals, Inc., Neste and Toyota Tsusho Corp. announced today that they are joining forces to enable Japan's first industrial-scale production of renewable plastics and chemicals from 100% bio-based hydrocarbons.

In this collaboration, Mitsui Chemicals will use Neste RE™, 100% bio-based hydrocarbons produced by Neste, to replace a part of the fossil feedstock in the production of a variety of plastics and chemicals at its crackers within Osaka Works during 2021. In doing so, Mitsui Chemicals will become Japan's first company to use bio-based feedstock in its crackers. The collaboration between Neste, Mitsui Chemicals and Toyota Tsusho will enable brand owners and other potential clients in the Asian market, particularly in Japan, to start incorporating renewable plastics and chemicals into their products and offerings.

*Significant reduction in greenhouse gas emissions by shifting to bio-based hydrocarbons*

For this collaboration, Neste, a forerunner in producing renewable and recycled feedstock alternatives for the plastics and chemicals industry, will produce its Neste RE feedstock entirely from renewable raw materials, such as bio-based waste and residue oils, without any fossil oil. By using Neste RE, Mitsui Chemicals is able to produce plastics and chemicals with significantly reduced greenhouse gas emissions over their life cy-

cle – spanning from the raw materials stage all the way through to product disposal – when compared to products made using fossil feedstock, such as petroleum naphtha.

*Derivatives retain the same high quality as conventional petroleum-based products*

The introduction of Neste-produced bio-based hydrocarbons as feedstock at the crackers will allow Mitsui Chemicals to produce renewable ethylene, propylene, C4 fraction and benzene, among others, and process them into basic chemicals such as phenol, or plastics such as polyethylene and polypropylene, without altering the high-quality of these derivatives; the quality will be on par with conventional products.

Mitsui Chemicals and Toyota Tsusho intend to acquire International Sustainability and Carbon Certification (ISCC), which is widely accepted in Europe as a system for the certification of products from bio-based feedstock. Mass balance based ISCC Plus certification aims at driving up adoption of renewable content even in supply chains that feature complex production processes, such as those common in the chemical industry. "Aiming to reach carbon neutrality by 2050, Mitsui Chemicals is looking to help bring about a circular economy by pursuing the two pillars of recycling and the use of bio-based alternatives for its chemical and plastic products," said HIRAHARA Akio, Managing Executive Officer for Corporate Sustainability at Mitsui Chemicals. "Switching fossil feedstock to bio-based feedstock helps combat global warming, and it is regarded as an important strategic focus in the push for reaching car-



bon neutrality by 2050. With this in mind, Mitsui Chemicals will not only go about developing materials from high-quality bio-based feedstock and processes but also work with stakeholders toward getting biomass widely used in society.”

“Bringing sustainable plastics and chemicals to the market can only be successful if all value chain parties closely collaborate. We are therefore very excited about our partnership with Mitsui Chemicals and Toyota Tsusho, two industry leaders with whom we will start Japan’s first ever production of high-quality, high-performance plastics, from 100% bio-based Neste RE. Through this collaboration, we can considerably reduce emissions related to the use of fossil feedstocks, and help Japan to reach its national climate and polymers-related bio-content targets, fully in line with Neste’s purpose and drive towards a circular bioeconomy,” says Mercedes Alonso, Executive Vice President, Renewable Polymers and Chemicals at Neste.

“We are so excited that our decade-long experience brings our plastics market one of the best circular economy solutions from upstream to downstream,” says Kazuyuki Urata, COO for Chemicals & Electronics Division of Toyota Tsusho. “This project is very much aligned to support progress in the material sustainability issues identified for our company.”

Source: Packaging 360

## INEOS and LACTEL partner to produce the world’s first HDPE Milk Bottles from advanced recycling

INEOS O&P EUROPE is making a significant investment to develop a comprehensive portfolio of circular solutions for the packaging industry. The collaboration with LACTEL is yet another major milestone in this direction. Advanced recycling technology converts waste plastic back to its basic molecules which are then used in INEOS production sites to include recycled contents and replace traditional fossil-based raw materials. LACTEL is the first dairy brand, in collaboration with INEOS, to explore a solution for UHT milk bottles produced with circular polyethylene, derived from post-consumer recycled material.

“This trial production of 140,000 milk bottles, based on HDPE from advanced recycling technology, is a world first and a major step forward for Lactel towards a circular economy. This new innovative product will be used in the Montauban production plant for an initial production run. At Lactel we are extremely excited to bring this new environmental innovation to our iconic milk bottles”, explains Anne Charles-Pinault – Lactel France General Manager



“INEOS is very pleased to progress this partnership with Lactel. Both companies are committed to sustainability and, via advanced recycling, we are able to supply virgin quality polymer from recycled plastic that is ideal for even the most demanding food contact applications like milk. Another big step in the right direction.” – said Xavi Cros – CEO INEOS Olefins & Polymers Europe/South.

After an independent certification process, initiated several months ago, Lactel’s Montauban plant has been successfully RSB\* certified this April 2021. The milk bottles produced in this way are compliant with food safety regulations and are fully recyclable.

Source: Packaging 360

## EarthFirst Films by PSI Produces First PHA Home Compostable Packaging Film

EarthFirst Films by PSI, a global bioplastic film technology and manufacturing company, announces the successful completion of the first commercial run of PHA (Polyhydroxyalkanoate) home compostable packaging film.

Although the PHA materials have been certified, the film will go through biodegradation and home compostability screening prior to full certification. Made from Danimer Scientific’s (DNMR) NODAX® PHA, the new film is designed for a wide range of applications across food, beverage, grocery retail, quick service restaurant, stadium foodservice, and many other consumer packaged goods (CPG) and industrial segments.



“This is the first in a lineup of new advanced solutions in home compostable films we’ll launch in the next 12-18 months”, cites George Thomas, CEO of EarthFirst Films by PSI. “We are extremely excited to add PHA to our EarthFirst® biopolymer films portfolio. We appreciate the support we received from Danimer in making this a success.”

“Home Compostable films are a catalyst for greater expansion of End-of-Life (EOL) options for flexible packaging,” adds Chris Schaefer, Global Marketing Director. “We’re committed to helping brands lower their packaging carbon footprint in response to consumer requests.”

Source: Packaging 360

## PKN ORLEN starts the largest petrochemical project in Europe

PKN ORLEN is investing in the expansion of the olefins complex at the Płock Production Plant. It is the key project in the strategic petrochemical development programme and the largest petrochemical investment project in Europe in the last 20 years.

The olefins III complex will be built using state-of-the-art technologies to ensure, among others, greater energy efficiency, including a 30% reduction of CO<sub>2</sub> emissions per tonne of the product. The project will add about PLN 1bn to the company’s annual EBITDA.

“This is an important moment for PKN ORLEN and the Polish petrochemical industry. We are taking a major step towards significantly expanding the petrochemical segment at the Płock Production Plant, which – once the Olefins III Complex is completed – will be one of the most modern facilities of this type in Europe. With this

project on-stream, PKN ORLEN will join the top petrochemical producers in the European market. It will also secure its competitiveness in the long run and increase its resistance to unfavourable mega-trends in the fuel market. Importantly, the project fits with the merger of Orlen and Lotos, which will supply significant volumes of kerosene to the Olefins. Petrochemicals have a huge potential. We want to harness it to deliver maximum value, in response to the steadily growing demand for high-margin petrochemical products. This will benefit the Group companies, our shareholders and the Polish economy, which will become even more competitive,” said Daniel Obajtek, CEO and President of the PKN ORLEN Management Board.

The expansion of the complex at the Płock Production Plant is part of the ORLEN2030 strategy, which assumes that PKN ORLEN will achieve carbon neutrality by 2050. In furtherance of this goal, the company aims to reduce carbon emissions from its existing refinery and petrochemical assets by 20% and cut down carbon emissions per megawatt-hour of electricity by 33% by 2030.



The implementation of this strategic project has been greenlighted by the PKN ORLEN Supervisory Board which, in granting the consent, took into account the submission of an application for public aid to the Ministry of Development, Labour and Technology. The project’s value is estimated at PLN 13.5bn, based on a lump-sum bid for the Steam Cracker and the related units, as well as detailed estimates of expenditure on the necessary infrastructure. The plan for the project has been prepared in line with the world’s best practices.

Currently, the Steam Cracker’s capacity is 640 thousand tonnes. The Olefins III project envisages increasing its actual production capacities to 1,040 thousand tonnes, that is by approximately 60%. The ORLEN Group’s total petrochemical output, currently amounting to more than 5 million tonnes, will grow by over 1 million tonnes.

As part of the project, PKN ORLEN will consider shutting down the part of the olefin plant which was built over 40 years ago, with production capacity of about 340,000 tonnes and lower operational and energy efficiency. The

more modern part, with a capacity of about 300,000 tonnes, is to be upgraded. Most importantly, however, the Group will build a new Steam Cracker with a capacity of 740,000 tonnes. The Complex will also comprise five additional production units, including a new large ethylene oxide and glycol plant. Once completed, Olefins Complex III will additionally increase PKN ORLEN's capacity to produce other ethylene derivatives, delivering an extra margin and maximising the rate of return.

Source: India Chemical News

## Solid Growth Forecast for the Plastics Industry

The plastics industry is forecast to reach a compound annual growth rate (CAGR) of almost 5% this year as markets and consumption rebound from the business impact of COVID-19. Key trends shaping the global plastics and composites industry in the years ahead include, perhaps paradoxically, sustainability driving new product development and continued high demand for single-use plastics. Those are among the takeaways from new analysis published by Frost & Sullivan.

In its report, "Industry Convergence to Transform the Global Plastics and Composites Market, Outlook 2021," Frost & Sullivan predicts that global revenue will rise to an estimated \$558.71 billion this year, up from \$533.04 billion in 2020, a CAGR of 4.8%. The business consultancy credits progressive containment of the pandemic and resumption of activity in major end markets for the growth.

Frost & Sullivan analysts also reveal eight key trends that will affect the global plastics and composites market, starting, not surprisingly, with the impact of sustainability on new product development. "The recycling, re-use, and upcycling of plastics and composites are becoming key avenues for product development and value addition," said Frost & Sullivan analyst Aditya Krishnan. "The increasing relevance of energy efficiency and carbon neutrality goals will also drive new product design and development in several end-use sectors such as automotive, electronics, and consumer goods. Plastics and composites are expected to play an important part due to their versatile properties and longevity."

The drive to develop sustainable materials will not, however, diminish demand for single-use plastics. On the contrary, e-commerce and lingering concerns regarding the spread of the pandemic "will continue to drive the consumption of single-use plastics," according to Frost & Sullivan.

Supply-chain disruption precipitated by the pandemic won't resolve itself via a return to normalcy. As we have noted in *PlasticsToday* before, the shortage in personal

protective equipment and medical supplies experienced in the early days of the pandemic has prompted a re-think of rampant outsourcing to distant locations, both in the United States and globally. The Frost & Sullivan report forecasts a "surge in demand for local-for-local production." In a recent *PlasticsToday* podcast, Berry Global CEO Tom Salmon credited his company's "local value delivery" and dedicated supply chains as part of the reason that it has fared so well during the pandemic. The Frost & Sullivan report also points to the continued growth of additive manufacturing, evolving regulatory constraints to improve energy efficiency in building and construction and the automotive sectors, and increased demand for food safety and traceability as key trends benefiting plastics and composites.

The resurgence of public events — a subject dear to our hearts — also will drive growth for plastics. "Trade shows and concerts will increase demand for products for individuals participating in the events and other plastics in related applications, such as temporary stalls and seating arrangements," notes the report.

Source: *Plastics Today*

## Unilever Transforms Deodorant Package for People with Disabilities

As society becomes more aware of inequalities in life, brands are acting to show they have heard, and to show they care. One such example is the new Degree Inclusive deodorant from Unilever, currently in trial.

Degree Inclusive is the first deodorant product that comes in packaging specially designed for people with disabilities such as vision loss and missing or impaired upper limbs. People with limited arm mobility have trouble twisting a deodorant cap, turning a stick, or pushing down on a spray can — typical actions required with current packages. So, Degree reached out to occupational therapists, engineers, consultants, and designers from Wunderman Thompson — as well as getting input from people living with disabilities — to create an easy-to-apply deodorant package.

Unique features of the prototype package are:

- A hooked design for one-hand use.
- Magnetic closures for easy cap removal and reclosing.
- Ergonomic grip for easier application for users with limited mobility or no arms.
- Braille instructions on the label for users with impaired or no vision.
- A larger roll-on applicator to reach more surface area per swipe.





Degree has invited 200 people with disabilities in the US to try this new product, working in partnership with The Chicago Lighthouse, Open Style Lab, and Muscular Dystrophy Association. Participants have been asked to share their feedback on the product and the package, including functionality and messaging. Their input will help improve the product/package for its future commercial launch.

Design studio SOUR created the 200+ prototypes for Degree's user trial. "While the early prototypes were 3D printed in-house for rapid iteration," says Pinar Guvenc, partner at SOUR, "the final prototype has been produced through reaction injection molding."

She tells Packaging Digest that the prototype holds approximately 40 milliliters of liquid deodorant, but the package is flexible in design so it could hold 50 to 75 ml for the commercial product.

Scents and sensitivities.

In addition to addressing physical disabilities, Degree Inclusive also takes other key issues into account: gender neutrality and sustainability.

Degree opted for a gender-neutral package and fragrance. As Guvenc explains, "A gender-neutral fragrance has been created as the pack is also designed to be gender-neutral. The scent is also very light to account for people with sensitivity in sense of smell."

Two other considerations might be an influence in this decision as well:

- One, the number of disabled adults in America (about 28 million, according to 2019 US Census numbers) is a small percentage of total adults (about 252 million). So, the relatively small target audience probably couldn't support multiple stock-keeping units

(SKUs). Hence, a gender-neutral package makes sense from a financial and production point of view. However, once the commercial package is available, Degree might find that consumers who are not disabled could be interested in buying this product because of the slick-looking package that's highly functional.

- Two, a gender-neutral package and fragrance shows sensitivity to today's social attention on gender identity. That could resonate with like-minded consumers from a marketing/messaging perspective.

Regarding sustainability, the personal care product comes in a durable plastic package ultimately designed to be refillable to help reduce plastic consumption. But the refill pack doesn't exist yet, according to Guvenc, so we don't know what it looks like or how easy it would be to handle and replace. "The refill pack will be designed after gathering feedback on the roll-on prototype trial," she says.

An affordable refill pack could also be part of the economics of the package, which looks pretty expensive compared to the typical deodorant applicator. Degree's public relations firm was not able to answer our question on the product's suggested retail price since this product is just being trialed.

But the model of high-end, or even luxury, packaging that's designed to be robust enough for multiple reuses seems to be catching on with sustainably-minded consumers, as evidenced by the success of Loop, the circular shopping platform that enables consumers to buy branded products in durable, not disposable, packaging.

Source: Plastics Today

## PlasticsEurope condemns the illegal trade of plastic waste

PlasticsEurope has condemned the illegal dumping of plastic waste and called for stricter enforcement of the controls on its shipment.



The European plastics manufacturers trade organisation described the act as 'distressing', particularly for countries that lack appropriate waste enforcement capacities and suitable infrastructure to prevent the trade of illegal waste. PlasticsEurope continues to work collaboratively with enforcement authorities to tackle this issue.

A recent press statement read: 'The Interpol report on illegal plastic waste exports issued in August 2020 flagged a significant increase in plastic waste crime. We welcomed the Report's conclusions and have expressed since then the urgency to increase enforcement of existing global and national legislation on waste trade which PlasticsEurope fully backs.'

Virginia Janssens, PlasticsEurope Managing Director, said: "More radical measures are needed to stop this issue. This is why we also urged the international community to step up the development of efficient monitoring systems to tackle the lack of waste traceability and to improve collection of reliable data."

PlasticsEurope also works alongside the waste industry sector in the elaboration, development and implementation of a global certification platform for recycling. It is hoped that such activity will help reduce illegal waste. Plastic waste exports outside the EU have decreased by 39 per cent from 2016 to 2018, with further reductions being advocated through improved recycling infrastructure throughout the bloc.

'As an industry, we are transitioning to a circular economy and working with all players (governments, whole value chain, local communities, NGOs) is key to truly deliver one circular vision. We are playing our part in tackling the plastic pollution and stepping up efforts in this direction requires many solutions to also mitigate the impact of fraudulent plastic waste exports', the press statement continued.

Janssens added: "We need the right mechanisms in place that include innovative technologies, such as chemical recycling, and new waste minimisation business models. To facilitate domestic recycling, appropriate legislation is needed to rapidly remove remaining barriers to intra-EU movement of waste for recycling."

A recent survey conducted amongst PlasticsEurope members illustrated the determination of the industry to continue investing in chemical recycling, with planned investments in Europe of more than €7bn by 2030.

Source: Interplas Insights



## India News

### FDI equity inflows rise 19% to \$60 bn

Despite some moderation in the March quarter, the inflows last fiscal remained very encouraging, given the devastation and disruption caused by the pandemic across the globe. A spike in the cases in key states like Maharashtra in the second wave (in March) and some curbs on movement may also have weighed on the inflows.

Going forward, the bigger worry for FDI inflows, especially in the June quarter, would be the severity of the second wave and local lockdowns imposed by certain states to control the Covid-19 surge.

Foreign direct investment (FDI) in equity in India rose 19% year-on-year last fiscal to a record \$59.6 billion despite the onslaught of the pandemic. However, such inflows, which had jumped as much as 40% between April and December, seem to have lost some momentum in the March quarter.

The gross FDI inflows — which include FDI in equity, reinvested earnings, the equity capital of unincorporated bodies and other capital — rose 10% year-on-year to an all-time high of \$81.7 billion in FY21, showed the data released by the commerce and industry ministry on Monday. The gross FDI, too, had risen by a healthy 22% up to December last fiscal before easing in the March quarter.

Source: FE

### Incentives for R&D: New foreign trade policy to retain key schemes despite WTO trouble

Key elements from a national logistics policy, which has been in the works for months, will likely feature in the FTP. This policy will aim to reduce logistics costs from 13% of GDP to 8% over five years and substantially improve India's trade competitiveness.

New Delhi believes that it has a strong case and the verdict of the appellate body, when it comes, should go in its favour.

The government will likely retain certain key export schemes, such as those relating to special economic zones (SEZs) and export-oriented units, in the next foreign trade policy as well, even though these programmes have been challenged at the World Trade Organization (WTO), sources told FE. However, any new scheme within the FTP will be designed in sync with WTO stipulations, one of the sources said.

The new FTP for the next five years is expected to be rolled out from October 1. Coming as it is in the wake of the unprecedented Covid-19 pandemic, the FTP would focus more on ways to ensure India's greater integration with the global supply chain, trimming elevated logistics costs, incentivising the much-needed research & development (R&D) and bolstering certain marketing support, one of the sources said.

Source: FE



## Make in India? Half of manufacturing jobs lost in five years

According to an analysis by the Centre for Economic Data and Analysis (CEDA) based on the CMIE monthly time-series of employment by industry, manufacturing employment in 2020-21 was nearly half of what it was five years ago.

Among the service sectors, non-financial services, the largest component among service industries, the employment rose over the five-year horizon to 119.7 million to 127.7 million in 2020-21, but there was a sharp y-o-y decline in 2020-21, owing to the pandemic.



While the employment scenario in the country has turned bleaker of late due to the pandemic after a brief spell of moderate recovery from the fathoms hit in May 2020, manufacturing, which has ostensibly received a lot of policy attention, has been losing out to other sectors and the most to agriculture as job creator over the past few years.

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Source: FE

## Small businesses seek no penalty and interest relaxations on GST late payment, return filing till June

For taxpayers having up to Rs 5 crore in turnover in the preceding financial year, a 30-day period was given by the government earlier this month to file their 3B returns for March and April from their due date without a late fee. CBIC had earlier announced the extension of the due date for GSTR-1 April sales returns filing till May 26 from the actual due date of May 11.



Covid impact on MSMEs: Even as the government had earlier this month offered taxpayers a late fee waiver for filing GSTR-3B monthly returns for March and April and reduced interest rates for late payments, a majority of small businesses, startups, and traders are still seeking no penalty and interest relaxations on GST late payment and return filing till June 30, 2021. Small businesses have been urging for the deadline extension for GST payments as most units have suffered Covid impact including temporary shutdowns or negligible operations. A majority of micro entrepreneurs and traders still work on a paper-based approach where manual interfacing between them and their accountant takes place to finalise GST details and thereafter an electronic payment is made between the business owner and the accountant following which the latter pays the final GST to the government.

“GST payment deadline falls on 24th of every month. A majority of small businesses have been in shutdown mode across India since early or mid-April and for many of them filing and paying GST requires in-person coordination with their accountant which hasn't been possible due to lockdown in most states across India,” Sachin Taparia, Founder & Chairman, LocalCircles told Financial Express Online.

Based on a survey by the platform of more than 2,400 businesses located in 122 districts, 89 per cent respondents wanted no penalty and interest relaxations on GST late payment and return filing till June 30, 2021. By extending this date, the government will likely have to postpone 20 per cent of collection till June but it will have a positive impact on 80 per cent of businesses that are currently seeing cash flow challenges and have a high degree of future uncertainty, Taparia added. LocalCircles had escalated the need for relaxation for March GST payment and return to the government on April 23, 2021, and May 1, 2021.

The Central Board of Indirect Taxes and Customs (CBIC) had on May 1 issued a notification announcing the extension for filing the monthly GSTR-3B return by 15 days for taxpayers with a turnover of more than Rs 5 crore along with a lower 9 per cent tax rate for the 15 days. For taxpayers having up to Rs 5 crore in turnover in the preceding financial year, a 30-day period was given to file their 3B returns for March and April from their due date without a late fee. CBIC also announced the extension of the due date for GSTR-1 April sales returns filing till May 26 from the actual due date of May 11.

Source: FE

### **DST invites applications from startups for developing new technologies, innovative products**

Promising startups will be provided with financial and mentoring support for scaling up their products or technologies to the next level and speeding up their processes, helping them reach the product deployment stage as fast as possible, it added.

“Development and manufacturing (import substitution) of the products parts currently being imported for the devices like oxygen concentrators would also be considered for seed support through the DST supported-network of Technology Business Incubations (TBIs),” it said.



The Department of Science and Technology (DST) has invited applications from startups and companies for developing new technologies and innovative products to tackle the second wave of the COVID-19 pandemic.

Under NIDHI4COVID2.0 initiative by the DST, companies and startups registered in India, offering promising solutions in the thrust areas of oxygen innovation, portable solution, relevant medical accessories, diagnostic, informatics, or any other solution that addresses or mitigates various challenges faced by the country or society due to the severity are eligible for funding.

“As a rapid response to support startup-driven solutions for tackling the current challenging, the second wave of COVID 2.0 in the country, Indian startups and companies have been invited to apply for developing new technologies and innovative products that can enable our country to fight the crisis,” the DST said.

The initiative is a special drive of the National Science and Technology Entrepreneurship Development Board (NSTEDB) under the DST for supporting indigenous solutions and innovative products to combat the crisis the country is currently facing due to the pandemic.

“Development and manufacturing (import substitution) of the products parts currently being imported for the devices like oxygen concentrators would also be considered for seed support through the DST supported-network of Technology Business Incubations (TBIs),” it said.

Promising startups will be provided with financial and mentoring support for scaling up their products or technologies to the next level and speeding up their processes, helping them reach the product deployment stage as fast as possible, it added. This initiative has been built based on the NSTEDB’s past experience of implementing the Centre for Augmenting WAR with COVID-19 Health Crisis (CAWACH) and also through special calls through the National Initiative for Developing and Harnessing Innovations – Seed Support System (NIDHI-SSS) from TBI to support startups in 2020.

“Supporting development of devices like oxygen concentrators also brings with it huge opportunities in the development and manufacturing of several critical components that are being imported such as specialised valves, zeolite materials, oil-less and noiseless miniaturised compressors, gas sensors, which have wider applications in several sectors,” said Prof Ashutosh Sharma, Secretary, DST.

“Interested applicants offering promising solutions can apply through the centralised portal [www.dstnidhi-4covid.in](http://www.dstnidhi-4covid.in) latest by 31.05.2021 23.59 hrs,” the DST added.

Source: FE

## Importers to make prior disclosure to customs to avail concessional duty on goods: CBIC

Importers taking advantage of concessional rate of import duty will have to give prior information to the customs officers about goods being imported and also its estimated quantity and value, the CBIC has said. The Central Board of Indirect Taxes and Customs (CBIC) has amended the Customs (Import of Goods at Concessional Rate of Duty) Amendment Rules, which lay down the procedures and manner in which an importer can avail the benefit of a concessional duty on import of goods required for domestic production of goods or providing services.



One major change that accommodates the needs of trade and industry is that the imported goods have been permitted to be sent out for 'job work'. The absence of this facility had earlier constrained the industry, especially those in the MSME sector which did not have the complete manufacturing capability in-house.

Even importers who do not have any manufacturing facility can now avail the IGCR, 2017, to import goods at a concessional customs duty and get the final goods manufactured entirely on job work basis. However, some sectors such as gold, jewellery, precious stones and metals have been excluded.

"He shall also furnish the name and address of the premises of the importer and his job worker, if any; the nature and description of imported goods used in the manufacture of goods at the premises of the importer or the job worker, if any; and the nature of output service rendered utilising imported goods," the CBIC said in a circular. The importer would also have to give prior-intimation before import regarding the estimated quantity and value of goods to be imported, the exemption notification and serial number, the estimated duty forgone and the port of import with respect to a consignment. "This information may be provided by e-mail on a con-

solidated basis for a period not exceeding one year rather than in a transactional manner for every import," the CBIC added.

Another major incentive provided in the amended rules is to allow those who import capital goods at a concessional customs duty to clear them in the domestic market on payment of duty and interest at a depreciated value.

This was not allowed earlier, and manufacturers were stuck with the imported capital goods after having used them as they could not be easily re-exported. The CBIC said the Rules have been amended in view of the demands from the trade and industry and having regard to their changing needs as per prevalent global practices. "The amendments are also an effort towards creating an enabling environment for the promoting manufacturing by domestic industry to make them competitive globally and also make them self-reliant in furtherance of the goal of Atmanirbhar Bharat," the CBIC said. The rules further said an importer shall utilise the imported goods for the intended purpose or re-export the same, within a period of six months from the date of import, failing which the importer is liable to payment of duty with interest.

In case the importer intends to clear the unutilised or defective goods on payment of requisite duty and interest, the import duty payable would be equal to the difference between the duty leviable on such goods but for the exemption availed and that already paid, if any, at the time of importation, along with interest.

Source: ET

## NBFCs stop lending on fear of rising defaults

Hit with a drop in instalment collections due to the Covid-induced lockdowns across the country, non-bank lenders are slowing fresh disbursements and even halting them for unsecured loans.

From an average default rate in collection efficiency at 2-3 per cent in pre-Covid times, non-banking finance companies (NBFCs) are now seeing 6-8 per cent of borrowers missing their payment schedules during the second wave of the pandemic. IIFL Finance NSE -0.79 % has halted fresh disbursements for unsecured loans for micro-businesses & personal loans. It has also tightened scrutiny and disbursements for secured loans like loan against property, the company has reduced the loan-to-value ratio to 50-40 per cent from 70 per cent earlier.





Cholamandalam Investment & Finance executive VP & CFO Arulselvan D said, “In Q1, we want to be more cautious. Disbursements will bounce back once the cases decline. It is difficult to predict fresh lending exposure, especially when our employees want to stay safe and protect their families. We hope there is no third Covid wave.” The collection efficiency of loans has reduced from 115 per cent in March to 95 per cent in April 2021. “The severity of lockdown was more visible in April when we saw the impact on collection efficiency. Thus, we have made an additional provision of Rs 350 crore in the March-ended quarter, 2021, considering a probable impact of the second Covid wave,” Arulselvan said.

The head of another NBFC in the wholesale lending business said, “Disbursement in Q1 is likely to be lower than that in Q4. We are trying to do an additional assessment of the impact on the borrower of Covid 2.0. It shall be fair to say that some caution has come in as part of our credit decision making.”

Shriram City Union Finance NSE -2.05 % MD & CEO Y S Chakravarti said that, while it is too early to talk about the company's performance in Q1FY22, April was a steady month in terms of both disbursements and collections. “Disbursements were comparable to our usual start to any of our first quarters. The localised lockdowns in May are, however, likely to have affected business. But considering that there seems to have been some control exercised over fresh infections in important business locations for us such as Tamil Nadu and Maharashtra, we are hopeful that June will look better,” he said.

Source: ET

### Why become a Plexconcil Member?

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

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

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

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

#### Membership Benefits

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

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

Sr. No	Name of the Company	Address	City	Pin	State	Director Name	Email
1	ALBA INDUSTRIES LTD	BMC HOUSE, 32/2, HALLS ROAD, EG-MORE	CHENNAI	600008	Tamil Nadu	MR. SUDALAI MASANAM	info@alba-packs.com
2	ANZEN EXPORTS PRIVATE LIMITED	20 C, HAZRA ROAD 1ST FLOOR BHOWANIPURE	KOLKATA	700026	West Bengal	MR. SANJAY KUMAR BAID	logistics.export@anzen.co.in
3	AVYAAN VINYLs LLP	BLOCK A,295, SUSHANT LOCK PHASE-I	GURGAON	122001	Haryana	MR. MANISH UPADHYAYA	avyaanvinyls@gmail.com
4	CYGNET INDUSTRIES LIMITED	BIRLA BUILDING, 8TH FLOOR, 9/1 R.N. MUKHERJEE ROAD	KOLKATA	700001	West Bengal	MR. KASHI PRASAD KHANDELWAL	akar@kesora-mrayon.com
5	FIBC SILVASSA	113, FIRST FLOOR, LANDMARK, TOKARKHADDA	SILVASSA	396230	Dadra & Nagar Haveli and Daman & Diu	MR. SHAN PILLAI	fibc@fibc-silvassa.com
6	IMPACT POLYPACK	SURVEY NO 101/P/1, VILLAGE SARAYA, TANKARA,	MORBI	363650	Gujarat	MR. JAYDEEP GOPANI	impactpoly-pack@gmail.com
7	LOTUS INTERNATIONAL	SHOP NO. 143, RAJHANS PLATINUM PLAZA, PALANPORE CANAL ROAD	SURAT	395009	Gujarat	MR. HARDIK A. GAGLANI	INFO@LOTUSINTINDIA.COM
8	NATIONAL VINYL INDUSTRIES	PLOT NO. 325 T&S, KIADB INDUSTRIAL AREA, 2ND PHASE, HAROHALLI RAMNAGARA	BENGALURU	562112	Karnataka	MR. PRAYAS SRIMAL	prayas.sri-mal@nvi.org.in
9	PARSHWA POLYMER INDUSTRIES	234/6119, 2ND FLOOR, GANESH KRIPA CHS, NAIDU COLONY, PANTNAGAR, GHATKOPAR EAST	MUMBAI	400075	Maharashtra	MR. HARSHIT SHAH	parshwapolymer@gmail.com
10	PAVANSUT POLYTEX PRIVATE LIMITED	S NO. 187 P4, LAJAI CHOWKDI, HADMATIYA ROAD, BH KARAMYOGI IND. HADMATIYA TALTANKARA,	MORBI	363641	Gujarat	MR. KRUPAL H CHANDIBHARMAR	pavansutpolytex@gmail.com
11	SAI RAM POLYMER	PLOT NO 17, 2ND FLRA MUKTHI ENCLAVE MANAPAKKAM	CHENNAI	600125	Tamil Nadu	MR. BRIJESH PATIL	sairampolymer@yahoo.com
12	SHOSETSU POLYMERS PVT LTD	KM00081503 KOSMOS WISHTOWN JAYPEE GREENS SECTOR-134 NOIDA	GAUTAM BUDDHA NAGAR	201301	Uttar Pradesh	MR. SANDEEP AGARWAL	jas.polychem@gmail.com
13	SHYAM TRADERS	WARD-34, 226-C,PLOT NO.-69, MALGODOWN, COLLEGE SQUARE,CUTTACK, ODISHA, 753003	CUTTACK	73003	Orissa	MR. GARIMA KHEMKA	garimakhemka2002@gmail.com



## New Members

14	STAR FILTER INDUSTRIES	SURVEY NO 127, PLOT NO 102 TO 105, NEAR KMB EXTRUSION PVT LTD, SIDC ROAD, VERAVAL SHAPAR,	RAJKOT	360024	Gujarat	MR. SHA- RADBHAI ANTALA	accounts@ silverfiltration. com
15	TESLA ECO TECH	ANMOL APT, SHOP NO 1 SURVEY NO 143, PLOT NO 43, 55,56	VAPI	396191	Gujarat	MR. RISHAV KOTHARI	teslaecotech@ gmail.com