PLEXCONCIL - The Plastics Export Promotion Council

PLEXCONNECT

Edition 1, July 2019



Ghana, Trade at a Glace

Plastics Export, A promising Future

Innovation in Plastics, Understanding material properties

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2nd-4th, December 2019

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Publisher

PLEXCONCIL - The Plastics Export Promotion Council

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We welcome your feedback & comments. write to us on editor@plexconcil.org



Message from the Joint Secretary





Shyamal Misra, IAS Joint Secretary

मारत सरकार वाणिज्य एवं उद्योग मंत्रालय वाणिज्य विमाग उद्योग मवन, नई दिल्ली—110011 Government of India Ministry of Commerce & Industry Department of Commerce Udyog Bhawan, New Delhi-110011

http://commerce.gov.in

MESSAGE

I congratulate Plastics Export Promotion Council on the launch of PlexConnect, the monthly e-Magazine to extend support and encouragement to its members and create a more engaging platform for the industry.

Plastics are among the fastest growing industries in India, experiencing a double-digit growth rate on average. India is currently ranked among the top five consumers of polymers in the world and has 30,000+ plastic processing units, employing over four million people across the country.

With the tremendous growth of global plastics trade, there is a huge potential for exports of plastic products from India. The export of plastic raw materials currently dominates the exports of this sector and therefore the share of exports of processed plastic items needs to be boosted. This involves, among other things, upgradation of technology to enhance production capacities, focus on high value added and high end technology items, and innovative marketing strategies.

Plexconcil's exports during April 2018-March 2019 stood at US\$ 10,855 million as against US\$ 8,850 million in the corresponding period of last year, thereby recording a growth of 22.65%.

Demonstrating a fast pace of growth in exports of Plastics, India has emerged as one of the most important sourcing hubs in the world. With available capabilities to meet the challenges of growth, the sector offers immense opportunities for technological advancement and employment generation.

Plexconcil has played a pioneering role in promoting exports of the products in its basket by showcasing the capabilities of the Indian plastic industry before the world and also encouraging the members to integrate their business with the global value chains- however, there is still a lot more that needs to be done for Indian Plastics sector to become a leading global player. It is my hope that the organization will provide a platform for the industry to debate and introspect on the future course of action, and become the engine for boosting our exports. The Department of Commerce will continue to provide support to the industry and the Council.

I extend my best wishes to Plexconcil and exporting fraternity in the Indian plastic industry

(Shyamal Misra)

From the Chairman's Desk



As an Irish proverb goes, making a new beginning is one third of the work done. Today, on behalf of my esteemed colleagues of the COA and the Secretariat, it is with much pleasure and pride to introduce the First Edition of PlexConnect, the monthly e-Magazine from Plexconcil.

Indian Plastics exports has been making great strides over the years. Despite the global slowdown recently, India's plastics exports recorded a growth of 24.1 percent at \$10.98 billion during the period 2018-19 as against \$8.85 billion in the same period during 2017-18. The growth has been primarily boosted by higher shipment of plastic raw materials; woven sacks (incl. FIBC); plastic sheet, film, plates, and packaging materials.

With so much happening in our industry and with even more potential for the segment in the future, Plexconcil has been working constantly towards exploring ways in which to engage its members and facilitate their businesses. With the launch of PlexConnect, we aim to apprise our members and associates of the latest happenings in the industry. This issue and every subsequent issue will cover important subjects such as Export Performance, Council activities, latest news and trends, panel overview, focus on export destinations as well as features led by Experts on various topics such as innovation, industry best practices, environmental impacts and more.

In each feature, we will also examine the multiple reasons why Plastic exports is a lucrative business segment to encourage manufacturers as well as those seeking to enter the exports segment. Needless to say,

not only does the segment offer ample opportunity for employment generation, but with the numerous schemes and initiatives of the Government to boost the segment, it holds much promise for a great future.

Technological advancement, innovation, as well as expansion and optimization of production are critical to the growth of Plastics exports and we further aim to cover these important topics that impact our industry's growth through this medium.

We do hope that you enjoy the read and we look forward to receiving your feedback, opinions and comments. Moreover though, we look forward to opening a more fruitful dialogue with our members as well as your continued support and encouragement in making PlexConnect a collective success for us all.

Sincerely,

Ravish Kamath Chairman

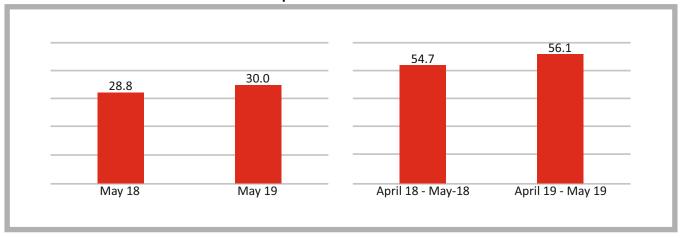
Export Performance

ANALYSIS OF INDIA'S PLASTICS EXPORT, MAY 2019

TREND IN OVERALL EXPORTS

India reported merchandise exports of USD 30.0 billion in May 2019, up 4.3% from USD 28.8 billion in May 2018. Cumulative value of merchandise exports during April 19 – May 19 was USD 56.1 billion as against USD 54.7 billion during the same period last year, reflecting a growth of 2.5%.

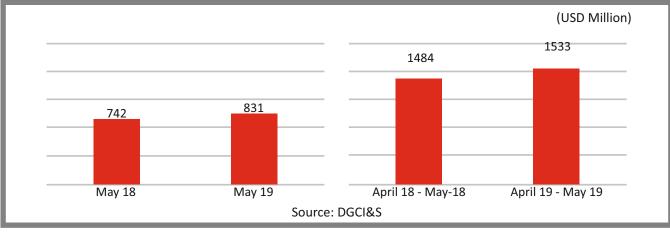
Exhibit 1: Trend in overall merchandise exports from India



TREND IN PLASTICS EXPORT

Export of plastics from India grew at a faster clip than the overall merchandise exports. During May 2019, India exported plastics worth USD 831 million, up 12.0% from USD 742 million in May 2018. Cumulative value of plastics export during April 19 – May 19 was USD 1,533 million as against USD 1,484 million during the same period last year, registering a growth of 3.3%.

Exhibit 2: Trend in plastics export by India





PLASTICS EXPORT, BY PANEL

In May 2019, all the product groups except human hair reported positive growth. Other plastic items witnessed year-on-year growth of 73.1%; followed by moulded & extruded goods (+53.3%); stationery/office/school supply (+11.7%); plastic sheet, film, plates etc (+9.9%); optical items (+5.9%); packaging materials (+4.3%); and plastic raw materials (+0.01%).

Products grouped under human hair and products thereof witnessed a decline of 2.7% in May 2019.

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

Panel	May-18	May-19	Growth	Apr 18- May 18	Apr 19- May 19	Growth
	(USD Mn)	(USD Mn)	(%)	(USD Mn)	(USD Mn)	(%)
Plastic raw materials	348.88	348.91	0.01%	705.29	634.43	-10.0%
Plastic sheet, film, plates etc	123.16	135.35	9.9%	244.07	261.52	7.1%
Moulded & extruded goods	88.28	135.30	53.3%	173.29	242.92	40.2%
Packaging materials	66.10	68.92	4.3%	132.01	135.53	2.7%
Other plastic items	30.64	53.03	73.1%	59.40	89.19	50.1%
Optical items (incl. lens etc)	40.08	42.43	5.9%	79.52	82.77	4.1%
Stationery/Office/School Supply	22.94	25.63	11.7%	44.13	44.54	0.9%
Human hair, products thereof	21.57	20.98	-2.7%	46.61	42.19	-9.5%
	741.65	830.55	12.0%	1,484.31	1,533.08	3.3%

Note: Plastics are segregated under eight panels by DGCI&S

Export growth in moulded & extruded goods panel, packaging materials panel as well as stationery/office/school supply panel was driven by higher shipments to the United States of America. Plastic sheet, film, plates panel received a boost on account of increased export to Sierra Leone and United Arab Emirates along with the United States of America.

Export of optical items benefited from higher shipments to France and Italy. Likewise, plastics raw materials panel received a boost on account of increased export to Iran, China, and Kenya.

Human hair segment witnessed a decline in exports due to lower sales to key destinations including China, Bangladesh and Myanmar. The human hair export segment has been struggling for quite some time now and their problems have already been submitted to the Department of Commerce for remedial measures.



Source: DGCI&S

Export Performance

PLASTICS EXPORT, BY REGION

India's plastics export in May 2019 did well on account of increased shipments to Commonwealth of Independent States (+57.9% year-on-year), North America (+47.2%), Africa (+18.5%), North-East Asia (+16.4%), European Union (+5.1%), and Middle East (+4.5%).

The export growth was negative in some of the territories like Latin America & Caribbean (-8.7%), ASEAN + 2 (-6.8%), and South Asia (-2.7%).

Exhibit 4: Region-wise trend in plastics export by India

Region	May-18	May-19	Growth	Apr 18 - May 18	Apr 19 - May 19	Growth
	(USD Mn)	(USD Mn)	(%)	(USD Mn)	(USD Mn)	(%)
European Union (EU)	148.54	156.09	5.1%	297.18	297.72	0.2%
Middle East	131.09	136.94	4.5%	236.33	256.95	8.7%
North America	100.09	147.30	47.2%	198.41	251.60	26.8%
North-East Asia	103.77	120.77	16.4%	223.99	213.80	-4.5%
Africa	89.82	106.45	18.5%	177.16	191.97	8.4%
South Asia	75.41	73.40	-2.7%	151.52	138.50	-8.6%
ASEAN + 2	49.78	46.39	-6.8%	101.75	97.72	-4.0%
Latin America & Caribbean (LAC)	32.78	29.92	-8.7%	78.10	58.56	-25.0%
CIS	6.90	10.89	57.9%	12.80	21.35	66.8%
Others	3.47	2.39	-31.1%	7.08	4.90	-30.8%
	741.65	830.55	12.0%	1,484.31	1,533.08	3.3%

Source: DGCI&S

Within Commonwealth of Independent States, India's plastics exports found great support in Russia (+86%) and Ukraine (+42%) while exports to North America did particularly well in United States (+57%) and Canada (+51%).

As far as Africa is concerned, plastics exports were higher to Sierra Leone (620%) and South Africa (+116%). Within North-East Asia, India's plastics exports witnessed strong growth in Hong Kong (+240%), while growth in the Middle East and European Union came primarily from Iran (+639%), United Arab Emirates (+23%), United Kingdom (+19%), and France (+17%).

Major destinations in Latin America & Caribbean that witnessed a decline in plastics exports were Uruguay (-66%) and Colombia (-50%). Plastics exports were also lower to South Asia and ASEAN, particularly Indonesia (-53%) and Bangladesh (-7.6%).



PLASTICS EXPORT, BY DESTINATION COUNTRY

During May 2019, 14 out of the top 25 destination countries recorded year-on-year growth in plastics export from India. Exports to United States, Canada and South Africa, witnessed high growth rates ranging between 50-120%, during the period.

On a cumulative basis, during April 19 – May 19, 10 out of the top 25 destination countries recorded year-on-year growth in plastics export from India. Exports to Canada and South Africa witnessed high growth rates ranging between 40-80%, during the above period.

Exhibit 5: Top 25 destinations of plastics exported by India

Country	May-18	May-19	Growth	Apr 18 - May 18	Apr 19 - May 19	Growth
	(USD Mn)	(USD Mn)	(%)	(USD Mn)	(USD Mn)	(%)
China	87.24	93.45	7.1%	158.46	169.56	7.0%
United States	80.66	126.40	56.7%	164.51	210.97	28.2%
United Arab Emirates	40.72	50.13	23.1%	85.25	100.80	18.2%
Italy	31.47	29.96	-4.8%	65.01	55.43	-14.7%
Germany	27.13	27.24	0.4%	53.44	52.52	-1.7%
Bangladesh	30.84	28.48	-7.6%	54.32	54.10	-0.4%
Turkey	30.08	20.75	-31.0%	58.45	29.87	-48.9%
United Kingdom	20.39	24.36	19.5%	41.87	46.92	12.1%
Nepal	21.09	21.65	2.6%	40.73	41.08	0.9%
Vietnam	13.21	11.89	-10.0%	28.38	22.95	-19.1%
France	13.82	16.13	16.7%	30.10	32.22	7.0%
Indonesia	9.24	4.37	-52.7%	21.31	12.41	-41.8%
Egypt	12.64	11.79	-6.8%	28.29	21.50	-24.0%
Belgium	10.65	10.09	-5.3%	22.54	22.06	-2.1%
Japan	7.80	10.40	33.4%	21.78	19.00	-12.8%
Nigeria	13.86	8.10	-41.6%	29.31	15.47	-47.2%
Pakistan	10.50	11.76	12.0%	25.02	21.43	-14.4%
South Africa	8.67	18.72	116.0%	18.80	32.48	72.8%
Israel	9.13	8.20	-10.2%	18.10	16.67	-7.9%
Mexico	11.94	9.62	-19.4%	24.95	18.91	-24.2%
Kenya	10.05	13.00	29.3%	21.61	23.10	6.9%
Spain	9.38	9.78	4.2%	21.24	19.64	-7.5%
Sri Lanka	9.08	7.37	-18.8%	20.54	14.61	-28.9%
Canada	7.49	11.28	50.6%	14.53	21.72	49.4%
Saudi Arabia	9.51	11.94	25.6%	18.65	23.25	24.7%

Note: Top 25 destinations based on 2018-19 plastic exports by India

India exported plastics to 187 countries in May 2019 as compared to 184 countries in May 2018.

Source: DGCI&S

Export Performance

Exhibit 6: Panels with details of % growth seen in top 10 export destinations

Panel	Country	Apr 18- May 18	Apr 19- May 19	Growth
		(USD Mn)	(USD Mn)	(%)
Plastic raw materials	China	146.38	129.49	-11.5%
	Italy	44.86	33.89	-24.5%
	Turkey	44.29	26.09	-41.1%
	Bangladesh	49.58	37.63	-24.1%
	United Arab Emirates	34.61	35.55	2.7%
	United States	23.51	25.82	9.8%
	Vietnam	23.79	19.04	-20.0%
	Nepal	21.48	25.27	17.6%
	Indonesia	13.72	6.65	-51.6%
	Pakistan	22.70	19.80	-12.8%
Plastic sheet, film, plates etc	United States	37.69	44.79	18.8%
	United Arab Emirates	9.82	13.33	35.7%
	Germany	11.72	10.73	-8.5%
	South Africa	9.80	10.83	10.6%
	Nigeria	14.98	5.17	-65.5%
	Italy	9.58	9.13	-4.7%
	United Kingdom	7.52	9.65	28.2%
	Bangladesh	6.96	5.81	-16.5%
	Mexico	7.16	6.26	-12.7%
	Spain	6.06	7.17	18.3%
Moulded & extruded goods	United States	37.63	76.93	104.4%
	United Arab Emirates	10.26	27.50	168.2%
	United Kingdom	9.02	10.18	12.8%
	Germany	9.34	7.83	-16.1%
	Canada	7.28	10.21	40.3%
	Sri Lanka	2.37	1.87	-21.1%
	Spain	3.81	3.32	-12.8%
	Nigeria	3.43	3.93	14.8%
	Saudi Arabia	3.45	4.27	24.0%
	Brazil	2.17	3.46	59.4%
Packaging materials	United States	21.71	28.43	30.9%
	United Kingdom	10.86	10.59	-2.5%
	United Arab Emirates	7.31	7.78	6.6%
	Netherland	4.76	5.08	6.7%
	Germany	4.39	3.43	-21.8%
	Belgium	4.08	1.33	-67.5%
	France	3.19	3.07	-3.7%
	Spain	3.50	2.73	-22.0%
	Djibouti	6.47	4.12	-36.3%
	Nepal	4.01	2.54	-36.7%

Export Performance

Panel	Country	Apr 18 - May 18	Apr 19 - May 19	Growth
		(USD Mn)	(USD Mn)	(%)
Optical items (incl. lens etc)	France	18.17	22.73	25.1%
	Germany	8.95	8.54	-4.6%
	United Kingdom	5.99	7.50	25.2%
	United States	6.12	2.16	-64.7%
	United Arab Emirates	3.18	4.67	46.9%
	Netherland	3.69	2.90	-21.3%
	Poland	3.45	1.17	-66.1%
	Italy	2.00	4.02	100.8%
	Russia	0.16	4.91	2945.7%
	Israel	1.01	1.49	46.9%
Other plastic items	United States	14.43	13.48	-6.6%
	Belgium	5.66	3.76	-33.6%
	United Arab Emirates	5.92	9.75	64.8%
	South Africa	1.44	14.40	897.3%
	United Kingdom	1.33	3.16	136.4%
	Italy	1.35	2.68	98.3%
	Germany	1.97	3.74	90.4%
	Poland	0.88	1.72	96.2%
	Nepal	1.44	1.47	2.2%
	Saudi Arabia	1.48	2.09	40.8%
Human hair, products thereof	China	30.25	27.07	-10.5%
· ·	Myanmar	2.69	1.77	-34.3%
	United States	3.07	2.97	-3.3%
	Tunisia	1.52	2.31	51.9%
	Hong Kong	1.88	2.65	40.4%
	Bangladesh	1.63	0.96	-41.2%
	United Arab Emirates	1.07	0.78	-27.0%
	Vietnam	0.57	0.63	9.9%
	Indonesia	0.66	0.37	-44.3%
	Italy	0.53	0.52	-2.7%
	,			
Stationery/Office/School Supply	United States	14.77	16.40	11.0%
	United Arab Emirates	1.63	1.43	-12.2%
	United Kingdom	2.58	2.30	-11.1%
	Thailand	1.82	1.79	-1.3%
	Algeria	0.77	1.47	89.9%
	Bangladesh	0.99	1.24	25.2%
	Germany	1.04	0.94	-9.6%
	Mexico	1.28	0.95	-26.4%
	Latvia	0.60	0.93	-55.0%
	Lutvia	0.00	0.27	-55.070

Note: Top 10 destinations based on India's 2018-19 exports under the eight plastic product panels

Source: DGCI&S

ANNEXURE-I

Trend in overall exports by India

Month	2018-19	2019-20	Growth
	(USD Bn)	(USD Bn)	(%)
April	25.95	26.07	0.5%
May	28.78	30.01	4.3%
	54.73	56.08	2.5%

Source: DGCI&S

ANNEXURE-II

Trend in plastics export by India

Month	2018-19	2019-20	Growth
	(USD Mn)	(USD Mn)	(%)
April	742.66	702.53	-5.4%
May	741.65	830.55	12.0%
	1484.31	1533.08	3.3%

Source: DGCI&S



Council Activities May 2019

1. Plexconcil attended a meeting for the release of a Study Report conducted by Research & Information Centre for Developing countries (RIS) on "India's Economic Engagement with LAC - Strategy for Trade and Investment" on May 6, 2019 at the Udyog Bhawan, New Delhi.

The report on "India's Economic Engagement with LAC-Strategy for Trade and Investment" was released by the Commerce Secretary and he urged all EPCs/Trade Bodies to share the report with their members, and utilize the report to fine tune the strategy to boost exports in the LAC region. Joint Secretary (LAC), Mr. Shyamal Misra, also urged all EPCs to share information with members, with regard to the Non Tariff Barriers (NTBs) in the LAC region and get their feedback and solution for the same.

2. Meeting with the MSME Trade and Investment Promotion Bureau (M-TIPB) held on 09th May 2019 at TANSIDCO Office, Chennai.

The Tamil Nadu Small Industries Development Corporation Ltd. (TANSIDCO), Government of Tamil Nadu, invited the Council for the preliminary discussion on the action plan to be carried out by the newly formed MSME Trade and investment Promotion Bureau (M-TIPB) under the MSME Department, Government of Tamil Nadu, with the objective of promoting Tamil Nadu's MSME Industries at leading International Trade Fairs around the World, as well as at prominent Trade Fairs organized in India during the financial year 2019-20.

The meeting was chaired by Mr. T.P. Rajesh, IAS, Managing Director, MSME Trade and Investment Promotion Bureau (M-TIPB), Government of Tamil Nadu. Apart from officials from TANSIDCO and officials from the Directorate of Industries & Commerce, officials from FIEO, EEPC, TANSTIA and AIEMA apart from PLEXCONCIL.



3. Meeting with the MSME Trade and Investment Promotion Bureau (M-TIPB) held on 09th May 2019 at TANSIDCO Office, Chennai.

The Tamil Nadu Small Industries Development Corporation Ltd. (TANSIDCO), Government of Tamil Nadu, invited the Council for the preliminary discussion on the action plan to be carried out by the newly formed MSME Trade and investment Promotion Bureau (M-TIPB) under the MSME Department, Government of Tamil Nadu, with the objective of promoting Tamil Nadu's MSME Industries at leading International Trade Fairs around the World, as well as at prominent Trade Fairs organized in India during the financial year 2019-20.

The meeting was chaired by Mr. T.P. Rajesh, IAS, Managing Director, MSME Trade and Investment Promotion Bureau (M-TIPB), Government of Tamil Nadu. Apart from officials from TANSIDCO and officials from the Directorate of Industries & Commerce, officials from FIEO, EEPC, TANSTIA and AIEMA apart from PLEXCONCIL.

4. Southern Regional Committee Meeting held on May 09, 2019 at Plexconcil Chennai Office.

The first Regional Committee Meeting of the Southern Region for fiscal 2019-20 was held on May 09, 2019 in the Council's Office in Chennai. Mr. Y.V. Raman, Regional Chairman, Southern Region, chaired the meeting.

5. Meeting with Ministry of MSME, May 15, 2019.

A meeting was held with Joint Development Commissioner Smt. Mandeep Kaur, IAS, Ministry of MSME, to discuss and seek the support of the Hon'ble Ministry to create Export Awareness among the manufacturers & traders of the Plastic Industry which comprised primarily of the SME & MSME. The meeting was held under the direction of Ministry of Commerce and Industry and at the conclusion of the meeting, the MSME Ministry agreed to support & promote the Export Promotion Awareness Programme pan India as per the clusters identified by Council. The Ministry of MSME has also agreed to provide Financial Assistance under PMS Scheme for organising the said Programs.

6. Meeting regarding the Introduction and Enforcement of Chemical regulations held on May 17, 2019 at Udyog Bhawan, New Delhi.

A meeting chaired by Mr. Shyamal Misra, Joint Secretary (JS) was held to discuss the Department of Commerce's proposal for the introduction and enforcement of Chemical Regulations in the country. The Regulation is proposed to be introduced in two

steps starting with the preparation of a national inventory of chemicals.

During the meeting, JS directed the representative of Chemexcil to publish the inventory on Chemicals that was prepared by them their Council's website. Representatives from the Centre for Trade and Investment Law (CTIL), also briefed the JS about the Draft Chemical (Safety) Rules which have been prepared after studying various countries practices on the same. JS requested all present to furnish suggestions on the draft rules by the end of the month.

7. Trade Facilitation Meeting (TFC) Meeting organized by Office of the Commissioner of Customs (PORT) held on 22nd May 2019 at Kolkata.

The meeting was chaired by Mr Manish Chandra, Commissioner of Customs (Port) and various issues and concerns pertaining to export through CFS station were discussed, including stuffing of containers, handing over the containers at CFS station, discontinuation of physical copies of MEIS scrips and refund of IGST.

8. Meeting with Joint Secretary (Customs), CBIC, to discuss issues faced by Human Hair exporters held on May 28, 2019 at North Block, New Delhi.

The Council fixed held a meeting with the Joint Secretary (Customs) on behalf of exporters from the Human Hair sector to discuss issues of illegal trade and under invoicing in export of Human Hair.

The Joint Secretary (JS) was informed that the Department of Commerce and the DGFT had already been apprised of the said issues and the meeting was being held with the JS to highlight the gravity of the situation. The Council explained how export of Human Hair was being badly affected due to illegal trade taking place, particularly from the North East to Myanmar and from there on to China. JS enquired about the specific border areas in the North East from where illegal trade was taking place and was duly informed of the same. Exporters present also explained the complete process of how the under invoicing and illegal trade was taking

place, with specific inputs about the manner in which it was being transported and the particular border check posts from where it was being done. JS assured the Council and said that they would look into the issue as well as send an alert to Customs at the particular border check – posts.

9. Participation at CHINAPLAS 2019 held from May 21-24, 2019 at Guangzhou, China.

The Council participated in ChinaPlas 2019, the 33rd International Exhibition on Plastics and Rubber Industries. This event is recognized as Asia's No.1 and World's No.2 largest showcase for the Plastic and Rubber sectors. ChinaPlas 2019 covered an area 2,40,000 Sqm with 3257 exhibitors and 1,28,264 visitors. The Council, which is also the exclusive representative of Chinaplas in India, organized the Indian participation in this event.

The Council's booth received Mr. Sujit Ghosh, Consul General of India, Guangzhou, PR of China & Mr. Aniket Patankar Consul (Pol. & Com. & Tourism) who interacted with members and encouraged them in their export endeavors. An exclusive brochure was also published and distributed among the visitors to promote Indian exporters at the show.

10. PLASPOL 2019 held from May 28-31, 2019 in Poland

As a part of promoting export of Plastic Products in the developed countries in the European Region, Plexconcil had organised its Indian Pavilion at 23rd PlastPol, Poland - International Fair of Plastics and Rubber Processing organised by Targi Kielce's during May 28-31, 2019. While in the past, only 2 participants attended the show from India, this year saw the number increase to 7 participants that represents a steady growth. The Council worked closely with various stakeholders such as the Department Of Commerce, Indian Embassy in Poland, Ministry of External Affairs, Ministry of Commerce & Poland Embassy in India for successfully organising the said exhibition.



Council Activities May 2019

In order to facilitate trade, the following major issues were taken up with the appropriate authority.

A. High Logistics cost for Exports especially Shipment related charges like Lifting Charges of Container

The issue was raised by M/s Mittal Technopack Pvt. Ltd., Kolkata. The Council was informed that that logistics cost for Exports especially Shipment related charges like Lifting Charges of Container are being levied on Exporters and that its significant YOY increase was becoming a matter of great concern to the Exporting Community.

The below mentioned Comparative Chart outlining charges by Different CFS/ Customs Service Provider on a yearly basis for 15-16 to 18-19 was shared to illustrate the excessive charges imposed on Exporters who find it increasingly difficult to remain competitive for their survival.

Name of Service Provider	2015-16 40' FCL	2016-17 40' FCL	2017-18 40' FCL	2018-19 40' FCL	Increase% from 2015-16
CenturyPly Board	Rs. 1200	Rs. 2400	Rs. 2500	Rs. 3000	150%
Reftech Containers	Rs. 1600	Rs. 2300	Rs. 2720	Rs. 3000	70%
Chhetri Enterprise	Rs. 1400	Rs. 2300	Rs. 2360	Rs. 2360	68%
Hindustan Engg.& Marine Corporation.	Rs. 1500	Rs. 2000	Rs. 2832	Rs. 2832	89%

B. Clarification/amendment on Advance License issued for deemed exports (Ref. customs notification no: 96/2009- and 112/2009-Customs).

The Council received a representation from M/s Haldia Petrochemical Ltd(HPLs), Kolkata regarding 3 Advance Authorizations issued in favour of them for Deemed Exports as per above notification. The company had completed the export order against advance licences which were obtained for Deemed Exports only. However, the notification number was mentioned by DGFT as 96/2009 which is the Customs Notification number for physical exports. It may be mentioned that HPL has submitted Bank Guarantee and applied for redemption of BG against three Advance Authorizations in the period December '16 to November '17 bearing a total BG amount of Rs 27.08 Cr which is not getting released from Customs. The above issues were taken up with the DGFT, New Delhi for clarification/amendment.

C. Request for Amendment of SION (Single Side Decorative Laminates with or without Barrier Paper)

M/s Merino Industries Limited requested the Council to take up the O/o DGFT for amendment of SION pertaining to their export product Single Side Decorative Laminates with or Without Barrier paper and the issue was duly taken up with the DGFT, New Delhi for necessary changes.



Other major Export Promotion / Trade Facilitation tasks undertaken in the regions

- > All Council offices assisted members with their enquiries on various subjects of interest to them (advising on prospective markets, providing product-market configuration support, advising on MAI guidelines, Shipping logistics, Licensing etc) and thereby facilitating their export promotion efforts.
- > Council offices also provided assistance and guidance to members (who enquired) on various issues of interest to them including Exim Policy, liaising with Customs, DGFT, membership, endorsement / issue of RCMCs, issue of Certificate of Origin, Visa recommendation, following up on dues, short-payments, export returns, deficiency letters etc.



Important Circulars & Notifications

1. CBIC - Simplified Auto Registration for IEC holders at ICEGATE

Simplified Auto Registration for IEC holders is now live on www.icegate.gov.in. The simplified Registration Module in ICEGATE has been designed to allow Exporters to register at the ICEGATE without the need to upload the Digital Signature Certificate (DSC), PAN verification, document upload to ICEGATE and approval procedure.

For further details, log on to http://plexconcil.co.in/images/circulars/CBIC_ICEGATE.pdf

2. Useful information for Indian companies interested in doing business in Algeria

The Embassy of India in Algeria has provided the Council with contact details of the Algerian Company of Exports Insurance and Guarantee (CAGEX) which is Public financial institution, specialized in the matters related to export credit assurance as well as being tasked with ensuring recovery of outstanding payments, against payment.

For further details, log on to http://plexconcil.co.in/images/circulars/Algeria CAGEX.pdf

3. Non requirement of submission of hard copy of application at RAs for issue of Advance Authorisation (AA) & EPCG Authorisation

DGFT, New Delhi has issued a PC regarding the Non-requirement of submission of Hard copy of application at RAs for issue of Advance Authorisation (AA) & EPCG Authorisation with the aim to reduce transaction cost.

For further details, log on to

http://plexconcil.co.in/images/circulars/Non_requirement_of_Hardcopy.pdf



Important Circulars & Notifications

4. Discontinuing submission of physical copy of RCMCs with effect from 01.07.2019 while filling application for incentives/entitlement under FTP

In order to improve ease of doing business and reduce transaction cost it has been decided to discontinue the requirement of submission of physical copy of RCMC with effect from 01.07.2019. The validity of RCMCs will be checked directly from the DGFTs data base which has the uploaded data of RCMC from EPCs.

For further details, log on to http://plexconcil.co.in/images/circulars/RCMC 01.07.2019.pdf

5. Plexconcil's members Redressal Forum on last Friday of every month in each region

The Council in its endeavour to serve the members shall be holding a Redressal Forum on the last Friday of each month between 2pm to 5pm at the council office across the regions and will be taking up the issues / concern faced by the members in their exports activities.

The objective of Redressal Forum will be either to resolve the issue on the sport or to take up the same with appropriate authorities for redressal.

For further details, log on to http://plexconcil.co.in/images/circulars/Redressal_forum.pdf

6. CBIC - Simplified auto-registration of beneficiaries (IEC holders) on ICEGATE for eSanchit and other benefits

CBIC has issued circular no. 14/2019-Customs dated 03/06/2019 regarding Simplified auto-registration of beneficiaries (IEC holders) on ICEGATE for eSanchit and Other benefits. As per CBIC circular, the registration of importers and exporters will also enable direct access to information related to their consignments for which DG(Systems) provides several enquiries under their login. The importers and exporters will get intimation about the status of their consignments and PDF copies of their declarations on their registered email ids. The option of replying to the queries raised by Customs officers, including those raised during post clearance audit has also been provided under the login of the IEC holder to avoid the necessity of submitting the same physically at the Service Centre

For further details, log on to http://plexconcil.co.in/images/circulars/E_SANCHIT.pdf



Asia-Pacific polymer market turns bearish amid escalation in US-China trade war

The Asia-Pacific polymer market is turning bearish because of an escalation in the US-China trade war, which could lead to higher tariffs being imposed on many chemical products as soon as tomorrow, as per Argus Media.

The US Trade Representative (USTR) said it will increase tariffs on US\$200 bln/yr of Chinese imports — including many polymers, aromatics and olefin products — to 25% from 10%, effective tomorrow. China may retaliate with similar tariffs.

The announcement came after a sudden deterioration in trade talks between the US and China this week, as US President Donald Trump accused Beijing of attempting to renegotiate a draft deal.

Geopolitics are weighing heavily on decisions of key buyers, trading firms and producers in southeast Asia and India. Indian and southeast Asian buyers typically track the key China spot and Dalian futures market for price direction. Spot prices for polyethylene (PE) and polypropylene (PP) have largely weakened by around \$20-30/t from the previous week. The polypropylene (PP) market in southeast Asia is starting to turn after a couple of weeks on a bullish run. Offers for PP in southeast Asia were last heard around \$1,180/t cfr, down by around \$20/t from last week, with buying ideas at \$1,150-1,160/t.

In India, buying appetite for PP and linear low density polyethylene (LLDPE) film is weak because of the market uncertainty. Domestic producers in India had earlier announced price protection measures and reduced domestic polymer prices in an attempt to boost demand. Indian buyers remain cautious and are not ordering large volumes of spot material for now until the price direction becomes clearer. The poor fundamentals in India mean Middle East producers have not offered much supply to the country as they opt for markets with better netbacks.

Source: plastemart.com

Next-generation plastic that can be recycled into new materials of any color, shape, form

Scientists have made a next-generation plastic that can be recycled again and again into new materials of any color, shape, or form.

A team of researchers at the U.S. Department of Energy's (DOE) Lawrence Berkeley National Laboratory (Berkeley Lab) has designed a recyclable plastic that can be disassembled into its constituent parts at the molecular level, and then reassembled into a different shape, texture, and color again and again without loss of performance or quality. The new material, called poly(diketoenamine), or PDK, was reported in the journal Nature Chemistry.

Most plastics were never made to be recycled," said lead author Peter Christensen, a postdoctoral researcher at Berkeley Lab's Molecular Foundry. "But we have discovered a new way to assemble plastics that takes recycling into consideration from a molecular perspective." Christensen was part of a multidisciplinary team led by Brett Helms, a staff



scientist in Berkeley Lab's Molecular Foundry. The other co-authors are undergraduate researchers Angelique Scheuermann (then of UC Berkeley) and Kathryn Loeffler (then of the University of Texas at Austin) who were funded by DOE's Science Undergraduate Laboratory Internship (SULI) program at the time of the study.

The researchers want to divert plastics from landfills and the oceans by incentivizing the recovery and reuse of plastics, which could be possible with polymers formed from PDKs. "With PDKs, the immutable bonds of conventional plastics are replaced with reversible bonds that allow the plastic to be recycled more effectively," Helms said. Unlike conventional plastics, the monomers of PDK plastic could be recovered and freed from any compounded additives simply by dunking the material in a highly acidic solution. The acid helps to break the bonds between the monomers and separate them from the chemical additives that give plastic its look and feel.

"We're interested in the chemistry that redirects plastic lifecycles from linear to circular," said Helms. "We see an opportunity to make a difference for where there are no recycling options." That includes adhesives, phone cases, watch bands, shoes, computer cables, and hard thermosets that are created by molding hot plastic material.

The researchers first discovered the exciting circular property of PDK-based plastics when Christensen was applying various acids to glassware used to make PDK adhesives, and noticed that the adhesive's composition had changed. Curious as to how the adhesive might have been transformed, Christensen analyzed the sample's molecular structure with an NMR (nuclear magnetic resonance) spectroscopy instrument. "To our surprise, they were the original monomers," Helms said. After testing various formulations at the Molecular Foundry, they demonstrated that not only does acid break down PDK polymers into monomers, but the process also allows the monomers to be separated from entwined additives.

Next, they proved that the recovered PDK monomers can be remade into polymers, and those recycled polymers can form new plastic materials without inheriting the color or other features of the original material – so that broken black watchband you tossed in the trash could find new life as a computer keyboard if it's made with PDK plastic. They could also upcycle the plastic by adding additional features, such as flexibility. Source: plastemart.com

LyondellBasell Grants Hostalen ACP License To Lianyungang Petrochemical Co., Ltd.

LyondellBasell, the world's largest licensor of polyolefin technologies, today announced that Lianyungang Petrochemical Co., Ltd (a company of Zhejiang Satellite) has selected Hostalen "Advanced Cascade Process" (Hostalen ACP) technology from LyondellBasell for a 400KT per year high density polyethylene (HDPE) plant to be built at Lianyungang, Jiangsu Province, China.

We are grateful to Zhejiang Satellite for selecting our technology. With this contract, LyondellBasell has licensed more than 1 million tons of Hostalen ACP capacity this year," said Jim Seward, vice president technology business and sustainability at LyondellBasell. "This clearly demonstrates this is the process technology of choice for the production of high-performance multimodal HDPE products."

Mr. Lu Wei Wei, vice president of Zhejiang Satellite stated: "The market demands high-performance HDPE and LyondellBasell's multi-modal technology effectively meets these needs. Selecting LyondellBasell's low-pressure slurry process in our petrochemical complex will enable us to produce high-quality products reliably and economically."

This project represents the 10th Hostalen ACP line licensed in China. With this license, the total design and operating capacity of Hostalen ACP lines in China will exceed 3.4 million tons per year.

Hostalen ACP process technology manufactures highperformance, multi-modal HDPE resins with an industry-leading stiffness/toughness balance, impact resistance, high stress cracking resistance and processing advantages used in film, blow moulding and pipe applications.

Source: lyondellbasell.com/ plastics-technology.com

PureCycle Collaborates With Milliken And Nestlé On Polypropylene Plastics Recycling

PureCycle Technologies, which offers the only recycled polypropylene with properties equal to virgin polymer,



has collaborated with global industrial manufacturer Milliken and food and beverage firm Nestlé to accelerate plastics recycling.

PureCycle plans to open its first plant to restore used polypropylene (PP) plastic to 'virgin-like' quality with a revolutionary recycling method.

The company's patented recycling process, developed and licensed by Procter & Gamble (P&G), isolates color, odor and other contaminants from plastic waste feedstock to convert it into virgin-like resin.

PureCycle Technologies CEO Mike Otwort said: "These partners are helping us accelerate as we bring this solution to the market. This is a validation of our method, and it will help us continue to move even more quickly as we make plastics recycling a reality."

Milliken has established an exclusive supply relationship with PureCycle to address the plastics end-of-life challenge. Milliken produces additives that play a significant role in renewing recycled polypropylene.

Nestlé has collaborated with PureCycle for the development of new packaging materials to reduce plastic waste. The partnership will also allow Nestlé to achieve its commitment of 100% of its packaging recyclable or reusable by 2025. By using market knowledge and technical expertise of Milliken and Nestlé, PureCycle will engage in the development of world's first virgin-like recycled polypropylene.

Source: compelo.com

WFO continues to tackle plastic pollution

On World Environment Day, Waste Free Oceans is reiterating its commitment to protect the world's oceans and waterways. The organisation is continuing its repetitive programme of hotspot clean-ups and remediation projects in the Danube river basin in Bulgaria, working towards the Black Sea and the Danube Delta in Romania. The goal is to use as much as possible of the collected plastic debris, turning it back into new products.

In the coming weeks, WFO will also start a clean-up action in the Mediterranean Sea, around the city of Marseille, France, working its way down towards Barcelona, Spain. While engaging with local authorities, NGOs, companies and other stakeholders, WFO plans to take part in a regular clean-up in the area, using the specially designed trawls to collect floating marine litter.

Once the plastic is collected, the next step is to find creative ways to reuse it. More and more companies are starting to use recycled plastic to offer consumers



sustainable, circular products. By connecting businesses with a trusted network of recyclers and converters, WFO helps them create innovative products that meet the highest standards of quality and safety, whilst contributing to a better future for our planet.

"Nowadays, the world is ready and waiting for products offering environmental solutions rather than more challenges. People are demanding sustainable choices and are now ready to pay for them. In the early days of our organisation, people were not yet aware of the impact of marine litter, nor were they prepared to get involved. Today, it has become clear that we can make a difference and brands have understood our message and commitment.", says Alexandre Dangis, WFO Founder.

WFO will organise a workshop during the EuPC Annual Meeting in Berlin on 13 June 2019. The event will focus on circular economy and sustainability of plastic products and will gather representatives of the European Plastics Industry, local and national authorities, machinery producers and media.

Source: wastefreeoceans.org.

Plastic Waste Like Bottles and Bags Can Now be Turned Into Jet Fuel

Researchers have melted plastic waste at high temperature with activated carbon with an increased surface area - to produce jet fuel!

Scientists have found a novel way to turn daily plastic waste products like water bottles and plastic bags into jet fuel. Researchers at Washington State University in the US melted plastic waste at high temperature with activated carbon, a processed carbon with increased surface area, to produce jet fuel.

"Waste plastic is a huge problem worldwide. This is a very good, and relatively simple, way to recycle these plastics," said Hanwu Lei, an associate professor at WSU. The research, published in the journal Applied Energy, tested low-density polyethylene and mixed a

variety of waste plastic products, like water bottles, milk bottles, and plastic bags, and ground them down to around three millimetres, or about the size of a grain of rice. The plastic granules were then placed on top of activated carbon in a tube reactor at a high temperature, ranging from 430 degree Celsius to 571 degrees Celsius. The carbon is a catalyst, or a substance that speeds up a chemical reaction without being consumed by the reaction. "Plastic is hard to break down. You have to add a catalyst to help break the chemical bonds. There is a lot of hydrogen in plastics, which is a key component in fuel," Lei said.

Once the carbon catalyst has done its work, it can be separated out and re-used on the next batch of waste plastic conversion. The catalyst can also be regenerated after losing its activity. After testing several different catalysts at different temperatures, the best result they had produced a mixture of 85 per cent jet fuel and 15 per cent diesel fuel. "We can recover almost 100 per cent of the energy from the plastic we tested," Lei said. "The fuel is very good quality, and the by-product gasses produced are high quality and useful as well," he said. He also said the method for this process is easily scalable. It could work at a large facility or even on farms, where farmers could turn plastic waste into diesel.

Source: news18.com

180 nations agree UN deal to regulate export of plastic waste

Around 180 governments agreed on a new UN accord to regulate the export of plastic waste, some eight million tonnes of which ends up in the oceans each year, organisers said.

The 1,400 representatives, meeting in Geneva reached the agreement after 12 days' discussion on what Rolph Payet, Executive Secretary of the UN Environment Programme (UNEP) called "one of the world's most pressing environmental issues".

The Geneva meeting amended the 1989 Basel Convention on the control of hazardous wastes to include plastic waste in a legally-binding framework.

"I'm proud that this week in Geneva, Parties to the Basel Convention have reached agreement on a legally-binding, globally-reaching mechanism for managing plastic waste," said Payet.

"The IPEN umbrella group seeking to eliminate hazardous, toxic chemicals said the new amendment would empower developing countries to refuse plastic waste dumping. For far too long developed countries like the US and Canada have been exporting their mixed toxic plastic wastes to developing Asian countries



claiming it would be recycled in the receiving country. Instead, much of this contaminated mixed waste cannot be recycled and is instead dumped or burned, or finds its way into the ocean," said IPEN science advisor Sara Brosche.

Plastic waste pollution has reached "epidemic proportions" with an estimated 100 million tonnes of plastic now found in the oceans. The Geneva meeting also undertook to eliminate two toxic chemical groups— Dicofol and Perfluorooctanoic Acid, plus related compounds. The latter has been used in a wide variety of industrial and domestic applications including non-stick cookware and food processing equipment, as well as carpets, paper and paints.

The European Union coordinates and directs environmental protection for its members, through the regulation of industry and the setting of green policy goals.

Source: phys.org

Sumika acquires Turkey's Emas

UK engineering compounds manufacturer Sumika Polymer Compounds Europe is to acquire Turkish plastics group Emas. Part of the deal are three compounding sites with what Sumika says are extensive compounding expertise. Terms of the deal were not disclosed.

Sumika is a subsidiary of Sumitomo Chemical Group, with Itochu Corp. and Toyo Ink as further shareholders. The company offers a wide range of high performance polypropylene short glass fibre marketed under the name of Thermofil and elastomers and produced at two European plants in Havant, England, and St Martin de Crau, France.

Founded in 1978 by the Alkan family, Emas is known as a predominant player in the compounding market in Turkey. The company owns three businesses: Almen, based in Gemlik, northwestern Turkey; Akce Plastik in the Izmir region of southwestern Turkey; and Emas Plastik in Bursa.

"This is an extremely positive development for Sumika Polymer Compounds Europe, which is increasing its

production capacity to 140,000 tonnes/year," Sumika President Ludovic Seynave said.

Sumika says the acquisition is in line with its growth strategy to expand the number of its global compounding sites to 14. It also intends to invest in the production equipment of the sites in Turkey to offer its entire range of PP fiberglass in the region.

Source: plasticsandrubberasia.com

Polyscope buys SMA business from Total

Dutch firm Polyscope Polymers has completed the business integration of the global styrene maleic anhydride (SMA) copolymers business from Cray Valley, Cray Valley HSC Asia Ltd, Cray Valley (Guangzhou) Chemical Co. Ltd. and Total Petrochemicals & Refining USA, Inc.

Cray Valley is a global market leader for low molecular weight (LMW) SMA products and the main competitor to Polyscope's specialty chemicals business unit. The deal included the transfer of all SMA products, inventory, application knowledge, and intellectual property from Cray Valley. Polyscope Polymers now supplies all former Cray Valley customers, integrating the businesses and supply chains in all geographic regions worldwide.

Patrick Muezers, CEO of Polyscope Polymers stated: "This successful business integration is a major milestone for the business and a key stage in our Polyscope 3.0 "Market leadership and Product -Business Innovator" strategic plan, initiated in 2017 to take the business to the next stage by the end of 2021. Polyscope 3.0 included the integration of a suitable competitor and Cray Valley proved to be an excellent strategic fit. It has significantly strengthened our LMW SMA position and provides us with a better balanced future business model with global growth opportunities in both engineering plastics and specialty polymers markets. The due diligence carried out highlighted attractive sales, operational, technology and financial synergies between the two businesses. These synergies will enable us to optimize costs, increase productivity and develop new products, as well as improving our supply chain globally to achieve our long term business expansion objectives and sustainable profitable growth in the coming years."

Since entering the market in 2006, Polyscope has established a global product leadership position in high molecular weight (HMW) SMA additives for engineering plastics and SMA-modified advanced plastic compounds. The Specialty Polymers business unit was set up in 2011 as part of the 'Polyscope 2.0' global 2011-2016 strategic growth objectives to

expand its SMA product leadership position and market expansion beyond engineering plastics.

Source: plasticsandrubberasia.com

Plastic Energy to build five plants in Indonesia; Enviro's technology to recover carbon fibre from composites

With Indonesia notoriously in the lead for marine pollution, UK-based Plastic Energy's agreement with the province of West Java (Indonesia) to build five chemical recycling plants comes as a relief.

An MOU was signed recently by Plastics Energy and the Governor of West Java, Ridwan Kamil. It follows campaigns – including the United Nations (UN) Clean Seas, the Global Plastic Action Partnership, Our Ocean Conference – to reduce plastic pollution and, in particular, plastics reaching the ocean around Indonesia, a country which is second only to China for leaking plastic into the sea.

The Indonesian government has made addressing the plastic waste issue a priority, with an ambitious commitment to reduce marine plastic debris by 70% by 2025.

The waste management industry in Indonesia is still in its early stages of development, and as such infrastructure development still faces a range of challenges. Plastic Energy is exploring partnerships



with a range of public and private sector organisations to address these challenges and to facilitate the construction of these plants, and to make West Java a showcase for the rest of Indonesia.

Governor Ridwan Kamil commented: "West Java is the biggest province in Indonesia in terms of population. We have 50 million people and 27 cities. West Java is also known as the province with a vision of green development, and are creating a series of strategies to make sure our future is sustainable. One of the big issues we are facing is plastic waste. So therefore I am very happy to sign this MoU with Plastic Energy, a British company that can transform plastic waste into fuel, something which is very useful. We are committed to ensuring this project is executed in a proper, transparent and professional way. We want to be the first region in Indonesia to have the facilities to transform plastic waste into energy and into fuel, through this partnership with Plastic Energy."

Plastic Energy has pioneered the conversion of valueless plastic waste, with patented low carbon footprint technology, into oils, known as Tacoil, for making new virgin – food safe – plastics and creating a circular economy, or used as an alternative fuel with lower emissions. In Indonesia, as well as the environmental advantages, the development of the five plants will also boost local economies providing both direct and indirect employment as well as establishing a blueprint for a range of waste management solutions, says Plastic Energy.

Source: plasticsandrubberasia.com

Myanmar's plastic makers in conflict with imported goods

Northern Myanmar's plastic production businesses are facing heightened competition from their international counterparts, as imported products made from nylon or recycled plastics are generally cheaper and readily available to local consumers. Local producers say they are unable to scale products accordingly to meet demand and instead locally made products are "forced" to be sold at higher prices due to higher costs of raw materials and logistics.

Ko Hlaing Aung from plastic production business Mandalay Gold Star has admitted that local manufacturers are at a loss because they use virgin, expensive raw materials that are usually sourced from abroad for their end products.

The President of Myanmar's Plastic Industry Association (MPIA), U Tun, also explained that local manufacturers use raw materials from the US or Japan since these can also be recycled to make near-new products.

Currently, negotiations are being undertaken with the Commerce Department to produce imported goods locally as a solution to ward off overseas competition, said the report in the Myanmar Times.

Furthermore, an Upper Myanmar Plastic Industries Association might be formed soon to better meet the needs of almost 6,000 local plastic businesses in the country.

Source: plasticsandrubberasia.com





ITC Ties up With Pune City Body For Plastic Waste Management

Diversified conglomerate ITC Ltd on Wednesday said it has joined hands with the Pune Municipal Corporation and a waste-pickers cooperative to collect and process multi-layered plastic (MLP) waste in the city.

The company has launched the model for sustainable management of MLP waste on an end-to-end basis in partnership with SWaCH and the Pune civic body, an official release said.

In the first phase, ITC-SWaCH-PMC will operate one processing facility with a capacity to manage 200 metric tonne of MLP waste per month, providing an opportunity to 3,500 such collectors, it said.

These collectors will gather dry and wet waste separately every day, covering 8.1 lakh properties across the city, ITC said. "With the ITC-SWaCH-PMC partnership... We are taking yet another step in building a model which goes beyond segregation of solid waste to addressing one of the acute challenges of managing and recycling of the mounting multi-layered-plastic waste," ITC Projects Head (EHS and Quality Assurance) Chitranjan Dar said. The company, along with its partners, are looking forward to expanding the programme to cover the entire Pune city in the near future, he said.

ITC's waste management initiative was first launched in 2007 in Bengaluru and has expanded to 12 other cities, creating sustainable livelihood for over 14,500 waste collectors and more than 80 social entrepreneurs, the release said.

Source: news18.com

India's packaging industry to touch \$72.6 billion by FY20: ASSOCHAM-EY study

"India's packaging industry is expected to witness an outstanding growth during 2016-21, and anticipated to reach USD 72.6 billion by FY20," study said.

The market size of the country's packaging industry is expected to touch USD 72.6 billion by FY20 on account of rising population and income levels, according to a study by Assocham-EY. "India's packaging industry is expected to witness an outstanding growth during 2016-21, and anticipated to reach USD 72.6 billion by FY20," it said.

The industry was USD 31.7 billion in 2015. "The growth is driven by key factors such as rising population, increase in income levels and changing lifestyles," it said.

It said that boom in e-commerce and organised retail will enhance the growth of plastic packaging and percapita consumption in the years to come. Fast-moving consumer goods is one of the primary growing segments in the retail sector and is also one of the biggest end users of the packaging industry. Pharmaceutical packaging has now become a foremost part of the drug delivery system," it added.

Source: economictimes.indiatimes.com

Albéa, Blackstone in talks to acquire specialty packaging company Essel Propack

Albéa, a global leader in beauty, personal care, oral care, pharmaceutical and food packaging, is owned by French private equity fund PAI Partners.

French packaging group Albéa and US private equity fund Blackstone Group are in advanced negotiations to take a controlling stake in Essel Propack (EPL), India's

largest specialty packaging company, according to three people aware of the development. Amid consolidation in the packaging industry, the parent group is looking to sell assets in order to reduce debt.

Besides the two contenders cited above, Indorama and private equity fund Carlyle have also submitted nonbinding bids but the discussions with Albéa and Blackstone are believed to be progressing, said one of the persons cited above.

Albéa, a global leader in beauty, personal care, oral care, pharmaceutical and food packaging, is owned by French private equity fund PAI Partners. Due diligence is being conducted before binding bids are submitted. Morgan Stanley is advising the EPL promoters.

ET was the first to report the company is up for sale. Led by Ashok Goel, the promoters own 57.19 per cent of the company.

EPL had a market value of Rs 3,381 crore at the Friday close. Buying out the promoters will trigger an open offer for an additional 26 per cent of the company. EPL, part of the Subhash Chandra-led Essel (Zee) Group, manufactures laminated plastic tubes, extruded laminated plastic tubes, caps and flexible laminates used in in packaging of oral care products, cosmetics, food and pharmaceuticals. EPL sells more than 7 billion

tubes to over 400 clients globally from 19 global facilities.

"We wish to mention that the company has never commented on transactions by its shareholder(s), and in the absence of verified data available with it considers that such information is speculative," said Essel Propack chairman and managing director Ashok Goel. "As a policy, the company does not respond to market rumors and speculative news reporting." He added that the company continues to evaluate various strategic alternatives aimed at enhancing long-term shareholder value, including collaborations.



Albéa has 38 manufacturing sites globally. Besides India, it has a presence in China and Indonesia. It manufactures tubes and rigid packaging at its Goa and Baddi plants. Major customers in India include Dabur, Patanjali (oral care); Godrej, Emami, Vicco, Marico (skincare), Sun Pharma, Dr Reddy's and Piramal (pharmaceuticals), Lakme, Colorbar, Oriflame, Avon, L'Oreal (beauty and cosmetics).



OFFLOADING STAKES

The succession issue is also a trigger for Goel to explore divesting his flagship business, according to people aware of the matter. In the past, he has held informal discussions with PE groups but nothing has fructified so far. In 2015, Essel Propack sold its whollyowned subsidiary Packaging India (PIPL), valued at Rs 165 crore, to Amcor Flexibles India.

The debt-ridden Essel Group is in the process of selling various assets, including parts of its road and solar portfolio. Subhash Chandra is also looking for a buyer for half his stake in flagship Zee Entertainment Enterprises. At the group level, Essel has total debt of Rs 17,174 crore. Of this, the infrastructure business accounts for Rs 11,466 crore across three major verticals—power transmission, solar and roads (toll and annuity).

In one of the recent transactions in packaging space, promoters and a PE investor in Manjushree Technopack —India's largest rigid plastic packaging solution provider— offloaded a majority stake to US PE fund Advent International, valuing the company at Rs 2,300 crore

Source: economictimes.indiatimes.com

India's containerised exports grow 6% during Jan-March even as rupee appreciated: Maersk India

India's containerised exports reported a stable growth of 6% in the Jan-March quarter even as the rupee appreciated, signaling a strong demand for Indian exports while imports declined 2.2% over the same period, a report by Maersk India said.

The rupee appreciated marginally by 0.88% during the period even though it touched a low of Rs 71.81 in February. The overall export-import trade grew at 3% in the quarter. While north and west India drove trade with European and Mediterranean countries, highest growth in exports to the United States came from east India at 17%.

The overall export trend was driven by robust performance in refrigerated cargo, engineering and pharmaceuticals, largely by the eastern and western regions of India with commodities like plastic, rubber, textile, vehicles and vegetables as the key drivers.

"Exports have remained strong even as the rupee appreciated against the dollar, which shows a strong demand for Indian exports," Steve Felder, managing director, Maersk South Asia said, To be sure, global containerised trade has moderated due to a broad-based slowdown due to fall in private consumption,

trade risks, financial volatility and political uncertainties.

"Considering the tensions in the global trade environment, we are off to a positive start to 2019 on exports, and the market is expected to strengthen after the elections," he said. Felder pointed out that Indian exporters today are expanding their geographical range and product diversification and are moving towards higher value-added manufacturing and technology driven items in their basket.

Refrigerated cargo exports also grew at 6% with commodities like vegetables, fruit and nuts, fish, meat, pharmaceuticals and chemicals driving the reefer import-export trade. Saudi Arabia, USA, Germany, Belgium and Spain were among the highest export countries for India's refrigerated cargo with chemicals, pharmaceuticals, meat and vegetables driving this demand; while Russia (chemicals) and Italy (fruit and nuts) remained the strongest partners from the refer imports standpoint.

"The government's efforts to grow international trade are already visible through the plethora of initiatives over the past year, including the relaxation of cabotage regulations and favourable regulatory environment, emphasized by the grant of infrastructure status to the logistics industry. However, India needs to drive and indeed fast-track investment-led infrastructural upgrade of roads, intermodal transportation and cold chain infrastructure, which would benefit the farmers and small and medium enterprises. The 'Make in India' initiative is further expected to act as a catalyst in advancing our manufacturing sector to the international market," Felder said.

Source: economictimes.indiatimes.com



Pentaflex Films wins the

Kodak Global Flexo Innovation Award 2019

Pentaflex Films is based out of Ahmedabad and has over 20 years of experience in the blown film business. Kodak had invited entries from across the world for its Global Flexo Innovation Award 2019. The aim of the competition was to recognize outstanding work done in the field of flexo by leveraging the Kodak's Flexcel NX plate technology. Pentaflex had submitted a flexo printed PE-PE laminate job for salt packing.

Pentaflex was conferred with the Silver Award with Highest Honors for exceptional print quality and commitment towards sustainability. Pentaflex did India proud by being the only company to be awarded from the Asian continent.

According to the judge's comments the printing quality was almost indistinguishable from a gravure job. The PE-PE laminate was able to give recyclability to the packing without compromising on the aesthetics and overall appeal as compared to a PET-PE pack. Pentaflex

Films has constantly tried to push innovation and its efforts have now been internationally recognised. The company has installed an eight Color Bobst CI Flexo printing machine along with various other machines to provide complete packaging solution. Anticipating the governments push towards recyclability and sustainability the company is developing various products that would reduce the dependence on single use non-recyclable products.





L to R: Prakash Patel (Director, Pentaflex), Anand Patel (Director, Pentaflex), Chris Payne (CEO- Miraclon – Kodak)

Ghana Trade At a Glance

Economic overview

Ghana is a middle-income country in the West African region which has witnessed strong macroeconomic growth in the last two years after a challenging 2016. The 3rd edition of the Ghana Economic Update released by the World Bank in March 2018 states that while the country's focus remains on agriculture as the engine of growth and jobs creation, the service sector bounced back, and the fiscal consolidation has been paying off.

Ghana's inflation rate is also down to close of 10 percent and its GDP grew to 8.1 percent in 2017, an impressive increase from 3.4 percent recorded in 2016. With an improved trade balance shifting to a surplus, Ghana made good progress in macro-stabilization in 2017 and with sustained fiscal consolidation, the fiscal deficit could fall within the Government's target of below 5 percent of GDP from 2018 onwards by maintaining focus in the medium-term on domestic resource mobilization and expenditure controls.

Overcoming Challenges

Despite the positive outlook, challenges remain, including further containing inflation and strengthening and deepening the financial sector to lower interest rates. Ghana is also likely to face higher financing costs in both the domestic and external markets in the context of a strong U.S. dollar and rising global bond yields.

Ghana continues to be heavily reliant on primary commodities, including cocoa, gold, and oil which are all prone to volatility in international commodity prices and hence creating a cloud of uncertainty on its actual



future paths for growth, inflation, export receipts, and domestic revenue. The nation's manufacturing sector also remains largely non-existent.

Despite the tough road ahead, it is expected that with the right reforms, agriculture has the potential to be one of the leading sectors in the making of a more diverse economy and can be transformed to be an engine of growth and job creation. Agriculture has a very large multiplier effect on employment, creating over 750 jobs for every additional USD 1 million of output. Ghana is now also undertaking proactive measures to increase productivity through a phased approach to industrialization.

As of May 23, 2019, the S&P's rating for Ghana is B (stable); Moody's rating stands at B3 (stable); and Fitch has a reported rating of B (stable).

Economic indicators		2016	2017	2018
Nominal GDP	USD Billion	55.0	59.0	65.2
Nominal GDP per capita	USD	1,941	2,038	2,206
Real GDP growth	%	3.4	8.1	5.6
Total population	Million	28.3	28.9	29.6
Average inflation	%	17.5	12.4	9.8

Source: IMF, TradeMap

Plastics Trade overview

India and Ghana share cordial trade relations and were engaged in bilateral trade worth over USD 4 billion in 2018. During the year, India's exports to Ghana were valued at USD 722 million in comparison to India's imports worth USD 3,578 million resulting in a trade deficit of USD 2,856 million to India.

Ghana mainly imports pharmaceutical products, cotton yarn, fabrics, machinery and instruments from India. Some of the regular exports from Ghana to India include cashew nuts, metalliferous ores and metal scrap, wood and wood products, pearls, precious and semi-precious stones, oil seeds and spices. India has been among the top five trading partners of Ghana and the country continues to be a favoured destination for Indian investors.

Within plastics, India's position is seemingly strong with plastics exports worth USD 60 million to Ghana and a trade surplus of USD 60 million to India.

India's plastics exports to Ghana largely comprise of:

- Plastic sheets, films, plates etc. (39.9%)
- → Raw materials (22.8%)
- → Moulded and extruded goods (11.7%)
- → Packaging items (7.5%)
- ★ Ropes, twines and cordage (5.6%)

Ghana's annual plastics imports are valued between USD 600-700 million. Their plastic imports are largely catered to, by China (23.0%), Saudi Arabia (13.9%), and the United States (8.7%). India meets 6.2% of all plastic imports of Ghana. However, India holds a good standing in Ghana's import in the below mentioned plastic product categories:

- Plastic sheets, films India's market share of 31% (Rank 1)
- Leathercloth market share of 35.8% share (Rank
 2)
- Nets market share of 19.8% share (Rank 2)
- Ropes, twines, cordage market share of 28.5% share (Rank 2)
- Woven sacks FIBC market share of 19.1% share (Rank 2)

Trade potential

An internal research indicates that India's plastics exports to Ghana has the potential to grow ten-fold to USD 600 million. Available data indicates a favourable trade balance for Ghana, and hence it may as well be said that much of the potential that the two countries can offer for mutual economic benefits, remains untapped. Further strengthening of the strategic trade partnership between the countries can elevate economic and social benefits by creating new opportunities for trade, investment and employment.



Countryscape

Product categories, within plastics, that have immense export potential to Ghana include:

Product Category	Ghana's import from India	Ghana's import from world	India's export to world	Trade potential for India
	USD Million	USD Million	USD Million	USD Million
Plastics raw materials	14.29	421.22	4,498.11	365.64
Plastic sheets, films, plates etc	14.95	47.88	1,344.62	32.93
Other moulded and extruded items	0.46	33.23	619.88	32.77
Medical disposables	1.75	27.43	534.33	25.68
Electrical items	0.40	23.97	182.04	23.58
Packaging items	1.28	22.01	743.21	20.73
Houseware	1.26	19.96	181.06	18.71
Pipes, tubes, hoses etc and fittings	0.41	18.56	188.12	18.15
Nets (including fishnets)	3.31	16.71	68.82	13.40
Human hair & products thereof	-	14.15	248.33	12.00

Source: TradeMap, Plexconcil Research

Industry Speak



Rajesh Parikh, Director, Jay Laxmi PolyPlast

Ghana as an export destination has tremendous potential for moulded plastics, especially in plastics personal care products as well as household goods and as a large FMCG market, Indian exporters have excellent trade prospects. However, given the local trade policies that require manufacturers setting up in Ghana to invest a minimum of USD 1.2 million, the market may not be within reach for the players of the MSME segment. For those who wish to export to Ghana, it is advisable to establish clear commercial terms and safeguard their interests before entering into agreements with local importers. To sum it up, it is fair to say that Ghana has huge import potential, business-friendly trade policies and focus remains on volumes rather than high-quality standards, unlike Europe & USA.

The downside perhaps is that high investment requirement may be a deterrent for the MSME segment, reaching out to large importers can be challenging for smaller players while long shipping duration can be a drawback considering fluctuating prices of polymers. In my opinion, having well-articulated trade agreements between the two countries, especially with regard to commercial terms for Indian exporters could go a long way in developing this market into a major export destination for the country.

Countryscape



As per Ghana Plastic Manufacturers' Association (GPMA), the demand for plastic packing material in Ghana has seen an increase of over 75-80 percent since 2010 owing to the preference of plastic packaging over the eco-friendlier paper and other similar products.

With consumption of plastics in Ghana standing at over one million tons, there undoubtedly have been concerns amongst the GPMA over the influx of finished goods into the country which account for over 50 percent of the total domestic consumption. In terms of production of woven fabrics and sacks, while there is a growing demand in Ghana, with existing numerous Indian plants in Ghana, ensuring the right pricing for exports from India can be challenging for Indian exporters as it is quite competitive.

Having said that, the country offers good export prospects for Blue sheeting for farms, greenhouse shade cloth, shade netting for farms, primary and secondary packaging material, packaging for butter, plastics related to agro-processing and plastic pipes. These may be attributed to the nature of its economy that is largely agro based.

Ghana as an export destination holds good prospects as the country's trade policies are quite conducive to our exports. In terms of raw materials, India has been exporting Polymers (PE & PP), Compounded PP grades, White Masterbatch, Black Masterbatch and some colours as well as PET masterbatches for Bottles. Off late, a lot of recycling machines are also being imported into Ghana considering the spiraling plastic waste issues in the country.

Some of the challenges faced recent in recent exports to Ghana has been fulfilling the BVQi inspection which is not just an added cost of USD 350 to the exporter, but also results in delays. Shipping time is already a cause for concern considering the fewer options available and congestion at Tema port in Ghana. However, it is our belief that if more options were made available to exporters, it would ease the logistical concerns to a good extent.

Furthermore, there is also a need for improvement of interactions between the trade members of the two countries as quite a few Ghanian manufacturers have had concerns over Indian suppliers and there is a pressing need to rebuild faith in the quality of suppliers from India.

Consumer Houseware

As one of the largest product panels of the Council, the Consumer & Houseware Panel comprises 68 commodities at 8-digit HS code level. India's exports of products under this panel was valued at USD 552 million in 2018 at a growth rate of 10% for the period 2015-18 while the country also imported goods worth approx. USD 937 million in 2018 from the world in this category.

However, value added plastics account for nearly 60% of India's total plastics export. With capacity expansion and technology upgrades, increased exports to the US, Europe, emerging markets in Latin America, Africa and ASEAN as well a host of Government initiatives and schemes, the segment presents immense potential to capture a much larger share of the global export market.

Primarily comprising the MSME & SME sectors, the Consumer and Houseware segment offers tremendous prospects in terms of employment generation through entrepreneurship. However, given the lack of organization within the segment, there has been an increasing thrust from the government as well as industry trade bodies to organize this business segment and facilitate technology upgrades, expand production capacity to meet domestic demand, with the view to increase India's plastics exports.

Plexconcil itself, through its membership outreach programme as well as its various other initiatives continues, through its various endeavours to bring export businesses under its purview and help expand capacities as well as extend its member outreach to international markets.

India is currently ranked among the top five global consumers of polymers and has over 50,000 plastic processing units employing more than 4 million people across the country. Despite its sheer size, even today, many countries do not recognize our Bureau of Standards (BIS), a challenge that may have slowed the pace of export growth of Indian manufactured plastics. Nevertheless, with technology advancements and measures to boost production and consolidate capacities, the segment's outlook for the future remains promising and the country could well be on its path to achieving its export objectives.

Panel Highlights

- Major product segments within this panel include -Tableware and kitchenware; Tooth brushes; Plastics toys; and Travel ware.
- + World-wide import of Consumer & Houseware, of plastics, is above USD 190 billion.
- + In 2018, top-5 exporting countries of Consumer & Houseware products were: China (42.6%), Germany (8.3%), United States (4.9%), Hong Kong (4.0%), and Italy (3.9%).
- + Likewise, top-5 importing countries of these products were: United States (22.3%), Germany (7.5%), Japan (4.6%), United Kingdom (4.5%), and France (4.4%).
- + India was ranked as the 26th largest exporter as well as the 26th largest importer of Consumer & Houseware items, of plastics, in the world.
- + Major destination countries for export of Consumer & Houseware products from India are: United States (18%), Germany (9.2%), United Kingdom (8.9%), United Arab Emirates (8.1%), and Belgium (4.3%).



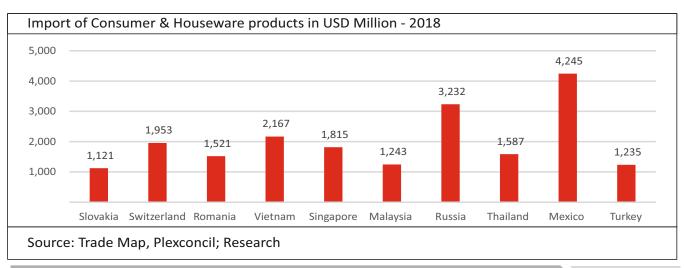
Panel Of The Month

Product categories within the Consumer & Houseware panel that have contributed significantly to the panel's growth include:

HS Code	Product Description	2015	2016	2017	2018
		USD Mn	USD Mn	USD Mn	USD Mn
96032100	Tooth brushes, incl. dental-plate brushes	44.9	56.7	60.6	75.4
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	29.0	33.3	35.3	54.6
42021220	Trunks, suit-cases, vanity-cases, executive-cases, brief-cases, school satchels and similar containers, with outer surface of plastics or textile materials: Plastic moulded suit cases	24.4	25.6	29.8	42.1
42021290	Trunks, suit-cases, vanity-cases, executive-cases, brief-cases, school satchels and similar containers, with outer surface of plastics or textile materials: Other	5.2	10.9	5.4	36.9
39261099	Office or school supplies, of plastics, n.e.s.: Other	16.0	15.8	20.9	25.7
42023290	Wallets, purses, key-pouches, cigarette-cases, tobacco-pouches and similar articles carried in the pocket or handbag, with outer surface of plastic sheeting or textile materials: Other	8.2	11.2	15.2	17.4
42022210	Handbags, whether or not with shoulder straps, incl. those without handles, with outer surface of plastic sheeting or textile materials: Hand bags and shopping bags, of artificial plastic material	3.1	3.1	5.2	11.9
39261019	Office or school supplies, of plastics, n.e.s.: Other PU foam	2.9	3.9	4.5	7.6

Source: Ministry of Commerce & Industry

Our internal research indicates that India's Consumer & Houseware exports have immense potential for growth in destinations like Slovakia, Switzerland, Romania, Vietnam, Singapore, Malaysia, Russia, Thailand, Mexico and Turkey.



Panel Of The Month

Product categories within the Consumer & Houseware panel that have contributed to import growth in India include:

HS Code	Product Description	2015	2016	2017	2018
		USD Mn	USD Mn	USD Mn	USD Mn
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	126.5	164.4	193.8	211.8
42021250	Trunks, suit-cases, vanity-cases, executive-cases, brief-cases, school satchels and similar containers, with outer surface of plastics or textile materials: Other travel goods	39.7	41.2	81.9	162.0
90041000	Sunglasses	51.3	49.2	64.9	68.2
39249090	Household articles and toilet articles, of plastics (excl. tableware, kitchenware, baths, showerbaths, wash-basins, bidets, lavatory pans, seats and covers, flushing cisterns and similar sanitary ware): Other	19.3	15.2	27.4	42.0
42022210	Handbags, whether or not with shoulder straps, incl. those without handles, with outer surface of plastic sheeting or textile materials: Hand bags and shopping bags, of artificial plastic material	4.9	4.6	25.9	41.2
96039000	Mops and leather dusters; prepared knots and tufts for broom or brush making; squeegees of rubber or other flexible materials; brooms and brushes, n.e.s.	16.0	18.0	24.7	30.4
39264029	Statuettes and other ornamental articles, of plastics: Other	13.1	9.5	21.5	27.9
39241090	Tableware and kitchenware, of plastics: Other	11.0	9.2	14.2	25.8

Source: Ministry of Commerce & Industry

As a World Trade Organization (WTO) member and a member of the General Agreement on Tariffs and Trade (GATT), the Indian Government continues to work towards a regime of greater bilateral trade agreements and relations. With preferential access, economic cooperation and free trade agreements (FTAs) with about 54 individual countries, the country remains focused on comprehensive economic partnership agreements, economic cooperation agreements, FTAs and preferential trade agreements (PTAs). Simplified tax structure, launch of various initiatives and schemes to promote exports, attracting FDIs into manufacturing, focus on technological advancements, amongst other are drivers that along with foreign trade policies are designed to drive Indian exports towards a brighter future and turn the country into a leading global sourcing hub.

Industry Speak

In your opinion, how has the Consumer and Houseware segment performed in the last year?

All Time Plastics is predominantly known for its products in the Homeware, Kitchenware & Food Prep segments. We feature amongst the large exporters of consumer and houseware products, and our exports account for almost 80% of our overall business. The year 2018-19 has been a very encouraging year for us and we have seen good traction for our product segment. The outlook for the coming year seems positive as well and we attribute this mainly to the fact that we have been able to reach out to some newer markets. Having said that, while the volume of our exports to these new markets have been comparatively lower, we see immense potential for growth in these markets.

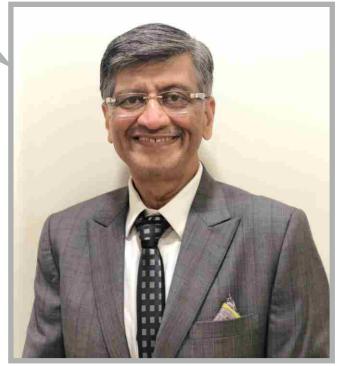
Which international regions and/or countries have witnessed increased demand for consumer and houseware products from India in the past year? Why?

USA and Europe, which already are the top export destinations for India have continued to remain our major growth partners. In the current context, trade tensions between China and USA can work well for India which is considered as an attractive alternate for international buyers. Another factor that has been in our favour is that global markets have been maintaining an open mind towards our country in terms of the quality of our plastics and polymers. We are perhaps challenged mainly with respect of products which have high volume. This may be attributed to the high cost of freight and logistics. Nevertheless, the opportunities for growth are immense, especially, if we are to focus on quality manufacturing.

In terms of emerging markets, while there are many players catering to this segment, at All Time Plastics, we have not seen much demand and this could be because some of the emerging markets are focused on low cost products, and not necessarily high quality. Having said that, we continue to explore business potential in these regions.

What major innovations have been seen in this particular segment recently?

In India, most of the innovation that has been gaining traction is in the recycled / renewable segment.



Kailesh Shah, MD, All Time Plastics Pvt. Ltd.

Through value addition, we have been able to improve and advance the functional and aesthetic aspects of our products. The focus, in terms of innovation has been more geared towards improving manufacturing processes and efficiencies through use of lesser plastics, manufacturing of multi application products, saving manufacturing cost, application of better engineering and technology to improve production efficiency, use of better raw materials, etc. In essence, innovation has been rather an advancement of the functional aspects of the business than product design per se.

In your opinion, why do you think India lags in the export of value-added plastics products? What areas, in your opinion, have scope for improvement?

The reason why India perhaps lags behind in the value added export segment is due to the fact that our industry is not aligned to meet the voluminous demands of large-scale international buyers. I do not believe that the quality of our product is the reason for the slow growth as our industry has access and possesses the required technology and expertise to manufacture world class products.

As an industry, especially for the larger players, we should be doing more to market our capacities and capabilities to these international buyers. Large scale manufactures need to demonstrate not just the scale of their business and their ability to expand capacities but also the professionalism in their approach. However, the high cost of finance involved in the expansion of

Panel Of The Month

production capacities is a deterrent and the cautious nature of our businesses with regard to expanding capacities are factors that perhaps hold us back from realizing our full potential.

What is the kind of additional support, in terms of policies, infrastructure, etc. that you believe that the industry should receive from the Govt for the growth, expansion, and improvement of the segment?

As a labour intensive business, one major factor that impacts our functioning are the labour laws in the country. Many representations have been made to the Government in this regard and as an industry we would like to believe that changes in labour laws will not only infuse greater dynamism in the way we conduct our business, but, also improve labour productivity as well as the industry's competitiveness. Enforcing fair labour practices, proper training, labour welfare, etc are as critical and should be enforced in the right spirit.

I also believe that the Government needs to take a holistic view on its Anti Dumping Duty policy. While the imposition of the Anti Dumping Duty on import of capital goods, may help in the short term, it perhaps does not do well for all segments of our industry. Besides, in an increasingly competitive global market, monopolistic practices may do more harm than good in the long run as it would compromise the quality, productivity and competitiveness of our industry at a global scale and curb its growth.

What is your message to Indian manufacturers and prospective exporters who wish for growth or are looking to enter into the segment?

Innovation is the key in today's world. However, before pursuing innovation, I would like to say that it is extremely important to foremost understand the white space that you wish to fill in through innovation. One must ensure you have the right infrastructure in place, and know your target markets very clearly. It is essential to have a clear vision and the right strategy in place before you enter the race. This is critical not only in the case of plastics exports, but for any entrepreneur looking to start or grow his enterprise. Last and not the least, always follow the laws of the land!













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Innovation In Plastics

Fuelling Applications

By Dr. N. C. Saha Director, Indian Institute of Packaging

The use of different forms of plastic materials are mainly dependant on the functional properties of individual material and the functional properties reflects the performance for a particular type of application. However, there is a need to understand in-The use of different forms of plastic materials are mainly dependant on the functional properties of individual material and the functional properties reflects the performance for a particular type of application. However, there is a need to understand in-depth about the properties of individual materials in order to assess this suitability for particular application.

The words 'Plastics' and 'Polymers' are used interchangeably. In general, plastics are used to describe a finished product whereas polymers are used to describe a raw material. The term 'Plastics' essentially refers to a material that can be heated and moulded, so that it retains the moulded shape after it cools. Historically, this term was also used to refer to natural materials such as wax, clay, tar, resin and asphalt.

'Polymers' are large molecules. A polymer is created when a large number of identical repeating monomer units are joined together to make a single polymer molecule. 'Poly' is a Greek term that means 'many' and 'mer' is the smallest repetitive unit in a polymer.

Depending upon the physical properties, plastics can be classified as thermoplastic materials or thermosetting materials. Thermoplastic materials can be formed into any desired shape on heating and under pressure and converts into solids on cooling. However, if they are subjected to the same conditions of heat and pressure, they can be remoulded. Thermosetting materials, on the other hand, acquire infallibility under heat and pressure and cannot be remoulded.

Plastics as a Packaging Media

Plastics are considered as the most popular and an important packaging media which fulfills the requirement of packaging and possess unique characteristics like lightweight, durability and formability which enable materials to be used in a wide range of products despite the environmental issues. Plastics today, have replaced almost all the

traditional packaging materials in food packaging like paper, glass and metals due to their certain useful properties such as versatile in nature, light in weight, non – corrosive, energy efficient and being user friendly materials. Their aesthetic appeal and abundance are the most effective factors for industrial growth in India. In addition, these materials have good resistance to alcohol and solvents and have been frequently used in making bottles and caps in the early days. These materials are mostly used for closures and trays rather than food packaging. The constant growth and development of packaging technology have made available a wide range of packaging materials like rigid, semi -rigid and flexible types.

This has further opened up the opportunity to the end user for having various alternatives for the same kind of packaging application. However, the selection of packaging materials are dependent on many factors like type of product to be packed, nature of product, storage condition, mode of transportation, type of handling, distribution network, market requirement and the cost aspect.

Depending upon the physical properties, plastics can be classified as thermoplastic materials or thermosetting materials.

In recent days, the consumption of plastic packaging materials has dominated all other packaging materials. Plastics are probably the single largest family in terms of variety and types of packaging media catering to multitude of applications. About 50% of plastics produced and consumed domestically are estimated to be used by the packaging sector only.

Plastic used in packaging are available in the following forms:

- Flexible Films and laminates, woven fabric
- Semi-rigid Extruded and laminated tubes
- Rigid Moulded, blow moulded thermoformed products etc.



Feature

The flexible packaging market is one of the most dynamic and fast growing markets in India. With a growth rate of about 17%, flexible packaging is dominating the Indian packaging industry. Flexible packaging has the advantage of protecting the product from adulteration, pilferage, moisture etc. and prevents wastage and damage. It also has the advantage of convenient handling and disposal along with cost savings in transportation and storage by taking up less space. Flexible packaging is unique in terms of aroma retention, sealing the product from heat, good barrier properties against moisture and gases along with good tensile strength.

Bulk Packaging

Although flexible packaging cover a wide range of materials like paper, aluminum foil, plastic or its combinations yet multilayered plastic materials have got huge application in packaging, both for consumer package as well as bulk package.

Interestingly, the concept of 'bulk package' has become very popular in recent times. This kind of shift in trends is mainly influenced by the overseas customers. In

order to meet the requirement of the export market, the concept of bulk package in the form of unitisation or palletisation is considered to be the 'Need of the hour' requirement in order to deliver the goods safely by way of minimising the transportation, labour, handling and warehousing cost by implementing the effective techniques for proper utilisation of space. Considering this requirement, today, the 'End of line' system has become very significant in terms of reducing the cost of packaging materials as well as operational cost. However, the reduction of packaging cost could be achieved only by means of formulating the optimum specification of packaging materials and thus, the performances of packages/ packaging materials in terms of functional properties become very important.

Properties and Applications of Plastic Films

Plastic materials, which are usually not more than 75 micron (0.003 inch) are termed as film and anything above these thin materials are usually referred to as a sheet. A number of plastic materials are available in film form as single layer are extensively used for packaging applications. The important types of plastic films are given in Table 1. The fastest growing segment among the flexible polymeric material is the polyethylene segment which finds usage

Table 1: Important Types of Plastic Films

Category	Polymeric Materials
Polyolefins	Polyethylene (PE)
	Polypropylene (PP)
Polyvinyl	Polyvinyl Chloride (PVC)
	Polyvinylidene Chloride (PVDC)
	Ethyl Vinyl Alcohol as Co-polymer (EVAC)
	Ethyl Vinyl Acetale (EVA)
Condensation Polymer	Polyamide-6 or Nylon
	Polyethylene Terephthalate (PET)
Styrene Polymer	Polystyrene

in a variety of end use segment. Polyethylene films are produced either by blown film or cast extrusion technology and the density ranges between 0.916 to 0.965 gm/cc.

- +
- → Depending upon the density and structure, the polyethylene films are available in different forms which are named as:
- → Low density polyethylene (LDPE)
- → Medium density polyethylene (MDPE)
- → Linear low density Polyethylene (LLDPE)
- → High density polyethylene (HDPE)
- + High molecular high density polyethylene (HMHDPE)
- → Polyethylene co-polymers like
 - ▲ Ethylene Acrylic Acid (EAA)
 - Primacor
 - Suryln

Low Density Polyethylene (LDPE) Properties

- Density is 0.916 to 0.926 gm/cc, lighter than water
- Good transparency and flexibility.
- → Good barrier towards moisture.
- → Offers fairly good chemical resistance.
- → Does not promote bacterial growth.
- → Good printability.
- + Good corrosion resistance with VCI impregnation.
- Excellent heat seal performance.
- Free from any foreign odour and taste.

Applications

- Films for heavy duty applications, detergent packaging, shrink film.
- → Milk packaging film, bubble films, shopping bags.
- Thin film packaging for textiles, garments etc.
- Coating on various substrates like paper, aluminium foil etc. used in the cosmetic and pharmaceutical industries.





High Density Polyethyene (HDPE) Properties

- Density is 0.94 to 0.965 gm/cc and is lighter than water.
- Good stiffness combined with certain degree of resistance.
- + Higher impact strength as compared to LDPE.
- Good barrier properties towards moisture/oil and grease.
- ★ Good flavour retention.
- Good chemical resistance except towards strong oxidising agents and aromatic solvents.
- + Practically free from odour and taste.
- + Retain good mechanical properties over a wide range of temperatures from −40°C to +100°C.
- Physiologically harmless and have been approved for use in contact with food stuff in many countries.

Applications

The properties of HDPE make an ideal film as lining materials for all bulk packages.

Feature

Linear Low Density Polyethylene (LLDPE) Properties

- The term linear refers to the arrangement of molecule in a straight line with short uniform side branching. Their properties lie in between LDPE and HDPE.
- → Density is 0.918 to 0.935 gm/cc.
- ★ Superior tensile strength.
- **→** Superior puncture resistance.
- + Superior low temperature impact resistance.
- + Superior environmental stress crack resistance.
- Down gauging of film by 30% is possible if LLDPE is used in place of LDPE.

Plastics are probably the single largest family in terms of variety and types of packaging media catering to multitude of applications.

Applications

- + Milk packaging films in blends upto 10% with
- General purpose films in blends upto 20% with LDPE.
- + Failure for heavy duty, packaging of detergents, in blends upto 20% with LDPE.
- Failure for shrink wrapping and stretch wrapping applications.



Stretch and Shrink Wrapping

In recent days, stretch wrapping and shrink wrapping techniques have become very effective in terms of palletisation and unitisation of smaller packages.

Stretch Wrapping

Types of Film Used for Stretch Wrape	also be used with different options like o
Monolayer: LLDPE based, EVA based,	Film with labelled side cling.o
LDPE and PVC•	Varying degree of cling.o
Multilayer : Co-extruded stretch film could	Tailor-made to save cost.

Advantages	Disadvantages•
Less space requirement. ●	Does not cover completely to prevent moisture.
Suitable for heat sensitive product. •	Not suitable for light flexible and fragile products.
Same film for different sizes of pallet. •	Impossible to print due to distortion.
Low cost equipment and • maintenance.	Holding force relaxed at elevated temperature.

Plastics today, have replaced almost all the traditional packaging materials in food packaging like paper, glass and metals due to their certain useful properties such as versatile in nature, light in weight, non – corrosive, energy efficient and being user friendly materials.

Table 2: Requirement of Stretch Film

Property	Requirement
Tensile strength (kg/cm²)	: MD : 300 – 350
	: CD : 250 – 280
Elongation at break (%)	: MD : 400 – 600
	: CD : 700 – 800
Dart Impact Strength (kgf)	: 150 – 170
Haze (%)	: 1 to 1.5%
Gloss at 45° (%)	: 90 – 92%
Elmendorf Tear Resistance (gmf) : $MD : 225 - 270$	
	: CD : 500 – 550
Cling (gmf)	: 220 – 250
Co-efficient of friction	: 0.6 to 0.7
Stretchability	: 200 – 300%
Relaxation	: How much does the film relax after stretching?

Shrink Wrapping

Shrink wrap is the process wherein the shrinkable grade LDPE film is wrapped around the product and then allowed to shrink by applying heat for providing tight fit tear proof overwrap. It also provides consumer appeal in addition to product protection and convenience.

Requirement of Shrink Film.

Percentage of shrinkage should be 70:30 ratio at both direction (MD : CD).

Good puncture resistance.

Resistance to UV light. •

Clarity and gloss.

Advantages	Disadvantages•
Any shaped product can be • shrink wrapped.	Not suitable for heat sensitive products.
Protects the products against • transit damage.•	Higher wastage of film.
Environmental protection • from moisture, insects etc.	Printing is not legible due to distortion.
Relatively faster operation. •	Different types of films are required for different applications.

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Feature

Stretch Wrap

This technique is implemented by means of a stretch film. A stretchable LDPE film having a thickness of 20-25 micron with 0.917 to 0.918 gm/cc density is used to wrap around the product to protect it from the environment and also to utilise the products for easy handling, storage and shipping (Table 2).

Performances of Stretch and Shrink Film

The performance of these films can be evaluated by analysing their physical and functional properties (Table 3). This is required to ensure their effective performance during handling, storage and transportation.

Conclusion

The use of different forms of plastic materials are mainly dependent on the functional properties of individual materials and their functional properties reflects the performance for a particular type of application. However, there is a need to understand indepth about the properties of individual materials in order to assess their suitability for a particular application.



Flexible packaging is unique in terms of aroma retention, sealing the product from heat, good barrier properties against moisture and gases along with good tensile strength.



Table 3: Properties of Stretch and Shrink Film

Properties	Significance	Relevant Test method
Gauge or Thickness	All the functional properties are directly related to thickness	ASTM D-374
Appearance – Colour, Smoothness and Surface Uniformity	Aesthetic and functional	Visual
Tensile Strength (kg/cm²)	To check the force required to break the film under tension	ASTM- D-882
Elongation at Break (%)	To determine the stretchability	ASTM D-882
Shrinkage	To determine the shrinkability of the film	ASTM-D 2732-1983
Gloss (%)	To check the reflectance of light at 45°	ASTM-D D-1033
Haze (%)	To determine the haziness of the film	ASTM- D-1033
Dart Impact Strength (gmf at 50% failure)	To evaluate the mechanical impact strength of the film	IS-2508
Printability	Scotch tape test	
Cling Properties	To analyse the adhesion strength of the film	

Recyclable plastic packaging is the new trend

The Packaging Industry in India has rapidly grown in the last decades. The increasing demand for bottled water, beverages, personal care and household items has tremendously contributed to the growth and the industry was valued at \$32 billion in FY2015. The rigid plastic packaging industry is the largest sector in India's packaging industry. Growing at a CAGR of 15%, the packaging sector is among the Indian high growth industries and shows immense potential for further expansion. The industry's new outlook is towards recyclable plastic packaging.

Polyethylene terephthalate (PET) is the most used material in rigid plastic packaging. The bottled water industry is steadily on the rise and growing at a CAGR of 30%. Most of the packaging material used for soft drinks and water is made of PET due to its characteristics that make it perfect for bottled water. PET bottles are robust, lightweight recycled or reused.

Out of 900,000 tonnes of PET produced in India every year, 90% is recycled. This makes India one of the worldwide leaders in recycling PET. 65% is recycled at authorised facilities, 15% in the unorganised sector and 10% is reused at homes. The rest ends up at waste disposal sites.

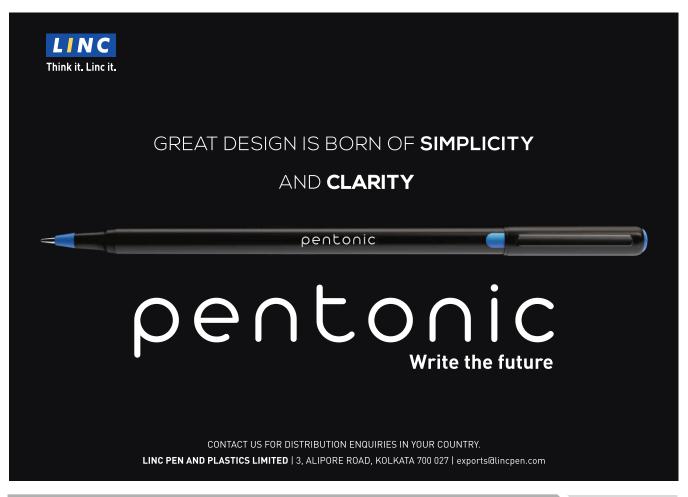
Polymer scientists at the National Chemical Laboratory (NCL) in Pune believe that the market has still strong growth potential. "PET recycling business in India generates around \$522.7 million a year, employing thousands, and recycling billions of PET bottles", said scientist Dr. Magesh Nandgopal from the NCL. While it is one of the most economically beneficial plastics, most of the people are not aware about the recyclable benefits of PET. Recycling PET bottles can be reused as filling material for mattresses or pillows or as converted fabrics for the use in clothing – in fact the entire Indian cricket team's apparel for the 2015 world cup was made from recycled PET bottles and even their current jersey is made from this material.

Increasing environmental concerns in India over waste management is motivating the Packaging Industry to invest in R&D for alternatives. Food giant Nestle India, is looking to collaborate with Indian start-ups to make alternatives to PET bottles for packaged drinking water. Their goal is to incorporate more recycled plastics and / or bioplastics made from renewable materials into their packaging. Petainer Innopac Packaging, a joint venture in India between Petainer UK Holdings Ltd and Innopac Containers Pvt Ltd is a manufacturer of premium, high performance and sustainable PET / plastics packaging solutions. Their R&D is focused on proprietary innovation with an aim to develop game

changing PET / plastic packaging solutions while reducing the carbon footprint from environment and at a reduced cost. Unilever's Indian subsidiary Hindustan Unilever has implemented innovative packaging ways with use of lighter, stronger and better materials that have a lower environmental impact. Unilever's Indian subsidiary Unilever's Indian subsidiary Hindustan Unilever said in 2015, it implemented innovative ways of reducing the resources used for packaging by focusing on using lighter, stronger and better materials that have a lower environmental impact. Unilever's Indian subsidiary claims to move to 100% recyclable plastic packaging by 2025 globally.

Experts in the field of packaging in India are stressing on the need for recyclable plastics — which accounts for 55% of the Packaging Industry. Driven by low cost labour, an increasing trend of using eco-friendly or recyclable materials in packaging and a large consumer market this sector opens opportunities to foreign companies in the Indian retail and technology sectors. India's increased focus on innovative technologies will provide boost not only to Packaging Industry but also affects other inter-related sectors like the Construction Industry, the Chemical Industry or the Food Processing Sector.

Source www.maiervidorno.com



Living with Plastics



What is relevant: plastic ban or proper waste management?

By Professor D. D. Kale

B.Tech.(Chem. Engg), M.Chem. Engg., Ph.D. (Chem. Engg) Former Head of Plastics/PPV Technology Division & Professor of Polymer Technology

Introduction

In Plastics Waste Management (PWM) 2016 Rules, only the carry bags below 50 micron thickness are banned. Although plastic waste management rules 2016 foster the Extended Producers Responsibility, EPR, there are no clear guide lines for the implementation of EPR. Most states have been banning many items made of plastics under the garbage control act. However, waste management remains missing in all these bans.

Recently, UNEP published a report and there is a lot of talk about single use plastics and possible ban. The 'products' mentioned in UNEP report are broad category as plastics in packaging and cutlery which are disposable plastics. In Europe, plastic bottles for beverages are found littering the oceans. In India, however, the bottles are recycled in numbers which are unbelievable. It is therefore, necessary, that we understand the problem of recycling and waste management from a different perspective.

Waste is of two types: Bio degradable and non bio

degradable. Plastics, metals, glass and to some extent even paper are non bio degradable types of wastes. It is the non bio degradable nature of plastics which has become a major issue. We attempt to dispose the non bio degradable packing material in the same way as the degradable packing is disposed off traditionally.

Background of waste problems:

India could be the first country where commercial recycling of plastics began. It was out of economic reasons rather than environmental or ecological reasons. Used plastic can be melted and granulated for reuse by extrusion or injection molding etc. In late 70s and early 80s the acute shortage of plastic material made mechanical recycling of used plastics as a profitable business. The generation of agencies comprising rag pickers was the outcome of the situation. The waste was collected or still is being collected by the rag pickers, but not due to ecological reasons. Plastics predominantly belonging to a homo polymer (a plastic such as polyethylene, polypropylene or poly styrene etc) gets collected by the rag pickers.

Over the years, the type of packaging has changed. More and more multilayered packaging consisting of different plastics have been developed so as to enhance the shelf life of packaged food. The structure of multi layered plastic is not suitable for the mechanical recycling as the different plastics are not compatible. Due to lack of economic incentives, the multilayered packing is not collected by the rag pickers. Similarly, foamed cups and bowls etc are used to serve small portion of beverages such as tea/ coffee or food items such as ketchup etc. The littered cups or bowls at the roadside vendors or at public places such as railway stations or bus stops etc are also not picked up by the rag pickers as these are contaminated with remnant



food and are very low in weight. Although these are totally recyclable, these are not collected by the rag pickers.

It is believed that more than 60 % of plastic waste is being recycled in India. There are recycling hubs outside almost every major city in India as shown by the survey conducted by the CPCB. However, recycling is predominantly mechanical involving melting and granulating products made from homo polymers.

There have been very little scientific inputs in the recycling industry. Today however, times have changed and non-scientific methods can no longer do justice to the mounting amounts of plastic wastes.

Segregation of waste is essential in the context of circular economy:

Households discard every packaging material be it plastics, glass or metallic containers into the garbage bins. These get mixed with other household waste. The rag pickers at some point, pick what is economically attractive to them. The rest gets accumulated in the dump yard. The plastic being non bio degradable, gets accumulated in landfills or dumping grounds over the years. The light weight plastic items can fly away and create an eye soar. These can leak into the water ways and eventually into oceans.

Many countries have spent 10 years to create awareness amongst the citizens for segregation at source. A country like Taiwan has advocated a 15 year program and achieved a success up to 85 % segregation. The plastic waste is a resource material in the context of circular economy. No country can afford to waste such resources. The alternatives for chemical recycling or manufacturing of liquid or gaseous fuel using a well designed plant is a need of the hour.

The policy of banning the plastic items appears to be on the basis of efficiency or the willingness of rag pickers to collect and recycle the plastic waste items. We need to think why the environment is cleaner in the advanced countries although the rag pickers do not exist there and also there are no bans as in India.

Method of tackling the plastic waste problem:

One has to take a rational view of plastic waste management. The plastic waste issue is divided into two parts: collection and segregation. Following method could be considered.

 Urban local bodies (municipal corporations, nagar parishads or grampachayats etc) will organize the collection of segregated waste. The task of collecting the segregated non bio degradable

- waste (plastic, glass and metals etc.) can be out sourced if necessary. The outsourcing can be by tender system. These agencies should work with concerned local bodies
- 2) The plastic waste being voluminous, segregated waste from few wards of big cities can be segregated further at a place designated by ULBs. In small villages, the segregation can be carried out on some designated site.
- 3) The segregated waste of plastic, metals, glass or paper etc will be sold to the recyclers by the ULBs. The selling would also be by a tender system.
- 4) The plastic waste remaining behind can be compacted and incinerated for power generation, or fuel manufacturing. This also can be outsourced. The power generated can be fed to the local power supply grid. (In Japan, more than 70% of waste is incinerated for power generation)
- 5) The outsourcing of waste collection, selling, compacting etc to be by tender system. The collection and segregation will cost while selling of waste as well as generation of power will earn money. The difference in these two is the net cost of waste management.
- 6) The total cost of waste treatment across the state can be calculated.
- 7) The net cost will be collected from the relevant industry (plastic, glass, metal and paper etc) as EPR or advance tax for environment.
- 8) Method of collecting tax, if any, can be decided by discussing the issues with concerned stake holders.
- 9) The degradable organic waste from household also has a potential for generating power as is practiced in Singapore and Sweden.
- 10) The wastes of all non bio degradable wastes plastics, glass, metals, paper etc will be treated on par in this way.
- 11) Water recycling can be considered as a separate issue.

Additional points to consider:

Government could create a small body, PWM cell, consisting of ULB representatives, MPCB authorities, NGOs, industry representatives and technical subject experts on monitoring the waste management. A target for next 5 years should be set. This will assist civil authorities to monitor the waste management.

Conclusions:

The waste of all types - degradable and non-degradable needs to be considered as resource material. A well designed waste management program has to be defined in a scientific way as a time bound program. ULBs have to take a lead and make the 'Swach Bharat Mission' successful through circular economy.

Bengaluru NGO gives Plastics waste a New Life

In the meantime, Bengaluru based NGO Swachha has come up with a solution that can convert discarded plastic waste and convert it into tiles and irrigation pipes.

In association with the BBMP, Swachha has developed what they are calling 'Re-Tile'—tiles which customers can use on pavements, as wall cladding tiles, apartment walkways and swimming pools because of their light weight. This is a project by the Eco Solutions arm of the non-profit.

Using the discarded plastics that go into the manufacturing of these tiles are shampoo bottles, cleaners, disposable restaurant containers, milk covers and water bottles. Swachha Re-Tile recycled floor tiles are made of recycled Polypropylene (PP) materials and utilise a unique interlocking edge design to eliminate the need for adhesives, making installation quick and inexpensive. These tiles are non-porous, flexible, durable and are resistant to most solvents, chemicals and abrasions, and simple to maintain, reconfigure or remove. Moreover, the tiles also have rainwater harvesting capabilities, are water-proof, anti-microbial, chemical and stainresistant, heat resistant up to 150 degrees Celsius, fire retardant, and can carry loads up to 35 tonnes, and most importantly, are recyclable.

Source: www.thebetterindia.com



This new system could change how we recycle

With so many issues surrounding plastic recycling in the U.S., technology company IBM is hard at work on an innovation that just may change the face of plastic recycling as we know it. The company's new device can powerfully break down materials that are often difficult to recycle — here's everything we know about the technology so far.

As reported by Fast Company, Silicon Valley-based IBM developers recently invented a pressure reactor that uses a new recycling method, called VolCat. The device has the ability to break down fabric made of a cotton and polyester blend. The machine will separate the two materials, spinning the natural cotton fibers into a ball, and breaking down the polyester into a powder. The machine also recycles dirty hard plastics (from bottles to containers), by breaking the items down into powder that can be used to make new plastic products. And according to a video that IBM shared on YouTube, the machine will not require any sorting or washing at all. Not to mention, VolCat will even be able to process items that are typically very hard to recycle, including clothing, carpets, toys, buckets, and more.

IBM shared more information about the VolCat (short for volatile catalyst) recycling process in a blog post on its website. "In five years, the disposal of trash and the creation of new plastics will be completely transformed. Everything from milk cartons to cookie containers to grocery bags and cheese cloths will be recyclable and polyester manufacturing companies will be able to take in refuse and turn it into something useful," the post read. "This transition will be powered by innovations like VolCat, a catalytic chemical process that digests certain plastics (called polyesters) into a substance that can be fed directly back into plastic manufacturing machines in order to make new products."

Bob Allen, IBM Research's senior manager of chemistry and materials, sent Green Matters a statement via email, explaining how the VolCat process works. "Plastic bottles, containers, and PET-based fabrics are collected, ground up, and combined with a chemical catalyst in a pressure cooker set to above 200 degrees Celsius," he explains in a statement sent to Green Matters. "With heat and a small amount of pressure, the catalyst is able to digest and clean the ground-up plastic, and the process separates contaminants (e.g., food residue, glue, dirt, dyes, and pigments) from material that is useable for new PET. The useable

matter (called a monomer) takes the form of a white powder, which can be fed directly into a polyester reactor to make brand new plastics."

Source: www.weforum.org

These former IT professionals are turning plastic waste into fashionable home decor and bags

Pune-based Aarohana Ecosocial, founded in 2013 by Amita Deshpande and Nandan Bhat, is attempting to solve India's plastic waste problem while providing steady livelihoods to tribal villagers.

Over 60 percent of India's plastic waste goes for recycling, according to the Central Pollution Control Board. Across the country, high-value plastic waste such as shampoo bottles and PET water bottles are collected by rag pickers and sold to recycling companies for a tidy sum. The problem remains in the form of smaller plastics - thin carry bags and wrappers - often left to accumulate on roadsides, in landfills and garbage dumps, as they are perceived as not worth the effort.

To address this problem, Pune-based Aarohana Ecosocial is turning plastic waste management into an art form by upcycling non-biodegradable and non-recyclable plastic into fabric. The company's artisans and workers spin the plastic fabric using handlooms and traditional charkhas and make handbags, accessories, and home decor products. Most importantly, Aarohana's project provides jobs and a steady income to over 30 tribal women and youths.

Aarohana did not start off weaving plastic. In fact, for the first two years, the duo travelled around India, learning about the value of different forms of plastic. They also saw that people in rural India were lacking employment options outside agriculture, compared with the number of odd jobs mushrooming in cities and towns.

The co-founders decided to make two points their focus when setting up Aarohana's plastic weaving in 2015. Unlike most companies, Aarohana takes pride in their manual labour and lack of technology and automation in manufacturing. The founders went to rural areas, and taught villagers the art of handweaving - an impressive feat, considering it is a craft that usually takes years of experience to master.

The duo set up a weaving unit in a tribal village in Dadra and Nagar Haveli, employing about 13 people. The employees, mostly tribal women, live next door to the facility, and are all paid between Rs 6,000 and Rs 15,000 a month - a fixed amount that isn't tied to the amount of work they do.

The social enterprise has tied up with NGOs who collect waste to source its bags. Waste plastic bags are first cleaned and sundried. These are then manually cut into strips and rolled on a traditional charkha. Aarohana's unique designs are also dependent on whatever waste is available.

Finally, a handloom is used to weave the plastic yarn into cloth. Once the plastic is spun and woven, it is sent to its Pune workshop, where product design and production happens. The cloth is stitched into various items including totes, cushion covers, and table mats. About 50 small plastic carry bags go into one Aarohana beach bag, and the founders estimate they have salvaged over 776,500 bags since August 2015.

The bulk of their sales comes from retail as well as exhibitions. Aarohana has received numerous corporate orders from companies such as TEDEx Kuwait and L'Oréal. In 2018, it sold about 10,000 products. Currently bootstrapped, Aarohana made sales worth Rs 14 lakh in its first year, and is netting Rs 51 lakh a year. It expects to double its sales in 2019, helped by international expansion plans and yet, has never taken any donations or investments.

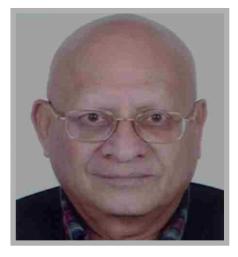
Source: yourstory.com



Picture courtesy: Aarohana

I'm kidding....Seriously

The **E**in Exports



By Manoj Agarwal

"Laughter is Americas most important Export."

So said Walt Disney.

I am quite sure for India it is not. We are a serious country. We are also serious about our exports. AS a nation our propensity not to take humour lightly has shaped our national ethos. It was the eighties when some brave men and women ventured out carrying samples and bundles of brochures being welcomed if at all with a pinch of salt. No one believed that we could export anything more than Jute fabric, Iron Ore and of course our wonderful handicrafts. If this sounds funny ask around. The eighties also defined how India evolved into a nation. Cement was partially decontrolled by Indira Gandhi in 1982 followed by her assassination in 1984 bringing to power with an unprecedented majority a young Pilot who masterminded the telecom revolution and of course Kapil Dev won the world cup for India in 1983.

So, what else changed? As a young nation almost 70 years ago we had a challenging task ahead of us. Most importantly we had to find an identity for ourselves. Nowhere is this more visible than in the countless sermons and comparisons that are made with what has happened in China. Nobody seems to remember that off the two nations that were born on almost the same day in 1947 one of them has outperformed the other on almost every economic parameter that you can think off several times over. With the Dollar having crossed the PkRs 150 mark maybe it's a good time to cross over and start a new business out there! As a nation we have forgotten to take pride in what we do and who we are. That has resulted in Indians always being defensive when going into global markets. If there is a success

story that we need to look at then it is Japan and not China. Japan with almost no natural resources and no technology, defeated in the war and a proud Imperial nation brought to its knees has shown what perseverance can do.

The Japanese created within themselves this identity which is still elusive for us and this is what will govern in the decades ahead the direction of our exports both in terms of quality and quantity.

The last 30 odd years have seen some remarkable changes in our lives. Economic reforms and a paradigm shift in technology led to higher production which in turn led to higher consumption. Gone are the shackles of a restrictive economy where you could not buy a Scooter off the shelf and had to pay three times the list price for a bag of cement or even polymer for that matter. More production led to larger capacities which in turn led to surpluses which had to be sold thus forcing us to step out into the Big dark world of Exports. For many of us that was a game changer. As we begin to capture our lost glory in the Global markets it would be interesting to look at history for a while. In his world renowned treatise "The World Economy" - a Historical perspective: Angus Maddison shows how India governed almost 33% of the global trade at the start of the AD era over 2000 years ago and examines how we lost our pre-eminence struggling to retain a fraction of that figure now. WE have a long way to go before we regain that lost glory and the journey will begin now.

WE are still well away before we can think of exporting laughter!

Manoj Agarwal, Managing Director of Kanpur Plastipack Ltd is an industry expert with over 40 years of experience. A past Chairman and currently serving as a COA member of Plexconcil he is actively associated with a number of professional and trade bodies. He holds a Master's Degree in Management Studies from the Birla Institute of Technology and Science (BITS) Pilani.

Plastics Exports Industry



The Indian Plastic industry makes significant contribution to the economic development with the growth of various key sectors in the country such as automotive, construction, electronics, healthcare, textiles, FMCG, and more. Novel technologies and rise in usage of polymers in new areas of applications have spurred the growth of plastic manufacturing sector opening greater opportunities for accelerated growth at a global level.

The first of a multi-part series, this section aims to highlight how becoming an exporter of Indian manufactured Plastics offers immense growth potential at an international level. In subsequent editions, we will delve deeper into individual aspects of the business, exploring the intricacies of the trade for the benefit of not just existing domestic players but new entrants as well.

A Stellar Export Performance

Plastics formed 3.33 percent of India's overall merchandise exports during 2018-19 demonstrating a significant growth of 24.1 percent at \$10.98 billion during the period 2018-19 as against \$8.85 billion in 2017-18. This highlights the faster pace of growth as compared to the overall merchandise export growth from India.

Plastics Exports Top Destinations

China, United States, and the United Arab Emirates continue to be top-3 destinations for India's plastics products accounting for 29.4 percent of India's plastics product exports, by value. Inclusion of new destination countries such as Guam, Mayotte, Monaco, Montserrat, Nauru Republic, Palau and Palestine helped the plastics export segment in 2018-19.

Government Initiatives to boost Plastics Export

Geared to take up the challenges of quantitative and qualitative growth, and with the introduction of numerous Government schemes and initiatives, today, the Indian Plastics exports has emerged as one of the fastest growing global sourcing hubs given, both, its sheer size and growing demand worldwide.

a. MEIS - Merchandise Exports from India Scheme

Merchandise Exports from India Scheme (MEIS) is a scheme meant to offset infrastructural inefficiencies and associated costs involved in export of goods/products, that are produced/manufactured in India, and have especially high export intensity, employment potential to enhance India's export competitiveness. Under this scheme, exports of notified goods/ products to notified markets as listed in Handbook of Procedures, are granted freely transferable duty credit scrips on realized FOB value of exports in free foreign exchange.

b. EPCG - Export Promotion Capital Goods Scheme

Export Promotion Capital Goods (EPCG) Scheme facilitates import of capital goods for the production quality goods and services that improve India's export competitiveness. EPCG scheme allows for import of capital goods used in pre-production, production and post-production at zero customs duty.

c. AA - Advance Authorization

Under this scheme, duty free import of inputs are allowed only if these are physically incorporated in the export product (after making normal allowance for wastage) with minimum 15% value addition.

d. Duty Free Import Authorization (DFIA) Scheme

Plastics Exports Industry

Duty Free Import Authorisation is issued to allow duty free import of inputs. In addition, import of oil and catalyst which is consumed / utilised in the process of production of export product, may also be allowed. It has an enabling provision for transferability of authorization or materials imported against it. DFIA can be applied and obtained on post export basis as well. It is popular with exporters who export first and then obtain the Authorization, which can be sold freely.

e. Status Holder Scheme

Upon achieving prescribed export performance, status recognition as one star Export House, two Star Export House, three star export house, four star export house and five star export house is accorded to the eligible applicants as per their export performance. Such Status Holders are eligible for various non-fiscal privileges as prescribed in the Foreign Trade Policy.

f. Interest Equalisation Scheme

Interest Equalisation Scheme (earlier known as Interest Subvention Scheme) on Pre & Post Shipment Rupee Export Credit is given to the exporter.

g. Duty Drawback Scheme

Under GST, the duty drawback is made available for the customs duty paid on imported inputs or central excise paid on certain petroleum or tobacco products used as inputs or fuel for captive power generation.

The future holds bright

With growing demand for Indian manufactured Plastics internationally, and given the industry's expanding capacity, infrastructure, and skilled manpower as well as the availability of raw materials in the country, the plastics manufacturing and export segment today is well placed to reduce dependency on imports and become a leading global hub by offering international markets true value in terms of quality, cost and globally standardized products.

Why become an Exporter of Plastics?

- Plastics exports is a USD 1 trillion opportunity.
- With plastics exports of USD 11 billion (as under the preview of Plexconcil), India has just 1.1% share in the global export market demonstrating immense opportunities for growth.
- India is targeting a 3% share in the global export market. The export of Plastics from India is expected to more than double to \$25 billion in the next 5 years.
- Exports can fetch superior price than domestic.
- The scale of global orders means complete utilization of production units.
- Ease of doing Business module in the country and digitization resulting in reduced paperwork for Exporters.
- Issue of IEC (Importer Exporter Code) by DGFT takes just One day
- Active Government support through various schemes to boost exports and promote Indian exporters globally

Industrial Entrepreneurs Memorandum

It has been witnessed that an estimated 15% of the total number of IEMs signed in the Plastics segment from April 2018 to March 2019 has been in the Woven Sacks and Bags category indicating increased demand for the product.

IEMs signed in the Plastics segment during March 2019

IEM No.	Company Name	State	Item of manufacture
492	Granula Masterbatches India Private Limited	Gujarat	Masterbatches
552	Uma Converter Limited	Gujarat	Plastic packaging
513	Satyendra FIBC Private Limited	Gujarat	FIBC (Jumbo bags)
510	Micropet Containers Inc	Himachal Pradesh	PET/HDPE bottles
547	Macpro Technologies Private Limited	Karnataka	Plastic moulded parts
468	Vacmet India Limited	Madhya Pradesh	BOPP films
549	Vindhya Telelinks Limited	Madhya Pradesh	Plastic rods of FRP
443	Mahindra CIE Automotive Limited	Maharashtra	Industrial accessories of plastics
578	Toyoda Gosei Minda Limited	Rajasthan	Other plastics items
514	Poddar Pigments Limited	Rajasthan	Masterbatches
482	Nifco South India Manufacturing Private Limited	Tamil Nadu	Other plastics items
470	V K Packwell Private Limited	Uttar Pradesh	HDPE tape and thread
516	Nandan Poly Fibers Private Limited	Chhattisgarh	PET flakes
524	Abdos Lamitubes Private Limited	Uttarakhand	Plastic laminated tubes

Source: Ministry of Commerce & Industry, Government of India



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3) Foam Compounds

HRC-FC-01

HRC-UFC-01 (Unbrakable Foam)

HRC-MFC-01 (Micro Foam Cell Structures)







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Why Be 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



INDIAN INNOVATION, GLOBAL RECOGNITION

Proud to announce that we are the only brand in Asia to win "Kodak Global Flexo Innovation Awards 2019" for providing superior print quality and commitment to sustainability.



Manufacturer of 5 layer Flexible Packaging Films 8 color CI Flexo Printing & Pouching Complete Flexible Packaging Solution

Pentaflex Films LLP

Plot 1, Rajendra Estate, Opp. Tata Arvind Housing, Vadsar - 382721, Ahmedabad, Gujarat, India info@pentaflexfilms.com | www.pentaflexfilms.com

onn.com

Why Be a Plexconcil Member?

A warm welcome to our new members

S. No.	Company Name	Communication Address	Director	Email
1	Aerolem Decoratives LLP	701, Shilp Aperia, Iscon Ambali Road, Bodakdev, Ahmedabad, Gujarat	Dhaval Patel	phmistry72@gmail.com
2	Aon Textiles (P) Ltd	321, 3 rd Floor, Rafeal Tower, 8/2, Old Palasia, Indore, Madhya Pradesh	Anant Agarwal	v.verma@tirupatibalajee.com
3	Aquent Advance Material Technologies (P) Ltd	607, Universal Majestic, Ghatkopar Mankhurd Link Road, Chembur West, Mumbai, Maharashtra	Vishal Mehta	vaibhav@aquent.in
4	Aypols Polymers (P) Ltd	211-212, Ravindranath Layout, Coimbatore, Tamil Nadu	D Krishnakumar	krishnaaypolsp@gmail.com
5	Bulkliner Logistics (P) Ltd	No 45/163 Anjumuri Ponnurunni, Thammanam, Ernakulam, Kerala	Suresh Nagappan Achary Puthenveettil	info@bulkliner.in
6	Correx Polymers LLP	S. No. 217/P1/P3/P1, Maliya Road, Sarvad Tal. Maliya, Morbi, Gujarat	Anil Mehta	correxpolymers@gmail.com
7	Dabs Packaging (P) Ltd	Survey No.276/P1 13, Plot No.94, Damanganga Industrial Park, Dungri Falia, Vapi, Gujarat	Bimalkumar Naik	vimalnaik1177@gmail.com
8	Engineering Exports	5-1-595/2, Syed Jung Lane, Troop Bazar, Hyderabad, Telangana	Mohammed Nayeemuddin	enggexports54@gmail.com
9	Epsilon International	Kazisaha, Near Juma Masjid, Murshidabad, West Bengal	Mohammed Abdul Akher	epsilonhairexporters@gmail.com
10	Evergreen Industries	14, Sidco Industrial Estate, Dindigul, Tamil Nadu	Thulasiram Rajendran	kittus2001@gmail.com
11	Flair Distributor (P) Ltd	63, B C Government Industrial Estate, Charkop,	Vimalchand Rathod	exports@flairpens.com
12	Glory Hair Exports	Kandivali West, Mumbai, Maharashtra Kazisaha, Murshidabad, Baharampur, West Bengal	Asmatara Bibi	gloryindiahair@gmail.com
	Golden Enterprise	Bhagwanpur, Purba Medinipur, Medinipur East,	Asik Ikbal Mallick	ikbalmallick109@gmail.com
13		Contai, West Bengal 616 City Centre, 19 Synagogue Street, Kolkata,	Vikin Goyel	blgoyel@goyelchemical.com
14	Goyel Chemical Corporation	West Bengal 13 H B Jirawala House, El Bus Stop Usmanpura,	Bajarang Lal Goyel	
15	HCP Enterprise Limited	Ahmedabad, Gujarat Survey No.552/1/P1 Plot No.1/2 Rajkot,	Chetankumar Parekh	dgftho@champalalgroup.com
16	Idol Plasto (P) Ltd	Ahmedabad Highway, NH No. 8-B, Kuvadava, Guj. Dharma Siddhi Estate, Virpar, Morbi-Rajkot	Bhagvanjibhai Vadodariya	info@idolpipe.com
17	J P Ropes & Twines	Highway, Gujarat SF No 172/B-3, Amutha Nagar, NH-7, Semmadai,	Rupeshkumar Ghodasara	jpropesntwines@gmail.com
18	J P Knits	Manmangalam, Karur, Tamil Nadu	M Saraswathi	accounts@peetex.net
19	Jesons Industries Ltd	904, Peninsula Tower 1 Ganpatrao Kadam Marg, Lower Parel West, Mumbai, Maharashtra	Dhiresh Gosalia	ajay.raul@jesons.net
20	M S Packaging LLP	Survey No. 929, Old Survey No.615/5, Dholka-Bavla Road, Bavla, Ahmedabad, Gujarat	Mukesh Halani	mspackagingllp@gmail.com
21	Mathews International	13/386, Chungakkunnu P.O., Kottiyoor, Kannur, Kerala	Shan Mathew	mathewsinternational2019@gmail.com
22	MCS Systems India LLP	21, Milan Estate Shantej, Vadasar Road, Kalol, Gujarat	Nirajbhai Shah	nirajshah.mcs@gmail.com
23	Nagarjuna Tubes	Office No. 31, Samsung Plaza, Marble Market, Jammu, Jammu & Kashmir	Sandeep Kumar	nagarjunatubes01@gmail.com
24	Nagreeka Indcon Products (P) Ltd	6 th Floor, 18, R.N. Mukherjee Road, Kolkata, West Bengal	Rajpal Udaysingh Tomar Satish Patwari	sragm@nagreeka.com
25	Nikita Plastic Industries	Plot No 21, Bhilad Laghu Audhyogik, Shahkari Mandali Ltd, Sarigam, Gujarat	Gulab Chand Baid	nikitaplasticind@gmail.com
26	Pep-Cee Pack Industries	A/16, Bhanupark, 2 nd Floor, Kasturba Road, Near Cine Star Cinema, Kandivali West, Mumbai,MH	Bhupat Shah	manishmehta@pepceepack.com
27	Pet Equipment Resales (P) Ltd	Office No. 502, 5 th Floor, Topiwala Centre, Near Station Goregaon West, Mumbai, Maharashtra	Swagata Mody	shurid.mody@petform.net
28	Polycromax Compounds	Plot No.460 & 471, Manjusar GIDC Estate, Village Zumkal, Taluka Savli, Gujarat	Devang Sheth	devang@polycromax.com
29	S K Trading	Plot No. A/12, Patel Industrial CHS, Opp. Anath Ashram, Bamba Wadi, Katargam, Surat, Gujarat	Suresh Manpara	jenil@acropackaging.com
30	Sachin Industries Ltd	Sachin House, Plot No 77-4, F-Road, Phase-1, GIDC Vatva, Ahmedabad, Gujarat	Kantilal Patel	kdpatel@sachininternational.com
31	Shayna Polymers LLP	Survey No. 1010 P 19 At. Bagathala, Morbi, Gujarat	Jigar Varmora	info@shaynapolymers.com
32	Sita Medical Industries	Plot No. 84, New Sidco Industrial Estate, Srinagar,	Balamanimehalai	accounts@freedomophthalmic.com
33	Sri Jagannath Enterprise	Hosur, Tamil Nadu 48B Sri Aurobindo Sarani, Kolkata, West Bengal	Sambhu Nath Sarkar	palash19@gmail.com
34	Standard Packaging	SY No.168/65, Dabhel Indl. Co-op. Society, Dabhel,	Palash Sarkar Deraiya Munaf Noormahamad	standardpckaging2016@gmail.com
35	Sterile World Technologies LLP	Nanai Daman, Daman Flat No. 1, C-3 Wing, Samyak Arcade, Connaught	Kishor Kale	sterilewt@gmail.com
	-	Place, Aurangabad, Maharashtra 6 th Floor, Pukhraj Corporate, Flat No. 615, Navlakha		-
36	Suyash Tradex LLP	Main Road, Indore, Madhya Pradesh Block No 63, Near NH8, Village-Makhinga, Taluka-	Ronit Garg	suyashtradex@gmail.com
37	Tribhuvan Polymers (P) Ltd	Palsana, Surat, Gujarat No. 240/1, Ganesha Krupa, 18 th Cross,	Amit Singh Charan	tribhuvanpolymers@gmail.com
38	Tuflite Polymers Ltd Unique Innovative Plastics and	Sadhashivanagar, Bangalore, Karnataka Flat No 37/9, Site No 9 2 nd Pahase, NTTF Main Road,	Mukesh Shah	info@tuflite.com
39	Engineering	Bangalore, Karnataka	K Mahammad Elahi	uipengineer@gmail.com
40	Vajra Plastic Industry	22/268F, Development Area, Ernakulam, Kerala	Mathew Joseph	info@euroguardhysquare.com

Name	Neil McCracken
Company	4 Front Development
Address	PO Box 16, 16122, Nobby Beach Queensland Australia
Email	neil.mccr@yahoo.co.uk
Contact	0444545156
Enquiry	Buyer is interested in importing HDPE products used for garden and landscaping from India
•	•
Name	David Majesz
Company	Caseling Inc
Address	9 Nicklesburg Rd # 201 Monroe NY 10950
Email	david@caseling.com or yorksalesys1@gmail.com
Contact	718-913-4883
Enquiry	Buyer is interested in importing EVA hard cases (HS Code 4202.92.9700) from
•	•
Name	Carlos Siu
Name Company	Carlos Siu Primazol C.A.
Company	Primazol C.A.
Company	Primazol C.A. J-29647989-5, Av. 67 Nro 148A-99 Zona Industrial 2da Etapa, Maracaibo, Venezuela
Company Address Email	Primazol C.A. J-29647989-5, Av. 67 Nro 148A-99 Zona Industrial 2da Etapa, Maracaibo, Venezuela carlos.siu@primazol.com
Company Address Email Contact	Primazol C.A. J-29647989-5, Av. 67 Nro 148A-99 Zona Industrial 2da Etapa, Maracaibo, Venezuela carlos.siu@primazol.com 0261-7140125 / 7140128
Company Address Email Contact	Primazol C.A. J-29647989-5, Av. 67 Nro 148A-99 Zona Industrial 2da Etapa, Maracaibo, Venezuela carlos.siu@primazol.com 0261-7140125 / 7140128
Company Address Email Contact Enquiry	Primazol C.A. J-29647989-5, Av. 67 Nro 148A-99 Zona Industrial 2da Etapa, Maracaibo, Venezuela carlos.siu@primazol.com 0261-7140125 / 7140128 Buyer is interested in importing Polypropylene from India
Company Address Email Contact Enquiry Name	Primazol C.A. J-29647989-5, Av. 67 Nro 148A-99 Zona Industrial 2da Etapa, Maracaibo, Venezuela carlos.siu@primazol.com 0261-7140125 / 7140128 Buyer is interested in importing Polypropylene from India Kanaya Hassamal
Company Address Email Contact Enquiry Name Company	Primazol C.A. J-29647989-5, Av. 67 Nro 148A-99 Zona Industrial 2da Etapa, Maracaibo, Venezuela carlos.siu@primazol.com 0261-7140125 / 7140128 Buyer is interested in importing Polypropylene from India Kanaya Hassamal Bulchand Hassamal & Co. Ltd. / Mitrosh Co. Ltd.
Company Address Email Contact Enquiry Name Company Address	Primazol C.A. J-29647989-5, Av. 67 Nro 148A-99 Zona Industrial 2da Etapa, Maracaibo, Venezuela carlos.siu@primazol.com 0261-7140125 / 7140128 Buyer is interested in importing Polypropylene from India Kanaya Hassamal Bulchand Hassamal & Co. Ltd. / Mitrosh Co. Ltd. Villa Chambly, Eau Coulee, Mauritius

Name	Mauricio Olivares
Company	Vanni Maria Angelica S.A
Address	Lira 2510, San Jaoquin, Santiago Chile
Email	molivares@vannichile.cl, fzamorano@vannichile.cl
Contact	56-963000856
Enquiry	Buyer is interested in Plastic film / tape, plastic cups / bowl / bottles, garbage bags etc.
•	•
Name	David Fish
Company	CEM Corporation
Address	3100 Smith Farm Road, Matthews, NC 28104, USA
Email	david.fish@cem.com
Contact	704-821-7015 (ext. 1170)
Enquiry	Buyer is interested in importing Masterbatches from India
•	•
Name	Neil McCracken
Name Company	Neil McCracken 4 Front Development
Company	4 Front Development
Company	4 Front Development PO Box 16, 16122, Nobby Beach Queensland Australia
Company Address Email	4 Front Development PO Box 16, 16122, Nobby Beach Queensland Australia neil.mccr@yahoo.co.uk
Company Address Email Contact	4 Front Development PO Box 16, 16122, Nobby Beach Queensland Australia neil.mccr@yahoo.co.uk 0444545156
Company Address Email Contact	4 Front Development PO Box 16, 16122, Nobby Beach Queensland Australia neil.mccr@yahoo.co.uk 0444545156
Company Address Email Contact Enquiry	4 Front Development PO Box 16, 16122, Nobby Beach Queensland Australia neil.mccr@yahoo.co.uk 0444545156 Buyer is interested in importing HDPE products used for garden and landscaping from India
Company Address Email Contact Enquiry Name	4 Front Development PO Box 16, 16122, Nobby Beach Queensland Australia neil.mccr@yahoo.co.uk 0444545156 Buyer is interested in importing HDPE products used for garden and landscaping from India Ing. Ismael Ruiz Pimentel
Company Address Email Contact Enquiry Name Company	4 Front Development PO Box 16, 16122, Nobby Beach Queensland Australia neil.mccr@yahoo.co.uk 0444545156 Buyer is interested in importing HDPE products used for garden and landscaping from India Ing. Ismael Ruiz Pimentel Reciplac
Company Address Email Contact Enquiry Name Company Address	4 Front Development PO Box 16, 16122, Nobby Beach Queensland Australia neil.mccr@yahoo.co.uk 0444545156 Buyer is interested in importing HDPE products used for garden and landscaping from India Ing. Ismael Ruiz Pimentel Reciplac Profr. Juan Luna No. 90, Co. Jauja, Zacapu, Mich., Mexico

Name	Ing. Igor Rosete Solorzano
Company	Envasadora Gugar, S.A.
Address	Camino de la Toma No. 108, Tlalixtac de Cabrera, Oaxaca, Mexico
Email	irosete@envasadoragugar.com.mx
Contact	951-5032800 / 951-5032820
Enquiry	Buyer is interested in importing PP and PET from India
•	•
Name	Horacio Mazariegos
Company	Mazariegos & Asociados
Address	Watteau #72 Int. 303, Col. Sta. Maria Nonoalco, Del. Benito Juarez, c.p. 03700, Ciudad de Mexico
Email	hmazariegos@mazariegosasociados.org
Contact	521-5553498110
Enquiry	Buyer is interested in importing laminated sheet for thermoforming
•	•
Name	Carlos Flores
Name Company	Carlos Flores Grupo Come In
Company	Grupo Come In
Company	Grupo Come In Blv. Hidalgo #2534, Col. Tablas de la Virgen. León, Guanajuato. Mexico
Company Address Email	Grupo Come In Blv. Hidalgo #2534, Col. Tablas de la Virgen. León, Guanajuato. Mexico comein.contacto2@gmail.com
Company Address Email Contact	Grupo Come In Blv. Hidalgo #2534, Col. Tablas de la Virgen. León, Guanajuato. Mexico comein.contacto2@gmail.com +52 (477) 700 8281
Company Address Email Contact	Grupo Come In Blv. Hidalgo #2534, Col. Tablas de la Virgen. León, Guanajuato. Mexico comein.contacto2@gmail.com +52 (477) 700 8281
Company Address Email Contact Enquiry	Grupo Come In Blv. Hidalgo #2534, Col. Tablas de la Virgen. León, Guanajuato. Mexico comein.contacto2@gmail.com +52 (477) 700 8281 Buyer is interested in importing HDPE Melt Flow Index 20 "Food Grade" and biodegradable resin from India.
Company Address Email Contact Enquiry Name	Grupo Come In Blv. Hidalgo #2534, Col. Tablas de la Virgen. León, Guanajuato. Mexico comein.contacto2@gmail.com +52 (477) 700 8281 Buyer is interested in importing HDPE Melt Flow Index 20 "Food Grade" and biodegradable resin from India. Hector Gabriel Temprano
Company Address Email Contact Enquiry Name Company	Grupo Come In Blv. Hidalgo #2534, Col. Tablas de la Virgen. León, Guanajuato. Mexico comein.contacto2@gmail.com +52 (477) 700 8281 Buyer is interested in importing HDPE Melt Flow Index 20 "Food Grade" and biodegradable resin from India. Hector Gabriel Temprano Force Line Ind. e Com. de Comp. Eletron. Ltda.
Company Address Email Contact Enquiry Name Company Address	Grupo Come In Blv. Hidalgo #2534, Col. Tablas de la Virgen. León, Guanajuato. Mexico comein.contacto2@gmail.com +52 (477) 700 8281 Buyer is interested in importing HDPE Melt Flow Index 20 "Food Grade" and biodegradable resin from India. Hector Gabriel Temprano Force Line Ind. e Com. de Comp. Eletron. Ltda. R. Elói Cerqueira, 286 - Belém, São Paulo - SP, 03062-010

Name	lan Watson
Company	Kinesik Engineered Products Incorporated
Address	2213 North Sheridan Way, Mississauga, Ontario L5K 1A3, Canada
Email	ian@engplastics.com
Contact	+1 855-364-7763 ext. 115
Enquiry	Buyer is interested in importing compression moulds from India



Singhal Industries Private Limited

Web: www.singhalgroup.in

Block No. 1547, Behind Mukat Pipes, Khatraj-Kalol

Road, Moti Bhoyan, Gandhinagar - 382721, Gujarat, India.

SINGHAL

An ISO 9001:2008 Company

+919662509010, +919879759000

pulkit@singhalgroup.in

International Trade Events Calendar

PLEXCONCIL EVENTS

We would be facilitating Indian participation at 12 international events.

The planned events for 2019 -20 are enlisted below and have been duly approved by the Government of India for financial assistance under the MAI Scheme. Separately, the council has also planned for taking business delegation to some countries.

PLASTIMAGEN FEI PLAST	PLASTPOL	COMPLAST MYANMAR		COMPLAST SRI LANKA		K FAIR VIETNAM PLAS	COMPLAST SOUTH AFRICA	PLAST EURASIA		INTERPLASTICA	INTERNATIONAL HOME HOUSEWARE SHOW JEC WORLD CAPINDIA
April	May	June	July	August	September	October	November	December	January	February	March
2019	2019	2019	2019	2019	2019	2019	2019	2019	2020	2020	2020

Source: PLEXCONCIL

Other important industry events for Plastics (June 2019 - August 2019)

11th – 13th July, 2019	COMPLAST Kenya	Plastics
19th – 21th July, 2019	MALAYSIA PLAS 2019	Molds and plastics processing machinery
24th – 26th July, 2019	PHILAUTO 2019	Auto Spare Parts, Accessories, Service and Repair
14th – 16th, August 2019	Vietnam Manufacturing Expo 2019	Mold, die and plastics processing machinery
21th – 24th, August 2019	PLASCOM Taiwan	Plastics, Rubber and Composites

UNITED STATES OF AMERICA					
Product Category	Apr 17-Mar 18	Apr 18-Mar 19	Growth		
	USD Mn	USD Mn	%		
All types of optical items (incl optical frames, lenses, sunglasses etc)	26.91	24.09	-10.5%		
Brushes (all kinds)	9.57	11.12	16.2%		
Electrical items	2.43	3.79	56.0%		
Floorcoverings	4.23	1.25	-70.4%		
Houseware	17.70	17.72	0.1%		
Human Hair & Products thereof	14.76	16.05	8.7%		
Laminates	12.94	15.15	17.1%		
Leathercloth	30.66	56.76	85.1%		
Medical Disposables	13.47	14.43	7.1%		
Monofilaments	17.05	20.83	22.2%		
Nets (including fishnets)	4.51	4.00	-11.3%		
Other moulded and extruded items	201.21	199.88	-0.7%		
Other plastic items	22.21	30.05	35.3%		
Packaging items	129.33	156.72	21.2%		
Photo Films	0.22	0.13	-40.9%		
Pipes, tubes, hoses etc and fittings thereof	17.09	20.23	18.4%		
Plastic Raw materials	126.52	174.63	38.0%		
Plastic sheets, films, plates etc	187.76	210.70	12.2%		
Ropes, twines, cordage	10.73	13.61	26.8%		
Self-adhesive sheets/films etc	11.27	17.81	58.0%		
Stationery/Office School supplies	5.05	6.39	26.5%		
Stoppers, closures, lids etc	3.79	5.54	46.2%		
Tarpaulins	0.07	0.13	85.7%		
Travelware	3.39	10.51	210.0%		
Woven sacks/FIBCs	200.60	237.63	18.5%		
Writing Instruments	33.63	44.88	33.5%		
Grand Total	1,107.10	1,314.03	18.7%		

CHINA					
Product Category	Apr 17-Mar 18	Apr 18-Mar 19	Growth		
	USD Mn	USD Mn	%		
All types of optical items (incl optical frames, lenses, sunglasses etc)	12.39	5.12	-58.7%		
Brushes (all kinds)	0.25	0.55	120.0%		
Electrical items	0.91	1.57	72.5%		
Floorcoverings	0.11	0.03	-72.7%		
Houseware	8.39	9.32	11.1%		
Human Hair & Products thereof	157.33	147.73	-6.1%		
Laminates	0.01	0.43	4200.0%		
Leathercloth	0.27	0.35	29.6%		
Medical Disposables	0.35	0.95	171.4%		
Monofilaments	0.13	-	-100.0%		
Other moulded and extruded items	5.23	5.66	8.2%		
Other plastic items	1.72	4.16	141.9%		
Packaging items	4.92	6.09	23.8%		
Photo Films	0.03	0.09	200.0%		
Pipes, tubes, hoses etc and fittings thereof	2.40	2.16	-10.0%		
Plastic Raw materials	495.71	1,044.57	110.7%		
Plastic sheets, films, plates etc	32.00	34.11	6.6%		
Ropes, twines, cordage	0.07	0.08	14.3%		
Self-adhesive sheets/films etc	0.17	0.68	300.0%		
Stationery/Office School supplies	0.97	1.01	4.1%		
Stoppers, closures, lids etc	1.08	1.11	2.8%		
Travelware	1.14	1.68	47.4%		
Woven sacks/FIBCs	1.32	12.60	854.5%		
Writing Instruments	1.41	1.60	13.5%		
Grand Total	728.31	1,281.65	76.0%		

UNITED ARAB EMIRATES				
Product Category	Apr 17-Mar 18	Apr 18-Mar 19	Growth	
	USD Mn	USD Mn	%	
All types of optical items (incl optical frames, lenses, sunglasses etc)	12.73	23.11	81.5%	
Brushes (all kinds)	2.44	9.75	299.6%	
Electrical items	8.09	5.61	-30.7%	
Floorcoverings	7.01	4.23	-39.7%	
Houseware	18.60	19.78	6.3%	
Human Hair & Products thereof	6.18	5.68	-8.1%	
Laminates	15.78	17.71	12.2%	
Leathercloth	16.25	13.90	-14.5%	
Medical Disposables	2.09	2.60	24.4%	
Monofilaments	1.30	1.04	-20.0%	
Nets (including fishnets)	6.42	3.88	-39.6%	
Other moulded and extruded items	21.61	35.37	63.7%	
Other plastic items	2.16	4.20	94.4%	
Packaging items	36.37	33.01	-9.2%	
Photo Films	0.02	0.03	50.0%	
Pipes, tubes, hoses etc and fittings thereof	11.71	17.98	53.5%	
Plastic Raw materials	166.94	193.17	15.7%	
Plastic sheets, films, plates etc	44.16	63.26	43.3%	
Ropes, twines, cordage	9.91	8.95	-9.7%	
Self-adhesive sheets/films etc	6.68	15.09	125.9%	
Stationery/Office School supplies	0.28	6.33	2160.7%	
Stoppers, closures, lids etc	10.25	11.15	8.8%	
Tarpaulins	0.03	-	-100.0%	
Travelware	3.24	36.11	1014.5%	
Woven sacks/FIBCs	17.76	37.74	112.5%	
Writing Instruments	12.81	9.83	-23.3%	
Grand Total	440.82	579.51	31.5%	

ITALY					
Product Category	Apr 17-Mar 18	Apr 18-Mar 19	Growth		
	USD Mn	USD Mn	%		
All types of optical items (incl optical frames, lenses, sunglasses etc)	21.22	14.52	-31.6%		
Brushes (all kinds)	0.43	0.81	88.4%		
Electrical items	4.17	4.02	-3.6%		
Floorcoverings	0.49	0.41	-16.3%		
Houseware	3.41	2.87	-15.8%		
Human Hair & Products thereof	7.74	3.60	-53.5%		
Laminates	3.63	5.13	41.3%		
Leathercloth	1.13	0.39	-65.5%		
Medical Disposables	2.62	3.89	48.5%		
Monofilaments	2.20	2.39	8.6%		
Nets (including fishnets)	0.30	0.38	26.7%		
Other moulded and extruded items	6.93	6.09	-12.1%		
Other plastic items	2.83	8.60	203.9%		
Packaging items	12.06	14.35	19.0%		
Pipes, tubes, hoses etc and fittings thereof	1.47	3.24	120.4%		
Plastic Raw materials	233.39	279.31	19.7%		
Plastic sheets, films, plates etc	55.96	52.88	-5.5%		
Ropes, twines, cordage	1.15	1.01	-12.2%		
Self-adhesive sheets/films etc	1.24	1.22	-1.6%		
Stationery/Office School supplies	0.33	0.18	-45.5%		
Stoppers, closures, lids etc	0.63	0.59	-6.3%		
Travelware	0.42	0.30	-28.6%		
Woven sacks/FIBCs	39.47	44.59	13.0%		
Writing Instruments	0.72	0.64	-11.1%		
Grand Total	403.94	451.41	11.8%		

GERMANY				
Product Category	Apr 17-Mar 18	Apr 18-Mar 19	Growth	
	USD Mn	USD Mn	%	
All types of optical items (incl optical frames, lenses, sunglasses etc)	56.85	48.57	-14.6%	
Brushes (all kinds)	11.56	14.41	24.7%	
Electrical items	2.17	1.68	-22.6%	
Floorcoverings	0.39	0.24	-38.5%	
Houseware	10.87	7.66	-29.5%	
Human Hair & Products thereof	0.69	0.93	34.8%	
Laminates	3.36	5.55	65.2%	
Leathercloth	3.06	2.65	-13.4%	
Medical Disposables	6.39	6.86	7.4%	
Monofilaments	1.01	1.23	21.8%	
Nets (including fishnets)	0.13	0.13	0.0%	
Other moulded and extruded items	23.48	27.99	19.2%	
Other plastic items	7.21	10.78	49.5%	
Packaging items	27.52	24.31	-11.7%	
Photo Films	0.02	0.01	-50.0%	
Pipes, tubes, hoses etc and fittings thereof	4.47	6.25	39.8%	
Plastic Raw materials	88.17	103.43	17.3%	
Plastic sheets, films, plates etc	45.48	63.94	40.6%	
Ropes, twines, cordage	0.33	0.49	48.5%	
Self-adhesive sheets/films etc	6.32	7.20	13.9%	
Stationery/Office School supplies	2.31	1.28	-44.6%	
Stoppers, closures, lids etc	0.62	0.82	32.3%	
Tarpaulins	0.03	-	-100.0%	
Travelware	1.63	1.36	-16.6%	
Woven sacks/FIBCs	57.39	64.31	12.1%	
Writing Instruments	5.56	5.06	-9.0%	
Grand Total	367.02	407.14	10.9%	

UNITED KINGDOM				
Product Category	Apr 17-Mar 18	Apr 18-Mar 19	Growth	
	USD Mn	USD Mn	%	
All types of optical items (incl optical frames, lenses, sunglasses etc)	40.08	44.64	11.4%	
Brushes (all kinds)	3.60	3.48	-3.3%	
Electrical items	2.92	1.90	-34.9%	
Floorcoverings	0.90	0.69	-23.3%	
Houseware	14.19	14.82	4.4%	
Human Hair & Products thereof	1.48	1.35	-8.8%	
Laminates	8.59	10.19	18.6%	
Leathercloth	1.54	1.61	4.5%	
Medical Disposables	0.21	1.48	604.8%	
Monofilaments	0.63	1.21	92.1%	
Nets (including fishnets)	5.28	4.36	-17.4%	
Other moulded and extruded items	35.24	33.75	-4.2%	
Other plastic items	7.15	8.65	21.0%	
Packaging items	57.37	68.34	19.1%	
Pipes, tubes, hoses etc and fittings thereof	6.12	7.48	22.2%	
Plastic Raw materials	12.05	18.43	52.9%	
Plastic sheets, films, plates etc	40.21	48.82	21.4%	
Ropes, twines, cordage	2.47	2.19	-11.3%	
Self-adhesive sheets/films etc	2.05	3.42	66.8%	
Stationery/Office School supplies	13.51	10.16	-24.8%	
Stoppers, closures, lids etc	2.18	1.89	-13.3%	
Tarpaulins	0.41	0.28	-31.7%	
Travelware	0.66	4.14	527.3%	
Woven sacks/FIBCs	55.28	72.67	31.5%	
Writing Instruments	4.13	4.75	15.0%	
Grand Total	318.25	370.70	16.5%	

TURKEY					
Product Category	Apr 17-Mar 18	Apr 18-Mar 19	Growth		
	USD Mn	USD Mn	%		
All types of optical items (incl optical frames, lenses, sunglasses etc)	11.65	3.97	-65.9%		
Brushes (all kinds)	0.13	0.15	15.4%		
Electrical items	5.24	4.51	-13.9%		
Floorcoverings	3.99	0.56	-86.0%		
Houseware	0.01	0.03	200.0%		
Human Hair & Products thereof	0.12	0.04	-66.7%		
Laminates	0.96	0.20	-79.2%		
Medical Disposables	4.57	6.33	38.5%		
Monofilaments	1.00	0.87	-13.0%		
Nets (including fishnets)	-	0.01	NM		
Other moulded and extruded items	7.52	5.68	-24.5%		
Other plastic items	0.13	0.33	153.8%		
Packaging items	1.91	1.58	-17.3%		
Pipes, tubes, hoses etc and fittings thereof	2.32	2.44	5.2%		
Plastic Raw materials	267.48	240.05	-10.3%		
Plastic sheets, films, plates etc	18.91	10.69	-43.5%		
Ropes, twines, cordage	3.57	2.41	-32.5%		
Self-adhesive sheets/films etc	1.52	1.47	-3.3%		
Stationery/Office School supplies	0.03	-	-100.0%		
Stoppers, closures, lids etc	0.43	0.37	-14.0%		
Travelware	0.37	0.01	-97.3%		
Woven sacks/FIBCs	0.86	2.41	180.2%		
Writing Instruments	1.46	1.31	-10.3%		
Grand Total	334.18	285.42	-14.6%		

Product Category	Apr 17-Mar 18		BANGLADESH				
	Apr 17 War 10	Apr 18-Mar 19	Growth				
	USD Mn	USD Mn	%				
All types of optical items (incl optical frames, lenses, sunglasses etc)	5.76	4.97	-13.7%				
Brushes (all kinds)	0.65	0.51	-21.5%				
Electrical items	0.39	0.61	56.4%				
Floorcoverings	0.27	0.22	-18.5%				
Houseware	0.81	0.58	-28.4%				
Human Hair & Products thereof	5.33	6.48	21.6%				
Laminates	1.61	1.50	-6.8%				
Leathercloth	3.94	3.92	-0.5%				
Medical Disposables	2.48	2.21	-10.9%				
Monofilaments	0.53	0.61	15.1%				
Nets (including fishnets)	0.16	0.18	12.5%				
Other moulded and extruded items	11.99	10.68	-10.9%				
Other plastic items	0.86	1.77	105.8%				
Packaging items	4.57	7.91	73.1%				
Photo Films	0.80	1.24	55.0%				
Pipes, tubes, hoses etc and fittings thereof	1.65	2.29	38.8%				
Plastic Raw materials	168.64	221.86	31.6%				
Plastic sheets, films, plates etc	33.79	43.19	27.8%				
Ropes, twines, cordage	0.36	0.27	-25.0%				
Self-adhesive sheets/films etc	3.87	3.26	-15.8%				
Stationery/Office School supplies	0.04	0.15	275.0%				
Stoppers, closures, lids etc	0.57	1.62	184.2%				
Travelware	-	0.01	NM				
Woven sacks/FIBCs	1.79	0.74	-58.7%				
Writing Instruments	6.28	6.29	0.2%				
Grand Total	257.14	323.07	25.6%				

FRANCE				
Product Category	Apr 17-Mar 18	Apr 18-Mar 19	Growth	
	USD Mn	USD Mn	%	
All types of optical items (incl optical frames, lenses, sunglasses etc)	72.93	124.23	70.3%	
Brushes (all kinds)	0.55	0.36	-34.5%	
Electrical items	2.07	2.41	16.4%	
Floorcoverings	0.62	0.33	-46.8%	
Houseware	1.94	1.53	-21.1%	
Human Hair & Products thereof	0.83	0.68	-18.1%	
Laminates	0.65	0.86	32.3%	
Leathercloth	0.30	0.23	-23.3%	
Medical Disposables	1.66	2.74	65.1%	
Monofilaments	1.55	1.93	24.5%	
Nets (including fishnets)	0.45	0.25	-44.4%	
Other moulded and extruded items	5.80	5.73	-1.2%	
Other plastic items	1.24	1.20	-3.2%	
Packaging items	17.45	19.57	12.1%	
Pipes, tubes, hoses etc and fittings thereof	1.61	1.58	-1.9%	
Plastic Raw materials	11.53	12.12	5.1%	
Plastic sheets, films, plates etc	11.87	12.68	6.8%	
Ropes, twines, cordage	0.18	0.22	22.2%	
Self-adhesive sheets/films etc	0.10	0.11	10.0%	
Stationery/Office School supplies	0.40	0.08	-80.0%	
Stoppers, closures, lids etc	0.20	0.25	25.0%	
Travelware	0.43	0.69	60.5%	
Woven sacks/FIBCs	36.34	40.00	10.1%	
Writing Instruments	3.82	3.35	-12.3%	
Grand Total	174.52	233.13	33.6%	

NEPAL					
Product Category	Apr 17-Mar 18	Apr 18-Mar 19	Growth		
	USD Mn	USD Mn	%		
All types of optical items (incl optical frames, lenses, sunglasses etc)	2.47	3.10	25.5%		
Brushes (all kinds)	2.50	3.32	32.8%		
Electrical items	0.80	0.98	22.5%		
Floorcoverings	1.29	1.51	17.1%		
Houseware	1.95	2.53	29.7%		
Laminates	6.94	11.34	63.4%		
Leathercloth	3.10	3.87	24.8%		
Medical Disposables	1.42	1.41	-0.7%		
Monofilaments	0.24	0.48	100.0%		
Nets (including fishnets)	0.04	0.09	125.0%		
Other moulded and extruded items	10.85	8.44	-22.2%		
Other plastic items	2.34	2.96	26.5%		
Packaging items	11.38	11.83	4.0%		
Photo Films	0.06	0.14	133.3%		
Pipes, tubes, hoses etc and fittings thereof	5.58	6.65	19.2%		
Plastic Raw materials	106.25	150.59	41.7%		
Plastic sheets, films, plates etc	35.41	37.16	4.9%		
Ropes, twines, cordage	0.83	0.96	15.7%		
Self-adhesive sheets/films etc	2.25	2.63	16.9%		
Stationery/Office School supplies	0.21	0.58	176.2%		
Stoppers, closures, lids etc	4.54	4.41	-2.9%		
Tarpaulins	0.35	0.24	-31.4%		
Travelware	0.27	0.18	-33.3%		
Woven sacks/FIBCs	0.64	1.39	117.2%		
Writing Instruments	4.25	5.01	17.9%		
Grand Total	205.96	261.80	27.1%		

KENYA			
Product Category	Apr 17-Mar 18	Apr 18-Mar 19	Growth
	USD Mn	USD Mn	%
All types of optical items (incl optical frames, lenses, sunglasses etc)	2.77	4.93	78.0%
Brushes (all kinds)	0.15	0.17	13.3%
Electrical items	0.09	0.16	77.8%
Floorcoverings	3.25	2.04	-37.2%
Houseware	1.27	1.41	11.0%
Human Hair & Products thereof	0.01	0.02	100.0%
Laminates	0.53	0.42	-20.8%
Leathercloth	4.20	4.00	-4.8%
Medical Disposables	1.98	1.88	-5.1%
Monofilaments	0.05	0.05	0.0%
Nets (including fishnets)	1.90	2.85	50.0%
Other moulded and extruded items	4.46	5.53	24.0%
Other plastic items	1.13	1.39	23.0%
Packaging items	1.93	3.98	106.2%
Photo Films	0.01	0.05	400.0%
Pipes, tubes, hoses etc and fittings thereof	1.71	2.93	71.3%
Plastic Raw materials	47.42	71.73	51.3%
Plastic sheets, films, plates etc	15.48	17.13	10.7%
Ropes, twines, cordage	0.32	0.35	9.4%
Self-adhesive sheets/films etc	3.12	2.95	-5.4%
Stationery/Office School supplies	0.04	0.15	275.0%
Stoppers, closures, lids etc	5.74	5.58	-2.8%
Travelware	-	0.01	NM
Woven sacks/FIBCs	0.65	0.57	-12.3%
Writing Instruments	2.70	2.67	-1.1%
Grand Total	100.91	132.95	31.8%

VIETNAM			
Product Category	Apr 17-Mar 18	Apr 18-Mar 19	Growth
	USD Mn	USD Mn	%
All types of optical items (incl optical frames, lenses, sunglasses etc)	0.79	0.54	-31.6%
Brushes (all kinds)	0.15	0.22	46.7%
Electrical items	0.09	0.13	44.4%
Floorcoverings	0.18	0.15	-16.7%
Houseware	0.08	0.31	287.5%
Human Hair & Products thereof	4.40	5.29	20.2%
Laminates	3.92	3.69	-5.9%
Leathercloth	2.45	2.73	11.4%
Medical Disposables	1.77	2.03	14.7%
Monofilaments	1.20	0.38	-68.3%
Other moulded and extruded items	1.36	2.47	81.6%
Other plastic items	0.01	0.08	700.0%
Packaging items	2.49	3.01	20.9%
Pipes, tubes, hoses etc and fittings thereof	0.58	0.06	-89.7%
Plastic Raw materials	120.01	168.66	40.5%
Plastic sheets, films, plates etc	5.22	5.54	6.1%
Ropes, twines, cordage	0.44	0.38	-13.6%
Self-adhesive sheets/films etc	0.86	1.16	34.9%
Stationery/Office School supplies	0.01	-	-100.0%
Stoppers, closures, lids etc	1.31	1.32	0.8%
Travelware	0.20	0.48	140.0%
Woven sacks/FIBCs	0.20	0.36	80.0%
Writing Instruments	2.58	3.15	22.1%
Grand Total	150.30	202.14	34.5%

INDONESIA			
Product Category	Apr 17-Mar 18	Apr 18-Mar 19	Growth
	USD Mn	USD Mn	%
All types of optical items (incl optical frames, lenses, sunglasses etc)	0.19	0.28	47.4%
Brushes (all kinds)	6.98	7.73	10.7%
Electrical items	0.09	0.03	-66.7%
Floorcoverings	0.45	0.43	-4.4%
Houseware	0.13	0.34	161.5%
Human Hair & Products thereof	2.84	3.63	27.8%
Laminates	7.41	6.54	-11.7%
Leathercloth	0.22	0.42	90.9%
Medical Disposables	2.09	2.34	12.0%
Monofilaments	0.93	0.58	-37.6%
Nets (including fishnets)	0.32	0.25	-21.9%
Other moulded and extruded items	6.62	4.19	-36.7%
Other plastic items	0.81	0.84	3.7%
Packaging items	2.80	2.74	-2.1%
Pipes, tubes, hoses etc and fittings thereof	0.38	0.74	94.7%
Plastic Raw materials	49.62	137.05	176.2%
Plastic sheets, films, plates etc	11.13	11.61	4.3%
Ropes, twines, cordage	6.51	2.27	-65.1%
Self-adhesive sheets/films etc	0.20	0.35	75.0%
Stationery/Office School supplies	0.03	0.04	33.3%
Stoppers, closures, lids etc	1.31	1.92	46.6%
Travelware	0.15	0.67	346.7%
Woven sacks/FIBCs	0.41	0.91	122.0%
Writing Instruments	3.46	4.13	19.4%
Grand Total	105.08	190.03	80.8%

BELGIUM				
Product Category	Apr 17-Mar 18	Apr 18-Mar 19	Growth	
	USD Mn	USD Mn	%	
All types of optical items (incl optical frames, lenses, sunglasses etc)	2.18	3.20	46.8%	
Brushes (all kinds)	4.31	4.04	-6.3%	
Electrical items	0.02	0.01	-50.0%	
Floorcoverings	0.30	0.09	-70.0%	
Houseware	3.45	2.13	-38.3%	
Human Hair & Products thereof	0.81	0.73	-9.9%	
Laminates	0.89	0.94	5.6%	
Leathercloth	1.28	1.22	-4.7%	
Medical Disposables	13.15	9.77	-25.7%	
Monofilaments	3.04	3.53	16.1%	
Other moulded and extruded items	2.51	3.90	55.4%	
Other plastic items	2.98	6.61	121.8%	
Packaging items	19.33	20.84	7.8%	
Photo Films	0.15	-	-100.0%	
Pipes, tubes, hoses etc and fittings thereof	0.36	0.37	2.8%	
Plastic Raw materials	42.70	47.05	10.2%	
Plastic sheets, films, plates etc	25.62	27.87	8.8%	
Ropes, twines, cordage	0.16	0.64	300.0%	
Self-adhesive sheets/films etc	0.11	0.05	-54.5%	
Stoppers, closures, lids etc	0.19	0.35	84.2%	
Travelware	17.98	25.76	43.3%	
Woven sacks/FIBCs	26.50	29.65	11.9%	
Writing Instruments	0.12	0.11	-8.3%	
Grand Total	168.14	188.86	12.3%	

EGYPT				
Product Category	Apr 17-Mar 18	Apr 18-Mar 19	Growth	
	USD Mn	USD Mn	%	
All types of optical items (incl optical frames, lenses, sunglasses etc)	1.67	1.61	-3.6%	
Brushes (all kinds)	0.42	0.98	133.3%	
Electrical items	0.10	0.21	110.0%	
Floorcoverings	0.02	-	-100.0%	
Houseware	1.43	1.44	0.7%	
Human Hair & Products thereof	0.03	0.04	33.3%	
Laminates	2.35	4.68	99.1%	
Leathercloth	2.59	2.96	14.3%	
Medical Disposables	2.27	2.29	0.9%	
Monofilaments	0.05	0.10	100.0%	
Nets (including fishnets)	0.04	0.24	500.0%	
Other moulded and extruded items	3.15	10.84	244.1%	
Other plastic items	0.97	-	-100.0%	
Packaging items	1.52	1.97	29.6%	
Pipes, tubes, hoses etc and fittings thereof	1.57	3.04	93.6%	
Plastic Raw materials	110.63	105.64	-4.5%	
Plastic sheets, films, plates etc	10.98	19.26	75.4%	
Ropes, twines, cordage	0.01	0.02	100.0%	
Self-adhesive sheets/films etc	0.34	0.53	55.9%	
Stoppers, closures, lids etc	1.31	1.36	3.8%	
Woven sacks/FIBCs	2.02	3.84	90.1%	
Writing Instruments	2.42	2.42	0.0%	
Grand Total	145.89	163.47	12.1%	

JAPAN				
Product Category	Apr 17-Mar 18	Apr 18-Mar 19	Growth	
	USD Mn	USD Mn	%	
All types of optical items (incl optical frames, lenses, sunglasses etc)	2.47	1.99	-19.4%	
Brushes (all kinds)	0.20	0.16	-20.0%	
Electrical items	0.08	-	-100.0%	
Floorcoverings	0.08	0.05	-37.5%	
Houseware	1.52	1.24	-18.4%	
Human Hair & Products thereof	0.01	0.01	0.0%	
Leathercloth	-	0.01	NM	
Medical Disposables	0.48	0.69	43.8%	
Monofilaments	0.01	0.01	0.0%	
Other moulded and extruded items	11.44	13.31	16.3%	
Other plastic items	2.36	2.24	-5.1%	
Packaging items	3.77	4.88	29.4%	
Photo Films	0.01	-	-100.0%	
Pipes, tubes, hoses etc and fittings thereof	0.12	0.27	125.0%	
Plastic Raw materials	47.18	115.39	144.6%	
Plastic sheets, films, plates etc	1.62	2.30	42.0%	
Ropes, twines, cordage	0.15	0.14	-6.7%	
Self-adhesive sheets/films etc	1.54	2.48	61.0%	
Stationery/Office School supplies	0.35	0.35	0.0%	
Stoppers, closures, lids etc	0.01	0.07	600.0%	
Travelware	0.87	1.30	49.4%	
Woven sacks/FIBCs	0.92	0.66	-28.3%	
Writing Instruments	2.02	2.01	-0.5%	
Grand Total	77.21	149.56	93.7%	

ISRAEL			
Product Category	Apr 17-Mar 18	Apr 18-Mar 19	Growth
	USD Mn	USD Mn	%
All types of optical items (incl optical frames, lenses, sunglasses etc)	12.96	9.08	-29.9%
Brushes (all kinds)	0.03	0.03	0.0%
Electrical items	0.08	0.13	62.5%
Floorcoverings	0.08	0.16	100.0%
Houseware	0.33	0.22	-33.3%
Human Hair & Products thereof	1.13	0.98	-13.3%
Laminates	8.53	10.04	17.7%
Leathercloth	0.09	0.24	166.7%
Medical Disposables	0.52	0.29	-44.2%
Monofilaments	0.25	0.42	68.0%
Nets (including fishnets)	0.03	0.01	-66.7%
Other moulded and extruded items	1.21	1.28	5.8%
Other plastic items	0.07	0.25	257.1%
Packaging items	8.59	9.35	8.8%
Pipes, tubes, hoses etc and fittings thereof	0.23	0.27	17.4%
Plastic Raw materials	59.86	84.09	40.5%
Plastic sheets, films, plates etc	16.01	19.00	18.7%
Ropes, twines, cordage	0.15	0.17	13.3%
Self-adhesive sheets/films etc	0.04	0.04	0.0%
Stoppers, closures, lids etc	0.11	0.08	-27.3%
Travelware	-	0.03	NM
Woven sacks/FIBCs	6.91	10.95	58.5%
Writing Instruments	1.37	1.35	-1.5%
Grand Total	118.58	148.46	25.2%

NIGERIA			
Product Category	Apr 17-Mar 18	Apr 18-Mar 19	Growth
	USD Mn	USD Mn	%
All types of optical items (incl optical frames, lenses, sunglasses etc)	2.12	1.76	-17.0%
Brushes (all kinds)	0.25	0.23	-8.0%
Electrical items	0.05	0.03	-40.0%
Floorcoverings	-	0.09	NM
Houseware	15.55	17.83	14.7%
Human Hair & Products thereof	0.20	0.11	-45.0%
Laminates	0.10	0.07	-30.0%
Leathercloth	0.79	0.21	-73.4%
Medical Disposables	3.47	2.05	-40.9%
Monofilaments	0.03	0.08	166.7%
Nets (including fishnets)	0.07	0.22	214.3%
Other moulded and extruded items	10.10	2.64	-73.9%
Other plastic items	0.84	0.37	-56.0%
Packaging items	3.28	3.95	20.4%
Photo Films	0.03	0.10	233.3%
Pipes, tubes, hoses etc and fittings thereof	1.69	1.36	-19.5%
Plastic Raw materials	34.70	52.11	50.2%
Plastic sheets, films, plates etc	38.72	54.61	41.0%
Ropes, twines, cordage	0.80	0.60	-25.0%
Self-adhesive sheets/films etc	1.58	1.55	-1.9%
Stationery/Office School supplies	0.04	0.12	200.0%
Stoppers, closures, lids etc	2.16	2.72	25.9%
Tarpaulins	0.02	0.03	50.0%
Woven sacks/FIBCs	2.96	2.01	-32.1%
Writing Instruments	2.64	2.44	-7.6%
Grand Total	122.19	147.29	20.5%

SOUTH AFRICA			
Product Category	Apr 17-Mar 18	Apr 18-Mar 19	Growth
	USD Mn	USD Mn	%
All types of optical items (incl optical frames, lenses, sunglasses etc)	7.51	7.04	-6.3%
Brushes (all kinds)	0.95	1.43	50.5%
Electrical items	0.88	0.49	-44.3%
Floorcoverings	2.93	20.02	583.3%
Houseware	0.70	1.09	55.7%
Human Hair & Products thereof	0.06	0.02	-66.7%
Laminates	0.81	1.19	46.9%
Leathercloth	4.65	3.88	-16.6%
Medical Disposables	1.75	2.16	23.4%
Monofilaments	0.63	0.56	-11.1%
Nets (including fishnets)	0.16	0.26	62.5%
Other moulded and extruded items	3.14	4.97	58.3%
Other plastic items	2.47	2.35	-4.9%
Packaging items	4.91	6.11	24.4%
Pipes, tubes, hoses etc and fittings thereof	2.94	3.38	15.0%
Plastic Raw materials	15.61	11.40	-27.0%
Plastic sheets, films, plates etc	50.08	59.23	18.3%
Ropes, twines, cordage	1.24	0.99	-20.2%
Self-adhesive sheets/films etc	3.36	9.98	197.0%
Stationery/Office School supplies	0.03	0.03	0.0%
Stoppers, closures, lids etc	0.78	0.63	-19.2%
Travelware	0.27	0.19	-29.6%
Woven sacks/FIBCs	4.89	4.37	-10.6%
Writing Instruments	0.71	0.96	35.2%
Grand Total	111.46	142.73	28.1%

MEXICO				
Product Category	Apr 17-Mar 18	Apr 18-Mar 19	Growth	
	USD Mn	USD Mn	%	
All types of optical items (incl optical frames, lenses, sunglasses etc)	1.29	0.21	-83.7%	
Brushes (all kinds)	0.35	0.34	-2.9%	
Electrical items	0.35	0.56	60.0%	
Floorcoverings	0.27	0.02	-92.6%	
Houseware	0.33	0.33	0.0%	
Human Hair & Products thereof	0.05	-	-100.0%	
Laminates	6.63	7.29	10.0%	
Leathercloth	0.22	0.08	-63.6%	
Medical Disposables	2.02	2.11	4.5%	
Monofilaments	0.18	0.15	-16.7%	
Nets (including fishnets)	0.37	0.31	-16.2%	
Other moulded and extruded items	6.15	9.70	57.7%	
Other plastic items	2.68	5.08	89.6%	
Packaging items	2.62	3.32	26.7%	
Pipes, tubes, hoses etc and fittings thereof	2.77	1.99	-28.2%	
Plastic Raw materials	34.09	54.28	59.2%	
Plastic sheets, films, plates etc	29.01	45.42	56.6%	
Ropes, twines, cordage	0.80	0.40	-50.0%	
Self-adhesive sheets/films etc	0.65	0.41	-36.9%	
Stationery/Office School supplies	0.34	0.43	26.5%	
Stoppers, closures, lids etc	0.18	0.15	-16.7%	
Travelware	0.05	0.05	0.0%	
Woven sacks/FIBCs	0.93	2.20	136.6%	
Writing Instruments	5.50	5.54	0.7%	
Grand Total	97.83	140.37	43.5%	

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