



PLEXCONCIL - The Plastics Export Promotion Council

PLEXCONNECT[®]

Edition 63, December 2024



Driving the Future: Smart Plastics in India's Automotive Industry, Pg No.-13

Export Performance of October 2024, Pg No.-08

Product of the Month : Wallets, Purses and Similar articles of plastics, Pg No.-15

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As we close this eventful year, I see great promise for India's plastic exports. Over the past months, our industry has demonstrated resilience, innovation, and dedication, achieving significant milestones.

India's plastic exports reached USD 1,142 million in October 2024, a remarkable 22.5% increase from the same period last year. From April to October 2024, cumulative exports rose to USD 7.3 billion, up by 11.5%. This positions us well to surpass the USD 13 billion year-end target, a once-ambitious goal that now seems within reach.

Growth has been recorded across all product categories. Raw materials led with a 28.1% increase, reflecting India's capacity to deliver global-quality inputs. Value-added plastics, including finished goods, grew by 21.4%, driven by rising global demand for Indian expertise. Even niche items, such as human hair, saw a 13.1% growth.

India's overall merchandise exports have also shown resilience. In October 2024, merchandise exports were valued at USD 39.2 billion, up 17.3% from October 2023. For April to October 2024, total exports reached USD 252.3 billion, marking steady 3.2% growth. Plastics have played a vital role in this national performance, contributing meaningfully to the trade surplus.

Plexconcil has been instrumental in driving this growth by exploring new global markets. Promotional campaigns in Dubai, Russia, Guatemala, Mexico, and Brazil have bolstered the visibility of Indian plastic products, fostering long-term partnerships and enhancing India's reputation as an innovative and reliable supplier.

Looking ahead, PlastIndia 2026 will be a game-changer. This global platform will showcase India's advancements in plastic technology and product innovation. Preparations are underway to make this event a landmark success, attracting buyers, investors, and policymakers from around the world.

To sustain this momentum, Plexconcil is focusing on key areas: filling vacant membership slots, developing industry talent, and adopting best practices to stay competitive. These steps will strengthen our framework, enabling exporters to tackle challenges and seize opportunities in the global market.

The industry's resilience this year has been commendable. Despite initial challenges in the first quarter, the second quarter saw demand rise, supply chains stabilize, and exporters adapt effectively. This resilience has been the foundation of the double-digit growth we celebrate today.

Plexconcil's active engagement with stakeholders has been pivotal in promoting growth. Highlights include participation in IPLAS 2024 in Chennai, collaboration with ASSOCHAM, and constructive dialogues with policymakers and customs authorities to create a supportive environment for exports.

As we enter 2025, collaboration, adaptability, and innovation will be crucial for maintaining our leadership in the evolving global market. I am optimistic that India's plastics industry will not only keep pace with emerging trends but also set new benchmarks for excellence.

Let us carry forward the momentum of 2024 into 2025 with renewed determination. Together, we can elevate India's plastics industry to unprecedented heights and continue contributing meaningfully to the nation's economic growth.

Best regards,

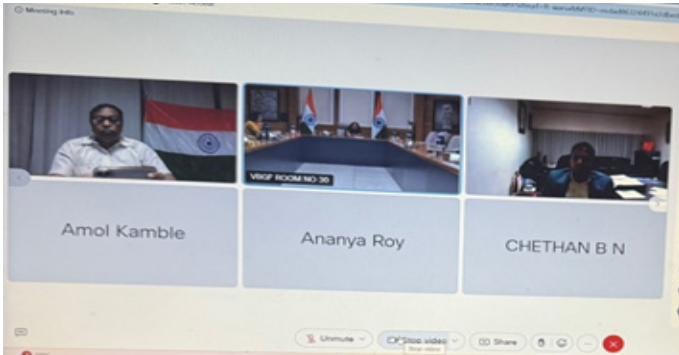
Vikram Bhaduria

Chairman, Plexconcil

ATR FOR THE MONTH – OCTOBER 2024

Stakeholder consultations for 2nd Joint Committee meeting under India-UAE CEPA - 3rd October 2024 | Eastern Region:

VC consultation Meeting organised by FT(WANA) Division of Department of Commerce, Govt. of India on Hybrid Mode. Objective of the meeting was to discuss the issues likely to be raised during the upcoming 2nd India-UAE JC meeting. Mr Nilotpall Biswas(RD-ER) joined the meeting through online mode & provided relevant inputs.



Road Show on PLEXPO INDIA, International Plastic & Packaging Exhibition - 3rd October 2024 | Eastern Region:

GSPMA organised the above Road Show in Kolkata. Ms Avantika Saraogi, Exe. Director, Balrampur Chini Mills Ltd. was the Chief Guest. Mr Alok Tibrewala, Regional Chairman(PLEXCONCIL) & Chairman, NEC-PLASTINDIA 2026, Plastindia Foundation was the Guest of Honour and addressed the gathering on the export potential of Plastics products.



Meeting with Mr Amit Sharma, Jt. DGFT, Kolkata - 4th October 2024 | Eastern Region:

President and Secretary of West Bengal Human Hair Association along with RD(East), few Member Exporters had a meeting with Jt. DGFT, Kolkata in order to discuss issues & concerns pertaining to Human Hair exports.

Consultation Meeting on Raw Human Hair Export Policy – 07th October 2024 | Southern Region:

The above VC meeting held under the chairpersonship of Mr. Rakesh Kumar, Addl DGFT, Department of Commerce to discuss the issues on Raw Human Hair Export Policy. Mr. Ruban Hobday, RD(South) along with Human Hair Exporters submitted necessary inputs during the meeting.

Participation in Executive Committee Meeting of GSPMA – 15th October 2024 | Western Region:

Gujarat State Plastic Manufacturers Association (GSPMA) organized Executive Committee meeting of committee members on Tuesday, 15th October, 2024 at GSPMA office, Ahmedabad. As a part of the committee member, Mr Naman Marjadi, Assistant Director, PLEXCONCIL- Regional Office (West) Ahmedabad was invited and attended the aforementioned meeting and shared relevant insights during the meeting.

Webinar on Strengthening Cybersecurity in Nonprofits: Safeguarding Data and Preventing Threats – 24th October 2024 | Western Region:

Webinar on Strengthening Cybersecurity in Nonprofits: Safeguarding Data and Preventing Threats was held on 24th October 2024, which was attended by Mr. Sribash Dasmohapatra, Executive Director.

Meeting with DoC on Revised RoDTEP Rates – 24th October 2024 | Western Region:

Meeting with Department of Commerce with regard to submission of Anomalies and Apparent Errors in Revised RoDTEP Rates, Mr. Sribash Dasmohapatra, Executive Director and Ms. Bharti Parve, Dy. Director attended and submitted necessary inputs.

► Council Activities

Interactive Meeting on 'Bharat Mart'- 24th October 2024 | Eastern Region:

FIEO in association with DP World organised an interactive meeting on 'Bharat Mart' in Kolkata on 24th October 2024. 'Bharat Mart' is a joint initiative of DP World, a Dubai based MNC and Ministry of Commerce and Industry, Government of India. It is being established with an aim to offer a new market and trading platform for the Indian industry and is expected to start operations in 2026. This marketplace, to be set-up in the Jebel Ali Free Zone Area (JAFZA) with facilities like showrooms, warehouse, distribution hubs etc. will not only pave the way for stronger bilateral trade relations India - UAE and the target set by the 2 nations for achieving 100 billion USD in non-oil bilateral trade but would also act as a gateway for Indian goods to reach out to UAE and other high-growth markets in Middle East, Europe, Africa. Mr Nilotpal Biswas, RD represented PLEXCONCIL at this interactive meeting.

Stakeholder consultation for issues under discussion in Intergovernmental Negotiating Committee (INC) to develop an International Legally Binding Instrument (ILBI) -25th October 2024 | Eastern Region:

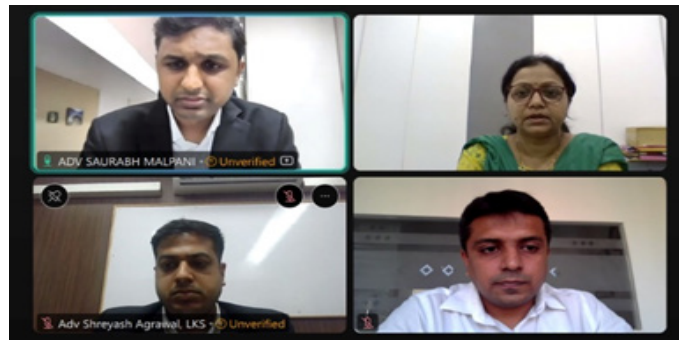
Above consultation Meeting organised by DCPC under the chairmanship of Joint Secretary (Petrochemicals), Department of Chemicals and Petrochemicals through virtual mode. Mr Nilotpal Biswas, RD(East) and Ms Bharti Parve, Dy. Director joined the meeting through online mode.

VC Stakeholders meeting to develop an International Legally Binding Instrument (ILBI) – 25th October 2024 | Western Region:

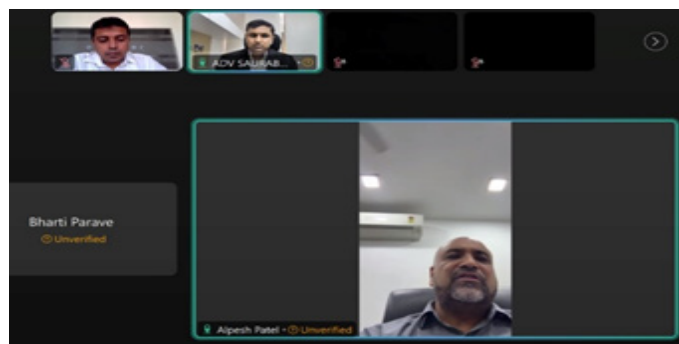
VC Stakeholders consultation meeting was held on 25th October 2024 for issues under discussion in Intergovernmental Negotiating Committee (INC) to develop an International Legally Binding Instrument (ILBI). The meeting was attended by Mr. Sribash Dasmohapatra, Executive Director and Ms. Bharti Parve, Dy. Director.

PLEXCONNECT- Webinar on Latest Amendments under GST/FTP in relation to Exports – 25th October 2024 | Western Region:

The Plastics Export Promotion Council (PLEXCONCIL), in association with Lakshmikumaran & Sridharan Attorneys (L&S) organized a webinar on Latest Amendments under GST/FTP in relation to Exports on 25th October, 2024 in virtual mode. The objective of this webinar was to share insights with participants on deletion of Rule 96(10), 89(4A) and 89(4B) and Impact on Export Refunds, import of non-BIS compliant goods under Advance Authorization and recent RoDTEP Amendment – Filing of Annual Return etc.

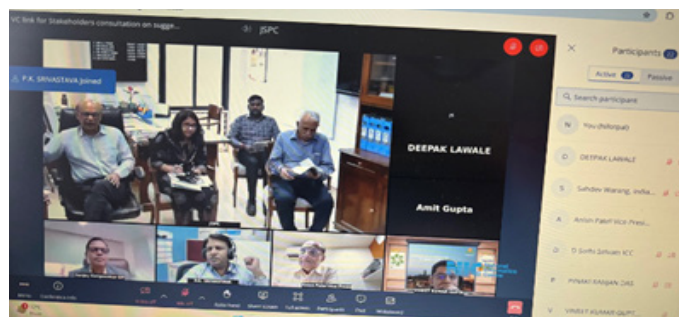


Mr Alpesh Patel, Gujarat regional Committee Chairman, Plexconcil and Director, Knack packaging Pvt Ltd gave a welcome address of the webinar. Expert Speakers of the webinar were Adv. Saurabh Malpani – Associate Partner and Adv. Shreyash Agrawal – Principal Associate from Lakshmikumaran & Sridharan Attorneys (L&S). Q & A session was moderated by Ms Bharti Parave, Deputy Director (Trade & Policy), Plexconcil. Webinar ended with vote of Thanks by Mr Naman Marjadi, Assistant Director, Plexconcil.



Stakeholders consultation on suggestions/inputs for Union Budget 2025-26 - 28th October 2024 | Eastern Region

Above consultation meeting organised by DCPC under the chairmanship of Joint Secretary (Petrochemicals), Department of Chemicals and Petrochemicals through virtual mode. Mr Nilotpal Biswas, RD(East) joined the meeting through online mode.



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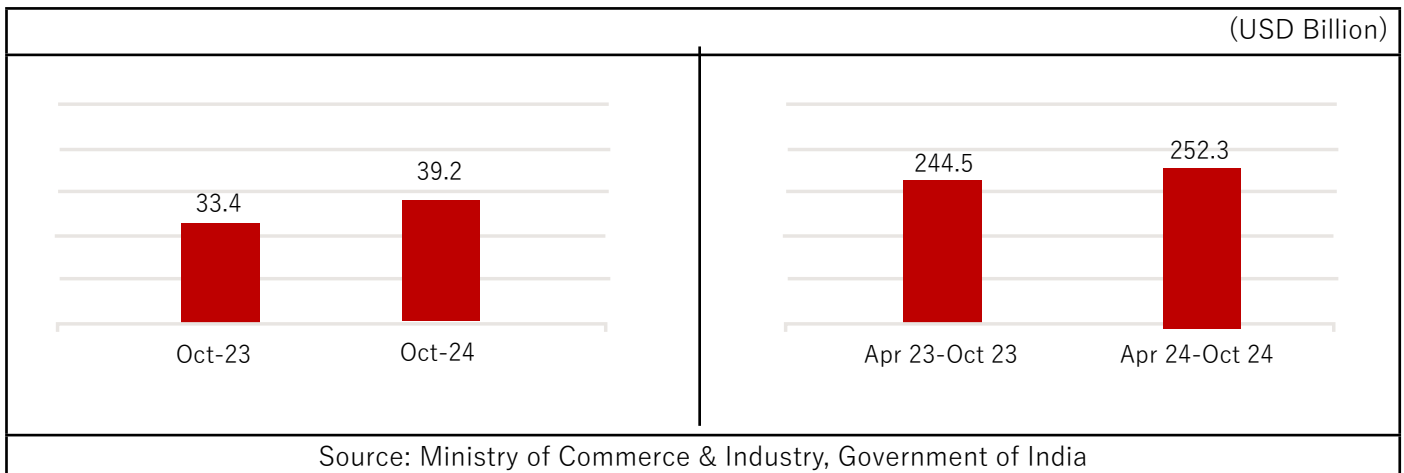


ANALYSIS OF INDIA'S PLASTICS EXPORT OCTOBER 2024

TREND IN OVERALL EXPORTS

India reported merchandise exports of USD 39.2 billion in October 2024, higher by 17.3% from USD 33.4 billion in October 2023. Cumulative value of merchandise exports during April 2024 – October 2024 was USD 252.3 billion as against USD 244.5 billion during the same period last year, reflecting a growth of 3.2%.

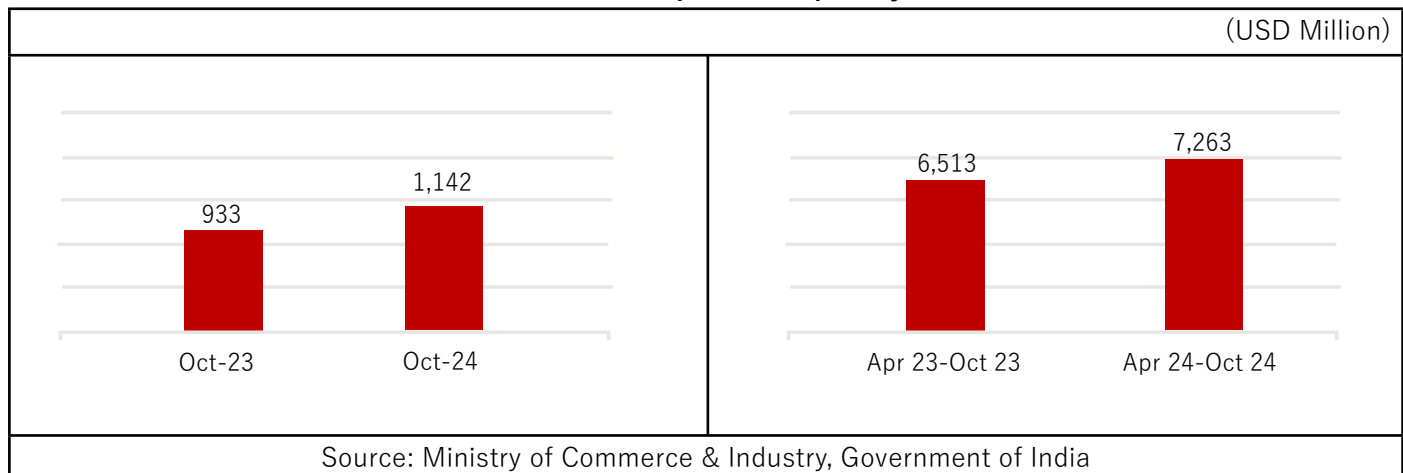
Exhibit 1: Trend in overall merchandise exports from India



TREND IN PLASTICS EXPORT

During October 2024, India exported plastics worth USD 1,142 million, higher by 22.5% from USD 933 million in October 2023. Cumulative value of plastics export during April 2024 – October 2024 was USD 7,263 million as against USD 6,513 million during the same period last year, registering an increase of 11.5%.

Exhibit 2: Trend in plastics export by India



PLASTICS EXPORT, BY PANEL

In October 2024, yet again export performance saw a substantial surge across all product categories, marking a significant milestone as it is the second time this year that every panel reported positive results, with Plastic raw materials achieving the highest surge, followed by Plastic films and sheets; FIBC, Woven sacks, Woven fabrics, Tarpaulin; Floorcoverings, leathercloth & laminates; Human hair & related products; Consumer & houseware products; Plastic pipes & fittings; Packaging items - flexible, rigid; Cordage, fishnets & monofilaments; FRP & Composites; Medical items of plastics; Writing instruments & stationery; and Miscellaneous products and items nes.

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

Panel	Oct-23	Oct-24	Growth	Apr 23-Oct-23	Apr 24-Oct-24	Growth
	(USD Mn)	(USD Mn)	(%)	(USD Mn)	(USD Mn)	(%)
Consumer & houseware products	63.0	71.4	+13.3%	429.4	449.2	+4.6%
Cordage, fishnets & monofilaments	21.7	29.5	+35.7%	149.7	178.4	+19.2%
FIBC, woven sacks, woven fabrics, & tarpaulin	116.8	149.3	+27.9%	774.5	893.6	+15.4%
Floorcoverings, leathercloth & laminates	56.7	68.0	+20.0%	399.2	446.0	+11.7%
FRP & Composites	37.2	45.0	+20.8%	264.1	312.8	+18.4%
Human hair & related products	67.7	76.6	+13.1%	415.0	428.5	+3.3%
Medical items of plastics	45.1	50.5	+12.0%	307.6	327.2	+6.4%
Miscellaneous products & items nes	48.7	61.8	+26.9%	447.6	393.2	-12.2%
Packaging items - flexible, rigid	53.8	62.0	+15.2%	360.6	398.3	+10.4%
Plastic films & sheets	145.0	177.2	+22.2%	973.7	1,198.2	+23.1%
Plastic pipes & fittings	23.8	32.2	+35.0%	162.0	194.1	+19.8%
Plastic raw materials	230.8	295.6	+28.1%	1,675.8	1,865.8	+11.3%
Writing instruments & stationery	22.1	23.0	+4.0%	153.3	177.4	+15.7%
	932.6	1,142.1	+22.5%	6,512.5	7,262.5	+11.5%

Source: Ministry of Commerce & Industry, Government of India

► Export Performance

Exports of **Consumer & houseware products** witnessed an surge of 13.3% in October 2024 due to higher sales of Tableware and Kitchenware of plastics (HS Code 392410) to Nigeria; Plastic moulded suit cases (42021220) to Saudi Arabia; other switches of plastic (85365020) to Germany and Toothbrushes (960321) to Mexico.

Exports of **Cordage, fishnets & monofilaments** were up by 35.7% in October 2024 due to positive growth witnessed in sales of Other binder or baler twine of polyethylene or polypropylene (560749) and Twine, cordage, ropes and cables of plastics (560790). Europe region is significant buyers of these product from India.

In October 2024, the export of **FIBC, woven sacks, woven fabrics & tarpaulin** witnessed a growth of 27.9% due to higher sales of Flexible intermediate bulk containers (630532) and sacks and bags of plastics (39232990) to the United States of America. It may be noted that both of these products reported its highest- ever export of in the past three years.

Export of **Floor coverings, leather cloth & laminates** were higher by 20.0% in October 2024 on account of improved sales of Floor coverings of polymers of vinyl chloride (391810), Decorative laminates (48239019) and Other textile fabrics, impregnated, coated, covered or laminated with plastics other than polymers of vinyl chloride (59039090).

Export of **FRP & Composites** witnessed a growth of 20.8% during October 2024. This notable increase was due to higher exports of Articles of plastics and articles of other materials of heading 3901 to 3914, n.e.s (39269099).

Export of **Human hair & related products** increased by 13.1% in October 2024 on account of a significant rise in sales of Human hair unworked (05010010) to Myanmar. Importantly, the average price realisations for Human hair unworked has seen an improvement in the current year, this far.

Medical items of plastics export were higher by 12.0% in October 2024 due to a rise in sales of Cannulae (90183930) and Cardiac catheters (90183920).

Export of **Miscellaneous products & items nes** were up by 26.9% in October 2024 due to higher shipments of Polypropylene articles (39269080).

Packaging items - flexible, rigid export augmented by 15.2% on account of higher sales of Sacks and bags of polyethylene (392321) and Articles for the conveyance or packaging of goods of plastics (392390). Sacks and bags of plastics also reported its highest- ever export of in the past three years.

In October 2024, the export of **Plastic films & sheets** was higher by 22.2% due to increased sales of Rigid and flexible sheets of polymers of propylene (392020); Films & sheets of polyethylene terephthalate (39206290); Other Flexible and metallised films & sheets (39219094, 39219099). Indian exporters of plastic films and sheets are experiencing are now witnessing an improved demand supply scenario, driven by strong performance in the polymer sector. This positive trend is further supported by an improved pricing & margin environment.

Export of **Plastic pipes & fittings** risen by 35.0% due to improved sales of Rigid tubes and pipes of Polymers of vinyl chloride (39172390); Flexible tubes of plastics (burst pressure \geq 27,6 MPa) (391731); Flexible tubes of plastics (391739) and Fittings of plastics for tubes & pipes (391740).

Plastics raw materials exports were higher by 28.1% due to increased shipments of Linear low-density polyethylene (39014010); Polypropylene (390210); Polytetrafluoroethylene (390461); Acrylic polymers (390690); Other polyether's (39072990) and Other polyethylene terephthalate (390761).

Export of **Writing instruments & stationery** substantially increased by 4.0% in October 2024 due to higher sales of and Ball point pens (96081099) to the United states of America. Export of writing instruments and stationery from India had been on a decline for the last one year.

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

HS Code	Description	Apr 23-Oct 23	Apr 24-Oct 24	Growth
		(USD Mn)	(USD Mn)	(%)
63053200	Flexible intermediate bulk containers	458.7	530.9	+15.7%
67030010	Human hair, dressed, thinned, bleached or otherwise worked	308.6	317.6	+2.9%
39269099	Other articles of plastics n.e.s	260.1	308.8	+18.7%
39232990	Other sacks and bags of plastics excl. those of polymers of ethylene	244.1	273.0	+11.8%
90011000	Optical fibres, optical fibre bundles and cables	261.9	175.8	-32.9%
39021000	Polypropylene	178.4	223.9	+25.5%
39076190	Other primary form of polyethylene terephthalate	194.4	189.2	-2.6%
48239019	Decorative laminates	174.2	187.9	+7.9%
39269080	Polypropylene articles n.e.s	119.9	149.3	+24.5%
39206220	Flexible and plain sheets and film of non-cellular polyethylene terephthalate, not reinforced, laminated, supported or similarly combined with other materials, without backing, unworked	117.5	158.3	+34.7%
39069090	Other acrylic polymers, in primary forms	119.9	145.7	+21.6%
39232100	Sacks and bags, incl. cones, of polymers of ethylene	118.6	129.8	+9.4%
39202020	Flexible and plain sheets and film of non-cellular polymers of ethylene, not reinforced, laminated, supported or similarly combined with other materials, without backing, unworked	112.8	139.7	+23.9%
39239090	Other articles for the conveyance or packaging of goods, of plastics	107.2	121.3	+13.1%
59039090	Other textile fabrics impregnated, coated, covered or laminated with plastics other than polyvinyl chloride or polyurethane	105.3	124.6	+18.3%
05010010	Human hair, unworked	97.1	108.1	+11.2%
90015000	Spectacle lenses of materials other than glass	103.9	95.1	-8.5%
39202090	Other sheets and film of non-cellular polymers of ethylene, not reinforced, laminated, supported or similarly combined with other materials, without backing, unworked	85.4	98.0	+14.8%
39012000	Polyethylene with a specific gravity of ≥ 0.94 , in primary forms	73.4	86.0	+17.1%
39076990	Other primary form of polyethylene terephthalate	86.9	71.9	-17.2%
96081019	Ball-point pens	81.7	82.6	+1.1%
90183930	Cannulae	76.2	84.1	+10.3%
39014010	Linear low-density polyethylene (LLDPE)	57.5	101.1	+75.7%
39046100	Polytetrafluoroethylene	69.3	75.5	+9.0%
39219099	Other sheets and film of plastics, reinforced, laminated, supported or similarly combined with other materials, unworked	67.8	86.4	+27.4%
39199090	Other self-adhesive sheets and film of plastics, whether or not in rolls > 20 cm wide	63.8	76.9	+20.6%
56074900	Twine, cordage, ropes and cables of polyethylene or polypropylene	65.3	75.5	+15.7%
54072090	Other woven fabrics of strip or the like, of synthetic filament, incl. monofilament of ≥ 67 decitex and with a cross sectional dimension of ≤ 1 mm	56.5	73.3	+29.8%
39129090	Other cellulose and chemical derivatives thereof, n.e.s., in primary forms	58.6	66.8	+14.1%
39241090	Other tableware and kitchenware, of plastics	56.6	59.6	+5.2%
39011090	Other polyethylene with a specific gravity of < 0.94 , in primary forms	63.4	41.2	-35.0%

► Export Performance

39119090	Other polysulphides, polysulphones and other polymers and pre-polymers produced by chemical synthesis, n.e.s.	59.5	48.1	-19.1%
39206919	Other sheets and film of non-cellular polyesters, not reinforced, laminated, supported or similarly combined with other materials, not worked	54.6	57.2	+4.7%
90041000	Sunglasses	1.8	3.8	+109.4%
39046990	Other fluoro-polymers of vinyl chloride or of other halogenated olefins, in primary forms	48.8	63.1	+29.4%
39181090	Other floor coverings, whether or not self-adhesive, in rolls or in the form of tiles, and wall or ceiling coverings in rolls with a width of \geq 45 cm, of polymers of vinyl chloride	49.2	65.2	+32.5%
39219094	Flexible and metallised sheets and film of plastics, reinforced, laminated, supported or similarly combined with other materials, unworked	43.3	67.5	+55.7%
39140020	Ion exchangers of polymerisation or co-polymerisation type	45.5	52.1	+14.6%
39095000	Polyurethanes	45.5	50.0	+10.1%
96032100	Tooth brushes	47.5	42.7	-10.1%
39204900	Sheets and film of non-cellular polymers of vinyl chloride, containing by weight $<$ 6% of plasticisers, not reinforced, laminated, supported or similarly combined with other materials, without backing, unworked	45.5	47.5	+4.2%
39206290	Other sheets and film of non-cellular polyethylene terephthalate, not reinforced, laminated, supported or similarly combined with other materials, without backing, unworked	40.5	54.8	+35.3%
59031090	Other textile fabrics impregnated, coated, covered or laminated with polyvinyl chloride	42.9	45.2	+5.3%
39201019	Other sheets and film of non-cellular plastics, not reinforced, laminated, supported or similarly combined with other materials, without backing, unworked	40.1	45.7	+13.8%
39172390	Other rigid tubes, pipes and hoses, and fittings of polymers of vinyl chloride	40.9	43.0	+5.4%
39235010	Stoppers, lids, caps and other closures, of plastics	38.7	45.0	+16.1%
39219096	Flexible and laminated sheets and film of plastics, reinforced, laminated, supported or similarly combined with other materials, unworked	37.0	46.1	+24.6%
39249090	Other household articles and toilet articles of plastics	41.2	38.0	-7.8%
39206929	Other sheets and film of non-cellular polyesters, not reinforced, laminated, supported or similarly combined with other materials, not worked	34.9	52.0	+48.9%
39073010	Epoxy resins	33.2	32.6	-1.7%

Source: Ministry of Commerce & Industry, Government of India



Driving the Future: Smart Plastics in India's Automotive Industry

The Indian automotive sector is experiencing a transformative shift, driven by the adoption of smart plastics—advanced polymers offering innovative solutions for modern vehicle design and production. These materials present an opportunity for India's plastics industry to establish itself as a global leader while catering to the growing domestic demand for efficient, lightweight, and cost-effective vehicles.

Why Smart Plastics?

Smart plastics offer compelling advantages over conventional materials like metal and glass:

- **Lightweight:** Reduces vehicle weight, enhancing fuel efficiency and lowering emissions.
- **Durable:** Resists wear, corrosion, and extreme conditions, extending component life.
- **Cost-Effective:** Simplifies manufacturing processes, reducing production costs.
- **Versatile:** Enables advanced features such as embedded sensors and self-healing properties.

These benefits align perfectly with the automotive industry's goals of efficiency, performance, and sustainability.

Applications of Smart Plastics in Automotives

Indian manufacturers have developed a range of plastic components tailored to automotive needs:

- **Exterior Components:**
 - Bumpers (Polypropylene, Thermoplastic Olefins): Provide durability and impact resistance.
 - Grills and trims (Acrylonitrile Butadiene Styrene): Combine strength with aesthetic appeal.
- **Interior Features:**
 - Dashboards (Polycarbonate Blends): Offer rigidity and a premium finish.
 - Door panels and seat frames (Polypropylene): Lightweight and cost-efficient.
- **Under-the-Hood Applications:**
 - Engine covers and air intake manifolds (Polyamide, Polybutylene Terephthalate): Withstand high heat and chemical exposure.
 - Fuel tanks (High-Density Polyethylene): Ensure durability and leak resistance.
- **Lighting Systems:**
 - Headlamp lenses (Polycarbonate): Provide clarity and impact resistance.

These materials demonstrate how smart plastics enhance safety, functionality, and aesthetics in vehicles.

Market Share and Growth Potential

India currently accounts for 5% of the \$40 billion global automotive plastics market. However, the domestic market is growing at a robust CAGR of over 12%, fueled by rising demand for lightweight vehicles, the expansion of the EV sector, and evolving fuel efficiency norms. Cities like Pune, Chennai, and Ahmedabad—key hubs for automotive manufacturing—are seeing a surge in smart plastics production, supported by advanced infrastructure and investments.

The increased use of smart plastics in India is also being driven by government initiatives like FAME (Faster Adoption and Manufacturing of Hybrid and Electric Vehicles), which promote advanced materials in EV production. With the right focus, India can significantly enhance its share in the global market.

Rising Consumption of Smart Plastics

Several factors are driving the rapid adoption of smart plastics in India's automotive sector:

1. **Government Policies:** Supportive measures, such as stricter fuel efficiency standards and EV promotion, encourage lightweight materials.
2. **Consumer Preferences:** Growing demand for fuel-efficient and eco-friendly vehicles has prompted manufacturers to turn to advanced plastics.
3. **Urbanization and Income Growth:** Higher disposable incomes are increasing demand for modern vehicles with advanced features reliant on smart plastics.
4. **Collaborations:** Partnerships between Indian companies and global OEMs are accelerating the adoption of innovative materials and standards.

Insights from Indian Manufacturers

Leading Indian companies are spearheading innovation in automotive plastics:

- **Reliance Industries:** Develops advanced polypropylene and polyurethanes to enhance vehicle efficiency and reduce emissions.
- **Tata Motors:** Utilizes smart plastics in vehicle design to boost production efficiency and product quality. Vishal Badshah, Vice President at Tata Motors, has emphasized the role of these materials in delivering seamless customer experiences.
- **Supreme Industries:** Specializes in engineered polymers and thermoplastics, focusing on safety, durability, and EV-specific components.

These efforts underscore India's commitment to modernizing its automotive industry through advanced materials.

Challenges Facing Producers

Despite its growth potential, India's automotive plastics industry faces several obstacles:

- **High Raw Material Costs:** Fluctuating prices of key inputs like polypropylene and ABS reduce profit margins.
- **Limited Technology Access:** A lack of infrastructure for advanced smart plastics hampers innovation.
- **Regulatory Pressures:** Adhering to stringent safety and environmental standards complicates production.
- **Import Competition:** Low-cost imports, particularly from China, challenge domestic manufacturers.

Conclusion: Unlocking the Potential

Smart plastics are revolutionizing India's automotive sector, offering cost-effective and innovative solutions for modern vehicle production. To capitalize on this potential, Indian manufacturers must invest in R&D, expand their product offerings, and address existing challenges. With policy support and continued innovation, smart plastics can drive India's automotive industry to new heights, cementing its position on the global stage.



Product: Wallets, Purses and Similar articles of plastics

Wallets, purses, and similar articles of plastics are durable, functional accessories made from materials such as polyvinyl chloride (PVC), polyethylene (PE), and polypropylene (PP). These plastics are chosen for their lightweight, flexible, and long-lasting properties, making them ideal for storing money, cards, and personal items. These materials guarantee products that withstand daily use, offering both practicality and style with excellent resistance to environmental stress and wear. They are classified under Subheading 420232 of the Harmonized System (HS) of Coding.

World-wide import of Wallets, purses, and similar articles of plastics is valued at USD 3.5 Billion per year approximately.

- In 2023, top - 5 exporting countries of Wallets, purses, and similar articles of plastics were China (56.6%), France (10.4%), Italy (6.6%), Viet Nam (4.3%) and Hong Kong (3.3%).
- In 2023, top - 5 importing countries of Wallets, purses, and similar articles of plastics were the United States of America (13.9%), Japan (8.4%), Italy (7.4%), South Korea (5.3%) and Hong Kong (5.1%).

In 2023-2024, India exported 11,229 pieces of Wallets, purses, and similar articles of plastics valued at USD 26.4 million to the world. The United States of America was the top export destination in terms of value and Indonesia in terms of volume.

Destination Country	Value (USD Mn)	Destination Country	Qty. (pieces)
United States of America	14.22	Indonesia	3,025
Japan	1.63	United States of America	2,988
Spain	1.62	Japan	690
France	1.22	Spain	582
Italy	0.95	France	572
United Kingdom	0.89	Kenya	536
Indonesia	0.81	Italy	413
Netherlands	0.74	United Arab Emirates	397
Canada	0.69	Nepal	341
United Arab Emirates	0.49	United Kingdom	231

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

▶ Product of the month

In 2023-24, India imported 38,453 pieces of Wallets, purses, and similar articles of plastics at USD 16 million from the world. China was the top supplier both in terms of value as well as volume.

Source Country	Value (USD Mn)	Source Country	Qty. (pieces)
China	11.23	China	37,844
Viet Nam	1.32	Italy	88.04
Singapore	0.71	Viet Nam	87.45
Italy	0.69	Denmark	76.88
Spain	0.30	South Korea	68.15
Netherlands	0.29	Spain	54.55
Hong Kong	0.25	Hong Kong	51.23
South Korea	0.22	United States of America	35.96
Switzerland	0.21	United Arab Emirates	29.55
France	0.20	Thailand	29.02

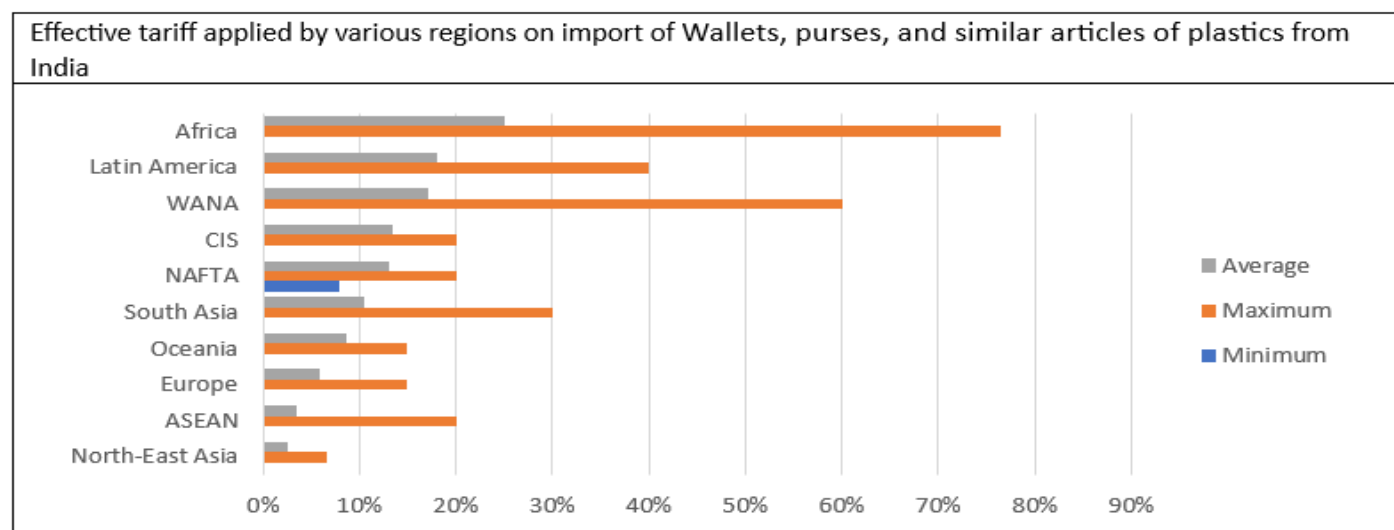
Source: Department of Commerce, Govt. of India, Plexconcil Research

Indian firms dealing in Wallets, purses, and similar articles of plastics have immense potential to export to destinations like Australia, Indonesia, Japan, South Korea, Malaysia, Singapore, Switzerland, United Arab Emirates, and Viet Nam.

- Import of this product is eligible for zero customs duty in Australia under India-Australia Economic Cooperation and Trade Agreement and Japan and South Korea under Comprehensive Economic Partnership Agreement.
- ASEAN countries, such as Indonesia also offer preferential customs duty and Viet Nam offers zero customs duty on imports of Wallets, purses, and similar articles of plastics from India under the ASEAN-India Free Trade Agreement.
- Import of Wallets, purses, and similar articles of plastics enjoy zero customs duty in Malaysia, Switzerland and Singapore.

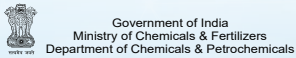
India's Exports to the United States of America, Italy, France, Canada, Germany, Spain and Russia do not enjoy any preferential treatment, however, these markets are quite lucrative for exports as they currently import 38.0% of the global imports of Wallets, purses, and similar articles of plastics.

Unfortunately, some countries in Africa, Latin America, CIS and NAFTA do not accord any preferential treatment to Wallets, purses, and similar articles of plastics imported from India due to which the average customs duty faced on this product is high.



Source: Market Access Map, Plexconcil Research

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Disclaimer: The map of India is used for reference only.

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RUSSIAN FEDERATION

Economic overview

The Russian Federation is located in Eastern Europe, bordering the Arctic Ocean. It has an area of 17,098,242 square kilometres and a population of 146.3 million. The country enjoys fiscal surpluses across all tiers of government and low external debt levels. Russian economy draws its strength from vast natural resources – crude oil, natural gas, coal, many strategic minerals and timber. In recent years, Russia’s economy has faced significant challenges, particularly due to international sanctions and escalating geopolitical tensions. However, Russia has worked to strengthen economic ties with India and other nations, diversifying its trade partnerships and investing in alternative markets. Despite these challenges, Russia remains a dominant global energy player, leveraging its vast natural resources to support economic stability and growth.

As of November 29, 2024, S&P’s rating for Russia is CC; Moody’s rating stands at Ca; and Fitch has a reported rating of C.



Economic indicators		2021	2022	2023
Nominal GDP	USD Billion	1,843.1	2,269.9	2,010.0
Nominal GDP per capita	USD	12,520	15,472	13,739
Real GDP growth	%	5.9	-1.2	3.6
Total population	Million	147.2	146.7	146.3
Average inflation	%	6.7	13.8	5.9

Source: IMF

Economic indicators		2019	2020	2021
Total merchandise exports	USD Million	422.8	337.1	492.3
Total merchandise imports	USD Million	243.8	231.7	293.5

Source: TradeMap

Russia has FTAs with Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyz Republic, Moldova, Serbia, Tajikistan, Turkmenistan, Ukraine, Uzbekistan and Viet Nam.

Trade overview

Russia has been a longstanding and time-tested partner for India. In 2023, India and Russia engaged in bilateral trade worth USD 64,641 million. During the year, India’s exports to Russia were valued at USD 4,055 million while India’s imports from Russia were valued at USD 60,587 million.

The major items of export (2-digit HS) from India to Russia are parts of machines (USD 577 million), other medicines (USD 371 million), organic chemicals (USD 323 million) and iron and steel (USD 322 million). Likewise, major items of export (2-digit HS) from Russia to India are petroleum crude (USD 53,421 million), fertilizers (USD 2,428 million) and sunflower oil (USD 1,247 million).

For products that come under the purview of PLEXCONCIL, the trade is largely in favour of India with exports of USD 100 million to Russia while imports from Russia to India stand at USD 47 million, leading a substantial trade surplus of USD 53 million for India.

The major items of export to Russia are:

- Plastic raw materials (39.1%),
- Plastic films and sheets (23.1%), and
- Medical items of plastics (7.9%).

Russia’s annual plastics imports are valued at USD 13.4 million approx. Its plastic imports are largely catered to, by China (30.1%); Germany (13%) and Belarus (5.8%). India’s market share in Russia’s plastics imports is quite insignificant (0.7%).

Export potential for India

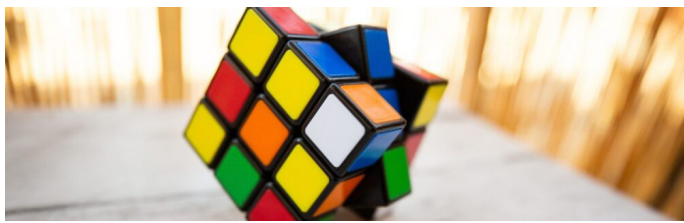
Based on our internal research, India’s export of PLEXCONCIL member products to Russia has the potential to grow by USD 6.8 billion. Details of product panels and their export potential to Russia is provided below:

Product panel	Russia’s import from India	Russia’s import from world	India’s export to world	Export potential for India
	USD Million	USD Million	USD Million	USD Million
Plastic raw materials	39.2	3,841.3	2,903.0	1,848.7
Consumer & houseware products	6.2	3,631.4	1,656.3	1,306.1
Medical items of plastics	22.1	1,534.7	1,162.9	920.0
Plastic films and sheets	20.6	1,566.1	1,682.5	842.0
Packaging items - flexible, rigid	5.2	380.7	604.8	345.2
Floorcoverings, leathercloth & laminates	3.9	609.5	835.5	315.0
Plastic pipes & fittings	1.8	518.4	278.7	166.6
Writing instruments & stationery	5.6	155.2	261.2	124.0
FIBC, Woven sacks, Woven fabrics, Tarpaulin	3.0	237.6	1,298.3	113.6

Source: TradeMap, Plexconcil Research



50 Years of Rubik's Cube: A Plastic Cube that Keeps the World in Suspense



From ABS plastic to recycled materials

U' L' ULUF U' F' – doesn't mean anything to you? And yet you have probably already acted according to this pattern: when trying to solve the Rubik's Cube. The plastic cube is celebrating its 50th anniversary this year. Originally made of wood, it is now of course made of plastic (some of it even recycled) and is as popular as on the first day.

From today's perspective, it is difficult to imagine that the development of the small cube took six years. But where rapid prototyping, fused deposition modeling and the like make development easier for us today, in the past there was nothing. The cube had to be designed and built by hand. In 1974, the Hungarian Ernő Rubik developed the Rubik's Cube, which has been world famous since the 1980s and bears his name. Rubik built the first models out of wood.

When the cube went into mass production, manufacturers switched to acrylonitrile butadiene styrene copolymer (ABS) and injection molding. After the black individual parts were produced and assembled, they were covered with the typical colorful stickers made of polypropylene film. The design is as simple as it is practical and the cube has never really gone out of fashion since the 1980s. The

cube was developed at a politically difficult time. While it became a bestseller in its native Hungary through word of mouth alone, distribution beyond the Iron Curtain was difficult. According to inventor Rubik (who was an architecture professor), it was simply too complex in the eyes of western companies. A toy that only a fraction of buyers would ever solve? Not interesting.

One company finally took the risk and estimated the sales figures (quite optimistically) at one million. Just off the mark: 30 million of the plastic cubes were sold worldwide in the first year. To date, the Rubik's Cube has been sold almost 500 million times – about 52 times the current Hungarian population.

Today, the Rubik's Cube brand belongs to the Spin Master company and is keeping up with the times when it comes to plastic. In addition to the many cube variants made of conventional plastic, Spin Master has developed the Rubik's Re-Cube from 100 percent recycled plastic, taking a big step towards sustainability in the plastics industry. It is made of 100 percent recycled plastic. But that's not all in terms of sustainability: in 2021, Spin Master Corp. in the USA teamed up with the company TerraCycle to make the cubes more recyclable. If the cube is no longer wanted, it can be sent to TerraCycle. There it is melted down and then processed into park benches, for example.

So what is the cryptic combination "U' L' ULUF U' F'" all about? It's simple: Cubers use letter combinations like this to note down their movements. The letters stand for the side of the cube that is to be moved (U for Up, L for Left, F for Front, etc.). An apostrophe is added when the side is turned anti-clockwise. Mathematicians have been racking their brains for decades over the shortest solution to the Rubik's Cube, the so-called God's number.

Have you got a taste for it? To ensure that users don't despair after the first turn, there are numerous instructions on how to solve the cube. The official Rubik's Cube website also provides a guide.

The God's number describes the ideal solution to a mathematical problem. In the case of the Rubik's Cube, this means solving the cube with as few turns as possible. The difficulty for the mathematicians lay in the number of possible combinations. There are 18 possibilities for the first move with the cube, then 18 more for the next move, and so on. This results in 43 trillion different positions. In 2010, the German mathematician Herbert Kociemba and the Californian computer scientist Thomas Rokicki proved that the God's number is 20.

Aside from the recycled plastic, the Rubik's Cube is also keeping up with the times in terms of digitalization. It is also available equipped with Bluetooth, so that an app can track every movement. But whether old school or modern: the Rubik's Cube has fascinated people for decades. Incidentally, its inventor needed over a month to solve it the first time. So don't worry if it takes a little longer.

The Rubik's Cube in numbers

- **Records** : Max Park solves the 2023 cube in 3.13 seconds. A robot from Mitsubishi Electric Corporation needs only 0.305 seconds.
- **Size** : The largest Rubik's Cube is 21×21 squares.
- **Solution** : There are 43 trillion ways to solve the Rubik's Cube. This number of cubes could cover the earth 200 times.
- **Documentary** : In 2020, Netflix released the documentary "The Speed Cubers". Here, too, Max Park is one of the protagonists.
- **Pop culture** : The Rubik's Cube also appears in films, for example in 2012 in "The Amazing Spiderman" with Andrew Garfield, in 1998 in "Armageddon" or in the animated children's film "Wall-E".

Source: Modern Plastics India

Food Vacuum System Containers use SABIC's Circular PP with Ocean Bound Plastic Content

- Certified circular SABIC PP polypropylene from advanced recycled ocean bound plastic (OBP) helps reduce marine litter and accelerate circularity.
- Sustainable material solution from SABIC's TRUCIRCLE portfolio meets demanding performance specifications for food contact approved vacuum containers.

SABIC, a global leader in the chemicals industry, reports that B!POD, a business unit of SAES Getters, has selected SABIC's OBP-based polypropylene resin as the material for their containers. In close collaboration, the partners selected SABIC PP 576P, a high-gloss grade from the company's TRUCIRCLE portfolio of circular resins. The container material has an OBP feedstock content in the range of 50%.



Khaled Al-Jalawi, Global Director of Circular Economy Business at SABIC, states: "We are very pleased about working with SAES Getters to help consumers meet the challenge of improving food preservation with a powerful vacuum system that uses containers molded in OBP-based SABIC PP. The decision to replace standard virgin PP by our OBP material in the containers also marks a significant step towards greater sustainability, as it supports the transformation of the plastics economy towards circularity."

The source of the OBP in SABIC's material is abandoned used plastic collected in regions within 50 km of shorelines and then converted to plastic feedstock by means of advanced recycling. The PP resin produced with this recycle is supplied in natural color to C.E.L. (Costruzioni Elettromeccaniche Legnaghesi), a leading Italian player specializing in the processing of thermoplastic resins. C.E.L. adds special masterbatches to mold the B!POD containers in different sizes and several distinct custom colors. At the end of their service life, the reusable containers are fully recyclable in existing PP material streams.

Ginevra della Porta, Chief Innovation Officer at SAES Getters & co-founder of B!POD, comments: "This innovation embraces sustainability from the very concept to end use – with an advanced vacuum technology to minimize food waste, with SABIC's OBP-based material that prevents used plastic from polluting our oceans,

and with containers in a range of colors each dedicated to an endangered species, such as orangutan orange or whale grey, it is designed to raise the awareness of consumers. Moreover, our market research has indicated that reusable rigid containers for food preservation can potentially eliminate the consumption of more than 300 non-recyclable plastic bags per person and year, which corresponds to a per capita release of 30 kg of CO₂ to the atmosphere.”

The selected OPB-based SABIC PP 576P resin is a food contact approved grade, free of PFAS and BPA. It offers ease of processing and delivers dimensionally stable parts with low warpage, good impact strength and high gloss as molded. The ocean-bound plastic based solution is fully certified under the International Sustainability & Carbon Certification (ISCC) PLUS chain of custody.

Source: Modern Plastics India

Borealis and E-Fuels Leader Infinium to Turn Carbon Emissions into Plastics



New Infinium eNaphtha to serve as sustainable feedstock alternative for plastics used to manufacture consumer goods

EFuels leader Infinium and Borealis, a leading supplier of advanced and sustainable plastic solutions, have entered into an agreement to enable the production of low-carbon-footprint plastics generated from waste carbon dioxide (CO₂) emissions that would otherwise be released into the atmosphere. These plastics, known as polyolefins, are commonly used in manufacturing consumer goods including packaging, appliances, apparel and medical devices.

“Many people aren’t aware that countless plastics products we use every day come from fossil-based components,” said Infinium CEO Robert Schuetzle. “With Infinium eNaphtha, Borealis will create plastics with an ultra-low carbon footprint for customers and end consumers seeking more sustainable, environmentally friendly alternatives.”

As the world’s first supplier of commercial volumes of eNaphtha, a sustainable drop-in alternative to traditional fossil-based naphtha, Infinium is helping to decarbonize plastics production and reduce harmful CO₂ emissions globally. Infinium eNaphtha is manufactured at the company’s Project Pathfinder facility in Corpus Christi, Texas, USA, and commercial eNaphtha volumes are being shipped to Borealis’ Porvoo facility in Finland, which provides advanced and sustainable polyolefin solutions to its manufacturing customers. The world’s first commercial eNaphtha shipment left the United States in May.

Plastics made from Infinium eNaphtha can be produced using the same facilities and manufacturing equipment and recycled in the same way as with a conventional naphtha-based product. eNaphtha produced at the Infinium Pathfinder facility has received ISCC PLUS certification from the International Sustainability and Carbon Certification (ISCC) body. This certification system ensures the traceability of the sustainably produced feedstock from its point of origin throughout the entire chain of custody.

“We are excited to be using Infinium eNaphtha to expand our portfolio of sustainable products,” said Mirjam Mayer, VP Circular Economy Solutions at Borealis. “Atmospheric carbon is a strategic element of the Borealis Circular Cascade approach to foster the transition toward greater circularity in plastics and carbon. It allows us to serve the needs of our customers while reducing their carbon footprints. Through this collaboration with Infinium, we show that atmospheric carbon, obtained by effectively capturing and storing carbon emissions in products during their lifetime, can constitute a circular building block for the future. This is one of the ways that Borealis is reinventing essentials for sustainable living.”

The unique partnership and supply chain development between Infinium and Borealis is an example of how innovators can collaborate toward novel solutions to meet growing consumer demand for circularity and defossilization.

Source: Modern Plastics India

Eastman's Bioplastic Foam Aces Tests

Study reveals that commercialized cellulose-based compostable foam that replaces polystyrene packaging degrades four times faster in a marine environment than paper.

Eastman has long been synonymous with plastics, but a recent innovation from the company opens new opportunities in packaging and other markets in an entirely new direction.

The breakthrough is Eastman Aventa, a cellulosic bioplastic engineered to redefine compostable materials. A new scientific study highlights Aventa's degradability across various environments, including that the material degrades four times faster than paper in marine conditions, offering a potential game-changer for sustainable packaging.

The study published in ACS Sustainable Chemistry & Engineering concluded that Aventa biodegradable cellulose diacetate (CDA)-based foams are commercially useful and will not persist in oceans as plastic pollution.

Notably, the CDA foams aren't limited to lab-level research — Aventa packaging applications are available through SEE's Cryovac brand.

"These materials are already used in commercial applications, such as protein trays, and adoption continues to grow," discloses Jeff Carbeck, Eastman vice president, corporate innovation and care solutions technology.

Carbeck also informs us that Aventa compostable solutions include other single-use plastic applications such as disposable straws and cutlery.

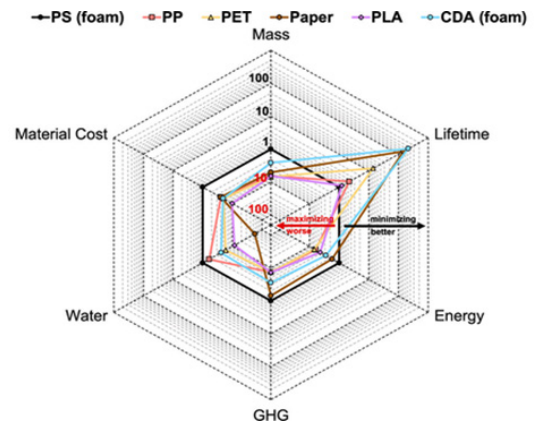
However, the sweet spot for Aventa is replacing polystyrene, particularly expanded PS (EPS) packaging.

"With regulatory bans on polystyrene, Eastman Aventa is positioned to be an excellent drop-in replacement because it maintains the same performance requirements while achieving environmental benefits," Carbeck explains. "Relative to competitive materials in the market, Aventa is made responsibly from sourced wood pulp and returns to nature as compost."

"Also, traditional plastic foams face challenges in end-of-life management, often unintentionally ending up as plastic pollution in the environment. Eastman Aventa materials offer a sustainable alternative, and this research shows that CDA-based foams will not contribute to persistent marine plastic pollution."

Study: Aventa provides performance, cost savings.

The study was led by scientists from Woods Hole Oceanographic Institution (WHOI), the world's leading independent, nonprofit organization dedicated to ocean research, exploration and education. WHOI's research and journal article focuses on CDA-based foams made with Aventa, which lost up to 70% of their mass after 36 weeks of incubation in seawater. In contrast, polystyrene foams (expanded polystyrene aka EPS), a material commonly used for food packaging, showed no signs of degradation.



Test results: Eastman Aventa CDA foam outperforms other material options. Credit: ACS Sustainable Chem. Eng. 2024, 12, 43, 16030-16040

Specifically, the study found that CDA foams degrade faster than any material evaluated under environmentally relevant marine conditions — more than quadruple that of paper and up to 1,000 times greater than solid forms of polypropylene, polystyrene, or polylactic acid (PLA).

"Foaming biodegradable bioplastics like Aventa offer a promising strategy to reduce the environmental impact of frequently mismanaged consumer plastics, particularly in food packaging applications," says Collin Ward, associate scientist at WHOI and the study's lead researcher. "These materials not only degrade rapidly in the ocean but also support circularity and material efficiency."

The study dived deeper into a systems-level assessment for redesigning plastic articles for food packaging applications, considering material performance, economics, sustainability and circularity.



RICK LINGLE VIA CANVA

Polystyrene is commonly used in food packaging, but it is not biodegradable and is difficult to recycle. Using calculations that include annual consumption rates and the social costs of pollution, the study concludes that switching from polystyrene to CDA-based foams for food trays could potentially save society more than \$1 billion by reducing costs associated with plastic pollution. The study highlights the need for holistic assessments of environmental impact to avoid swapping one issue for another.

“There are many factors to consider from the value created by using Aventa, including savings to society, energy, and persistence in the environment,” offers Carbeck. “As the WHOI study notes, switching from PS to CDA foam could equate to annual savings for society due to a reduction in the cost of plastic pollution of \$1.6 billion for food trays and \$114 million for takeaway containers.”

Source: Plastics Today

LCA Backs TerraCycle’s Green Cred

The company’s unconventional recycling models rate better than old-school waste handling per life cycle assessment metrics.

A new lifecycle assessment (LCA) comparing TerraCycle’s rigid-plastic recycling solutions to conventional municipal waste management methods in the United States quantifies the lower environmental impact of TerraCycle’s approach.

The third-party verified LCA, conducted by Long Trail Sustainability, evaluated six end-of-life models for post-consumer rigid-plastic packaging and products. The six included TerraCycle’s four core recycling techniques plus municipal landfilling and municipal incineration for waste to energy.

The four TerraCycle models studied were: freight recycling, public collection recycling, Zero Waste Box recycling, and mail-back recycling.

“Our LCAs compare our specialized recycling process for hard-to-recycle waste to traditional municipal waste-handling solutions, like landfilling and incineration,” says Kevin Flynn, executive vice president, operations, TerraCycle.

“Traditional recyclers typically only recycle larger polyethylene terephthalate (PET) packages, and the remaining smaller PET and other non-PET polymers would go to landfill or incineration. TerraCycle guarantees to recycle all accepted waste we receive,” he adds.



Inside look at one of TerraCycle’s processing operations. TERRACYCLE

Altogether, the lifecycle analysts looked at the impact of each of the six models on eight dimensions:

- Human carcinogenic toxicity;
- Human noncarcinogenic toxicity;
- Fossil resource scarcity; and
- Water consumption.

On all the measures, TerraCycle’s collection and recycling models were more environmentally favorable than the municipal waste management alternatives. The TerraCycle models prevailed over landfilling by a collective average of 73% and outperformed waste-to-energy incineration by an average of 67% (see table below).

Results for TerraCycle’s Recycling Models	Compared to Municipal Incineration Models	Compared to Municipal Landfill Models
Global Warming Potential (carbon emissions)	71% lower	53% lower
Ozone Formation - Human Health	72% lower	71% lower
Human Carcinogenic Toxicity	78% lower	77% lower
Human Noncarcinogenic Toxicity	48% lower	78% lower
Freshwater Eutrophication	57% lower	81% lower
Freshwater Ecotoxicity	62% lower	79% lower
Fossil Resource Scarcity	72% lower	72% lower
Water Consumption	74% lower	71% lower

TERRACYCLE, KATE CONNOLLY

The LCA indicated that on carbon emissions alone, TerraCycle’s rigid-plastics recycling models produce 71% fewer emissions than incineration and 53% fewer emissions than municipal landfilling.

Additionally, TerraCycle’s water consumption was 74% lower than incineration and 71% lower than landfilling. Human carcinogenic toxicity for TerraCycle’s models

was 78% lower than incineration and 77% lower than landfilling (see table for all comparisons.)

The rigid plastics TerraCycle recycles are typically not polymers that are widely recycled through curbside programs, such as monomaterial PET, high-density polyethylene (HDPE), and polypropylene (PP).

“Our recycling business is focused on recycling hard-to-recycle waste streams, and so we encourage our audience and customers to recycle locally, when possible,” Flynn says. “When we receive these common polymers, they are often components of hard-to-recycle products and packages — like beauty waste — and they represent a minority of the waste we recycle.”

The materials most commonly recycled by TerraCycle are rigid plastics, including food packaging such as bottle caps and polystyrene cups; multilayer packaging, such as coffee pouches, condiment packets, and snack bags; and contact lens packaging.

Source: Plastics Today

Unlocking Profitability in Plastic Waste Management: A Review of Economic Models

By aligning environmental responsibility with economic incentives, we can drive meaningful progress without the burden of excessive regulation.

Plastic is now becoming as much of a problem as it has been a solution. Some say the global plastic waste crisis has reached a critical tipping point, that the oceans are swimming with microplastics, landfills are overflowing, and the environmental impact is impossible to ignore. Some of this is hyperbole, but the concerns are real. While governments around the world impose regulatory solutions, it is becoming clear that heavy-handed government policies alone will not solve this complex problem.



What is needed are economic models and practices that make plastic waste management not just viable, but also profitable. By aligning environmental responsibility with economic incentives, we can drive meaningful progress without the burden of excessive regulation. So, how do we do this? Let's first look closer at the problem and the opportunity, and then review some of the options.

The limitations of regulatory approaches.

Government regulations, though well-intentioned, often lead to unintended consequences such as stifling innovation or imposing financial strains on businesses and consumers. Strict bans and mandates can create compliance challenges, especially for small and medium-sized enterprises lacking the resources to adapt quickly. Moreover, regulatory measures may not keep pace with the rapidly evolving landscape of plastic production and waste management technologies. Relying solely on regulation risks creating a reactive rather than proactive approach to the plastic waste crisis.

Using profitability as a catalyst for change.

To produce lasting change, plastic waste management must become a profitable enterprise for the plastics and plastic products industries. When businesses see economic value in recycling, reusing, and responsibly disposing of plastic, they will be more likely to invest in sustainable practices. Profitability drives innovation, attracts investment, and fosters competition, essential elements for developing efficient solutions to complex problems like plastic waste management.

Consumers increasingly are demanding environmentally friendly products and practices. Companies that respond to these concerns not only can enhance their brand image but also tap into a growing market segment willing to pay a premium for sustainability. By aligning profit motives with environmental stewardship, businesses can turn a global challenge into a lucrative opportunity. Change won't happen overnight, but it is important to start moving in the right direction.

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Competitive advantage for early adopters.

Early adopters of good plastic waste management practices stand to gain a competitive advantage. Businesses that integrate sustainable practices that make bottom-line sense ahead of their peers can position themselves as industry leaders and innovators. This not only attracts environmentally conscious consumers but also sets higher standards that competitors must strive to meet.

The development of proprietary methods for implementing environmentally responsible plastic waste management practices can serve as a powerful incentive. Companies that create unique, effective solutions can potentially secure intellectual property rights, resulting in a competitive edge and potential new revenue streams through licensing or partnerships. Proprietary technologies, processes, and systems can become valuable assets, enhancing a company's market position and financial performance.

The need for flexible economic models.

Enduring economic models addressing plastic waste will be adaptable and not tethered to specific technologies. Plastic waste management is a dynamic field, with new methods and technologies — from advanced recycling techniques to biodegradable materials — emerging regularly. A rigid model that hinges on a particular technology risks becoming obsolete as innovations emerge.

Flexible models encourage ongoing investment in research and development, ensuring that businesses can integrate innovative solutions without overhauling their entire economic structure. This adaptability not only reduces risk but also accelerates the adoption of more-efficient and cost-effective technologies over time.

Embrace innovation without technological dependency.

While technology plays a crucial role in managing plastic waste, over-reliance on any single solution can be detrimental. Markets and consumer behaviors evolve, as do technological capabilities. Economic models, therefore, should be designed to incorporate a variety of technolo-

gies and approaches, fostering an ecosystem where the best solutions can thrive.

By maintaining technological neutrality, businesses can remain agile, adjusting their strategies as new innovations prove their efficacy and cost-effectiveness. This approach also encourages a diversity of solutions, which is essential for tackling a problem as multifaceted as plastic waste.

Economic models for plastic waste management.

To illustrate how innovative economic models can drive progress, consider these different models for organizing, financing, and implementing effective plastic-waste management.

1. Extended producer responsibility (EPR) programs

Overview: EPR is a policy approach that holds manufacturers accountable for the entire lifecycle of their products, particularly the take-back, recycling, and final disposal of plastic waste.

Specific example: The Green Dot System in Europe.

How it works: The Green Dot symbol indicates that the producer has paid a licensing fee to fund the recovery and recycling of packaging waste. This system is managed by organizations like Der Grüne Punkt in Germany and similar entities across Europe.

Advantages:

Incentivized design — encourages companies to design recyclable products to lower fees.

Financial responsibility — shifts waste-management costs from taxpayers to producers.

Consumer awareness — raises awareness through product labeling (the Green Dot symbol, for example).

Explicit responsibility — the responsibility and required action cannot be shifted to others.

Limitations:

Administrative complexity — compliance can be complex, especially for multinational companies.

Cost burden — fees and compliance costs may burden small and medium enterprises. Better for big enterprises with mass production of plastic products.

Minimal compliance risk — companies might do just enough to meet requirements without improving sustainability.



2. Plastic credit trading systems

Overview: This model creates a market for plastic waste reduction by allowing companies to earn, buy, or sell plastic credits on a public exchange based on their waste-management performance.

Specific example: The Plastic Credit Exchange (PCX) in the Philippines.

How it works: PCX provides a platform where companies can offset their plastic footprint by purchasing credits that fund the collection and recycling of plastic waste.

Advantages:

Flexibility — offers strategies tailored to plastic product producers by reducing plastic use or purchasing credits.

Revenue generation — profitability depends on value of credits compared to cost of waste management and waste processor efficiency.

Market mechanism — stimulates competition and innovation in waste-reduction technologies.

Limitations:

Verification challenges — ensuring credits represent actual waste reduction can be difficult.

Greenwashing risk — companies might buy credits instead of reducing plastic use.

Market volatility — fluctuating credit prices make financing of waste-management systems to produce offsets challenging. Market for credits dependent on the whims of buyers who don't need to make long-term commitments.

3. Deposit refund systems

Overview: Consumers pay an extra fee when purchasing plastic products, which is refunded upon returning the product or packaging for recycling.

Specific example: Norway's bottle deposit system.

How it works: Consumers pay a small deposit on beverage containers, including plastic bottles. They receive a full refund when they return the containers to automated collection machines.

Advantages:

High recycling rates — achieves recycling rates over 97% for plastic bottles.

Consumer engagement — directly incentivizes consumers to recycle.

Quality recyclables — collects cleaner materials, improving recycling efficiency.

Limitations:

Implementation costs — infrastructure setup is expensive.

Limited scope — usually applies only to specific items like beverage containers.

Consumer inconvenience — returning items may not be feasible for all consumers, limiting participation.

4. Waste-to-product innovations

Overview: Businesses transform plastic waste into new products, creating a circular economy where waste becomes a resource.

Specific example: Ecoalf – A Sustainable Fashion Brand.

How it works: Ecoalf collects plastic waste from the ocean and recycles it into high-quality yarns and fabrics for clothing.

Advantages:

New revenue streams — opens markets for products made from recycled plastics.

Environmental impact — actively reduces pollution by removing waste.

Brand differentiation — positions companies as environmental leaders.

Limitations:

Technological challenges — recycling certain plastics can be complex and costly.

Higher costs — recycled products may be more expensive, limiting accessibility.

Supply constraints — dependence on waste material availability can cause inconsistencies.

5. Collaborative recycling initiatives

Overview: Businesses partner with waste management companies, NGOs, or other firms to collectively address plastic waste, sharing costs and benefits.

Specific example: The Circular Plastics Alliance (CPA) in the European Union.

How it works: The CPA brings together over 250 stakeholders, including businesses, trade organizations, and governments, to boost the EU market for recycled plastics to 10 million tons by 2025.

Advantages:

Shared resources — reduces individual costs and risks through pooling.

Accelerated innovation — faster development of new technologies.

Policy influence — greater leverage in advocating for favorable policies and standards.

Limitations:

Coordination challenges — managing multiple stakeholders is complex.

Unequal benefits — disparities in resources may favor larger companies.

IP concerns — sharing may risk proprietary technologies and competitive advantages.

6. Plastic waste offset programs

Overview: Companies commit to offsetting the plastic they produce by ensuring that an equivalent amount of plastic waste is removed from the environment and managed responsibly. Products are marked to indicate this commitment, as exemplified by organizations like Net Zero Plastic AS in Norway. (Full disclosure: My company Yankee Scientific is an investor in Net Zero Plastic.)

Advantages:

Consumer trust — enhances reputation through transparent commitments.

Competitive advantage — differentiates companies as environmentally responsible.

Scalable impact — collective efforts significantly reduce pollution.

Flexibility — allows choice in offset projects and methods.

Limitations:

Verification difficulty — requires rigorous auditing to ensure effectiveness.

Potential complacency — may rely on offsets instead of reducing own plastic use.

Cost — offsetting expenses might increase product prices, affecting competitiveness.

Comparative analysis of economic models.

To further understand the potential of these models, let's compare them based on specific criteria. This table summarizes the author's overall assessment of the potential of the above economic models.

Criteria	Extended Producer Responsibility	Plastic Credit Trading Systems	Deposit Refund Systems	Waste-to-Product Innovations	Collaborative Recycling Initiatives	Plastic Waste Offset Programs
Potential for widespread adoption	High	Moderate	Moderate	Moderate	Moderate	High
Convenience for producers	Low to moderate	Moderate	Low to moderate	Moderate	Moderate	High
Convenience for consumers	High	High	Moderate	High	High	High
Degree to which problem is truly solved (not just passed down to others)	High	Variable	High	High	High	Moderate to high
Potential for application to all plastic products	High	Moderate	Low to moderate	Moderate	High	High
Potential for implementation at scale	High	Moderate	Moderate	Moderate	High	Moderate
Potential for near-term adoption	Moderate	Moderate	High	Moderate	Moderate	High
Potential for achieving minimum cost burden on producers	Low to moderate	Moderate	Low to moderate	Moderate	Moderate to high	High

A collective call to action.

Addressing the plastic waste crisis requires a collaborative effort among businesses, consumers, investors, and policymakers. By developing and implementing economic models that make plastic waste management profitable and adaptable, we can create a sustainable framework that encourages responsible practices without the need for onerous regulations.

Investors should seek opportunities in companies that prioritize sustainability and demonstrate adaptable business models. Consumers must continue to voice their environmental concerns through their purchasing choices. Businesses need to innovate, not just in technology but in how they structure their operations to align profits with environmental responsibility.

Final thoughts.

Selecting the most appropriate economic model depends on a company's specific circumstances, resources, and strategic goals. A combination of these models may often provide the most effective approach to managing plastic waste responsibly while also capitalizing on economic opportunities.

By carefully considering the advantages and limitations of each model, businesses can develop tailored strategies that not only address environmental concerns but also enhance their competitiveness and profitability in a market increasingly driven by sustainability.

Key takeaways

- Profitability drives participation: Making plastic waste management economically beneficial encourages more businesses to participate.
- Competitive advantage: Early adopters with proprietary technologies or methods can lead the market.
- Flexibility is crucial: Models should be adaptable to incorporate innovative technologies and practices as they emerge.
- Consumer engagement: Incentivizing consumers plays a significant role in the success of these models.
- Waste offset programs: Can be used to achieve both collection and environmentally responsible elimination of plastic waste, offering practical, easily adopted ways for companies to neutralize their plastic footprint while gaining market advantages.

By leveraging these economic models, we can move toward a sustainable future where plastic waste is effectively managed, benefiting both the environment and the economy. The integration of innovative economic practices with environmental responsibility presents a pathway not only to mitigate the plastic waste crisis but also to unlock new business opportunities and foster a culture of sustainability.

Source: Plastics Today

Sustainable Plastics Can Redefine the Future of E-bikes

Replacing steel and aluminum with injection-molded plastics and localized supply chains are emerging trends among e-bike manufacturers.



Materials supplier Syensqo has partnered with Monaco-based Stajvelo to create an electric bike made entirely of plastic.

E-bike production today is dominated by aluminum and steel. These materials, and often the bikes themselves, are primarily sourced from Asia. To gain a competitive edge, however, "OEMs are exploring new materials to reduce cost, enhance manufacturing efficiency, improve design and functionality, and offer more sustainable solutions," said Megan Powers, global marketing manager for life solutions at advanced polymers supplier Syensqo (formerly part of Solvay).

In addition, according to Powers, there is a shift toward "regional manufacturing, predominantly in Europe. Supply-chain disruptions worsened by the pandemic, including semiconductor shortages and shipping delays, have all impacted the e-bike sector. Shifting to regional manufacturing for frames and other e-bike components can improve logistics, ensuring faster delivery by reducing dependency on external geopolitical factors, and also enhancing the after-sales market through local repairs," said Powers.

Environmental selling points

Local, plastics-centric production also benefits the environment, which can be a selling point for e-bike buyers. In fact, Syensqo has conducted an internal lifecycle assessment, which shows that using specialty polymer injection molding for the e-bike frame component specifically reduces global warming potential by about 70% compared with traditional aluminum manufacturing. “Eco-conscious consumers are driving demand for sustainable urban transportation,” noted Powers, adding that plastics also can deliver personalization and design improvements.

Syensqo views its Echo portfolio of sustainable grades with bio-based and/or recycled content as a natural fit for the e-bike market segment. One such series is the Ixef Para polyarylamide materials filled with either glass or carbon fiber, sometimes in combination, and in short- or long-fiber configurations. “To be fully efficient, these complex resin and filler blends must be combined with a specific part design and advanced processing technology like fluid-assisted injection molding,” emphasized Philippe Martin, senior technical development EMEA - expert melt processing, at Syensqo. Ixef Para materials deliver an ultra-smooth surface finish in structural thermoplastics with a metal-like feel and best-in class appearance. The material’s extremely low water absorption ensures dimensional stability, and the Ixef Para Echo grades can reduce a product’s carbon footprint by as much as 74%.

The all-plastic e-bike



Plastic composites offer various benefits in bicycle applications, such as colorability and corrosion resistance. Image courtesy of Stajvelo.

Syensqo has partnered with Monaco-based Stajvelo to create a cutting-edge electric bike made entirely of plastic, showcasing a new high-performance Xencor Para LGF polymer. Among the benefits of this material are a unique combination of stiffness and impact resistance, insensitivity to corrosion stress cracking, no fissure propagation, outstanding creep and fatigue performance, and outstanding gloss and surface appearance, according to Syensqo.

“Injection molding [of colored compounds for the e-bike] cuts down on post-production operations like painting and polishing, which are essential tasks when making metal frames to prevent corrosion and to achieve a polished look,” noted Syensqo’s Powers. “Additionally, the ease of adding new functionalities allows OEMs to quickly innovate and adapt to new design trends and requirements in the fast-paced e-bike market,” she added.

Source: Plastics Today



India News

Massive blaze engulfs plastic bag factory in Jeedimetla

Hyderabad: At least 60 workers managed to evacuate safely when a devastating fire destroyed a plastic bags manufacturing facility in Jeedimetla. There were no injuries or casualties, but property worth crores was gutted.

This was the second accident in Jeedimetra in less than week after a worker was killed and two others injured in a fire at a pharma unit earlier.

On Tuesday, the fire started at SSV Fab Industries at around 1 pm, with the blaze originating on the top floor of the three-storey factory building. The fire spread within a few minutes and oil drums in the factory intensified the flames. Preliminary investigation pointed to an electrical fault.

The factory is one of the largest manufacturers of a wide range of bags, catering to domestic and international clients across industries such as sugar, rice, food grains, cement and fertiliser. It has a manufacturing capacity of 4 lakh bags a day.

As the blaze was severe, the fire department deployed 10 fire engines from various stations including Jeedimetla, Kukatpally, Secunderabad, Charlapally, Madhapur and LB Nagar. Additionally, they positioned a large Bronto Skylift to prevent flames from spreading to neighbouring industrial units.

“Fire control operations will persist through the night and it is likely to be extinguished by Wednesday morning. The factory sustained extensive damage. A thorough evaluation of property losses and the fire’s origin will be conducted after the flames are contained,” said Jayakrishna, district fire officer, Kukatpally.

Source: The Times of India

First Plastics Recycling Awards India finalists announced



The Plastics Recycling Awards India recognise and celebrate achievement throughout all parts of the plastics recycling chain in India. The finalists in the first one have been announced, and will feature in a dedicated area at the Plastics Recycling Show India (PRS India) taking place at the NESCO Bombay Exhibition Center (BEC) in Mumbai from 4 to 6 December.

“Every project and product that has been shortlisted exemplifies the increasing level of investment that the Indian recycling industry is now applying at all levels of the sector,” said Taher Patrawala, Managing Director of Media Fusion. “We are delighted to be recognising the commitment and hard work of these finalists. May their success serve as a catalyst in India’s drive towards global leadership in plastics recycling and the circular use of plastics.”

Plastics Recycling Awards India Finalists

Best Community Effort for Recycling

- Anubhuti Welfare Foundation
- Hasiru Dala
- ReCircle
- Repurpose Global
- Shristi Waste Management Services

Recycled Plastic Product

- Thermoformed Flower Pots, Arun Plasto Moulders (India)
- Dodhia Petoloop™, Dodhia Synthetics
- TECHNYL 4EARTH C2E 216 V30 BK, DOMO Engineering Plastics India
- Artificial Eucalyptus Leaf Stem, Essen Speciality Films
- Sereno, Frontier Polymers
- Bio Medical Garbage Bags, Re Sustainability & Recycling
- Chemically Recycled rPET : chips, yarns, speciality building blocks , revalyu Recycling (India)

Recycled Plastic Packaging Product

- 100% Recycled Polyethylene Terephthalate (rPET) in packaging, Coca-Cola
- 100% Sustainable FIBC Jumbo Bags made from PET/PCR (rPET), Packem Umasree
- BOPP Laminated Bags, Pashupati Group

Technology and Innovation

- 100% PET Bottle-to-Bag Project, Packem Umasree
- Banyan Nation, Banyan Sustainable Waste Management
- Chemical Recycling of PET, revalyu Recycling (India)
- E-GO R polyolefin recycling extruders, Rajoo Bausano Extrusion
- SUKA, Ishitva Robotic Systems
- Affordable Small Sparkling Pack (ASSP), Coca-Cola India

Plastics Recycling Company

- Adiva Polymers
- Banyan Sustainable Waste Management
- Go Rewise by Ganesha Ecosphere
- HK Industries
- Nepra Resource Management
- Pashupati Group
- RE Sustainability and Recycling
- Recinloop Innovations
- revalyu Recycling (India)
- Uma Plastic

Plastics Recycling Ambassador

- Deepak Mehta, Founder and Managing Partner, Le-evams
- Mani Kishore Vajipeyajula, Co Founder and CEO, Banyan Nation
- Mansoor Gous, Dry Waste Collection Centre Operator, Hasiru Dala
- Sreenivasulu M R, Reuse and Rebuild

The Plastics Recycling Show India brings together key players from the plastics and recycling sectors to showcase innovative technology, share best practice, network and do business.

The latest trends in the plastics recycling sector will be explored in depth during the event's three-day conference, which will provide a holistic view of the whole plastic recycling value chain, drawing together legislators, major brands, recyclers and the plastics recycling and manufacturing industry. Local and international experts will address key themes including the circular economy, regulations, challenges, opportunities, innovations, technologies and trends, and share insights and experiences from across the sector promoting the sustainable use of plastics.

Source: Inter Plastics Insights

GVMC to implement strict ban on single-use plastic in Visakhapatnam from January 1

The corporation will be taking up awareness campaigns on a massive scale for a period of 45 days and fines will be imposed on those violating norms, say officials

Greater Visakhapatnam Municipal Corporation (GVMC) has decided to put a complete ban on the single-use plastic in the city from January 1, 2025 and also impose fines against people violating the norms. In this regard, the corporation will be taking up awareness campaigns on a massive scale for a period of 45 days.

A meeting was organised by the GVMC to sensitise about the plastic ban with the resource persons and sanitation secretaries at the VMRDA Children's Arena. District Collector M.N. Harendhira Prasad, GVMC Commissioner P. Sampath Kumar and other officials participated.

Mr. Harendhira Prasad said that sanitation secretaries, Self-Help Groups (SHGs) and other staff must come together to take up awareness programmes on the single-use plastic ban. He also appealed to the shopkeepers and commercial establishment owners to use alternative products for plastic.



Mr. Sampath Kumar said that the corporation is working with an action plan towards zero garbage and zero plastic goal. He said that there will be strict monitoring on single-use plastic. After January 1, fines will be imposed on those violating the norms, he warned. He also discussed how the plastic ban was implemented during the year 2022.

The authorities released a brochure 'Say No to Plastic' during the programme. Chief Medical Officer of Health, Naresh Kumar, Additional Commissioner R. Somanarayana and others were present.

Source: The Hindu

Plastic industry an integral part of Indian economy: Rane



These industries contribute ₹3.5 lakh crore to the country's economy. They also generate employment opportunities for more than 50,000 people. About ₹35 thousand crores worth of plastic is exported from India

NEW DELHI: The plastic industry in India is an integral part of the economy, said Union minister of Micro, Small and Medium Enterprises Narayan Rane on Wednesday.

Addressing the inaugural session of the Global MSME Convention in Goa virtually, the minister said that there are approximately 50,000 industries operating in the space. "Most of these industries are micro, small and medium scale. These industries contribute ₹3.5 lakh

crore to the country's economy. They also generate employment opportunities for more than 50,000 people. About ₹35 thousand crores worth of plastic is exported from India."

Rane added that 60% of plastic in the country is getting recycled, a rate higher than that of developed countries. "Plastic production is increasing through the government's 'Make in India', 'Skill India', 'Swachh Bharat' and 'Digital India' initiatives. By 2027, the plastics industry is expected to have an annual turnover of ₹10 lakh crore, with exports increasing to two lakh tons. Employment opportunities will be created for one crore people in the next five years through this industry."

He said that the government's resolve to provide all possible support for the latest technology to boost the plastic industry. "The plastic industry's contribution will go a long way in fulfilling the Prime Minister's vision of 'Atmanirbhar Bharat'."

The convention has been organized by the Union Ministry of Micro, Small and Medium Enterprises and All India Plastic Manufacturers Association. The theme is 'Opportunities for the Indian Plastics Industry in a US\$ 5 Trillion Economy'

Over the course of the two-day conference, experts will deliberate on various topics such as 'opportunities for the plastic industry through the government e-market place', 'Schemes of the Indian government to promote the plastic industry' and 'latest technology in the Indian tooling sector'.

More than 250 industries are participating in the conference, which will witness technology showcases, B2B meetings, business networking, case studies, best practices and panel discussions.

Source: Live Mint

Mumbai airport recycles about 9000 single-use plastic blouses in 10 months: MIAL

MUMBAI: Mumbai's Chhatrapati Shivaji Maharaj International Airport (CSMIA) has recycled 8,890 used bottles in the ten months up to October 2023 through the Reverse Wending Machines (RVMs) installed at the airport, said Mumbai International Airport Ltd (MIAL).

The airport is set to install three additional units of RVMs in November 2023, it said, adding that the 2 RVMs were installed in January this year at P4 and P6 at Terminal 2. "Each RVM installed at the airport is capable of processing up to 450 bottles per hour, compressing 70% of the waste for efficient and easy transportation to recycling centres. Hence, saving resources,

reducing emissions, and cutting transportation and logistics costs,” the airport said.



“In 2019, CSMIA initiated a comprehensive single-use plastic ban across its operations including retail, food & beverages, and partner airlines processes, achieving 100% single-use plastic-free status,” it said adding that over a prolonged period, the RVMs are expected to annually reduce carbon emissions by approximately 125 tCO2e.

Source: The Times of India

ITALICA Unveils India’s First Fully Plastic Folding Chair - Phoenix Folding Chair

Mumbai: ITALICA (PIL Italica Lifestyle Ltd.), a leading name in innovative and stylish furniture solutions, is thrilled to announce the launch of India’s very first fully plastic folding chair - Phoenix Folding Chair. With the tagline “Unfold comfort anywhere,” the Phoenix Folding Chair is set to revolutionize the way we think about seating, offering an unparalleled combination of design, durability, and convenience.

Phoenix Folding Chair by ITALICA is a masterpiece of engineering and design, seamlessly combining form and function. It combines solid construction with elegant design. Crafted from high-quality materials, it’s lightweight yet robust, ensuring stability and durability. Its attractive ventilated design is available in four vibrant colours, making it a stylish addition to any space. This chair is also space-saving, foldable, and stackable for easy storage and portability. With an intuitive locking system, it’s effortless to use and low maintenance, resistant to damage. Safety and stability are ensured with rubber stoppers on the legs, protecting your floors and carpets.

Speaking at the occasion, Yogesh Jangid, Head of Marketing-India, PIL Italica Lifestyle Ltd. said, “Our team at ITALICA is thrilled to introduce the Phoenix Folding Chair, India’s first fully plastic folding chair, just in time for the festive season. We believe that great moments deserve great seating, and Phoenix Folding Chair offers the perfect blend of style, comfort, and practicality. As we celebrate this season of joy and togetherness, we hope that our customers will embrace this innovative addition to their homes and gatherings, making every moment even more special.”



The launch of India’s first fully plastic folding chair marks a significant milestone for ITALICA. Whether you’re furnishing your home, office, or any other space, the Phoenix Folding Chair is the ideal choice to enhance comfort and style. ITALICA’s Phoenix Folding Chair is now available for purchase, just in time for the festive season. Unfold comfort anywhere with this remarkable addition to the world of furniture.

Source: Business Standard

Biesse Achieves a Milestone of 10,000 Made-In-India Machine Exports to 75+ Countries

By successfully integrating and localising expertise, Biesse embodies the spirit of the “Make in India” initiative while simultaneously exporting its high-quality machines to developed nations

Bengaluru, Karnataka, India



Biesse, a global leader in woodworking machinery and manufacturer of integrated lines and machines to process wood, glass, stone, plastic, and composite materials, has achieved the significant milestone of exporting 10,000 machines to over 75 countries across six continents from India. This accomplishment highlights the global demand for Biesse’s premium products and services, the company’s commitment to the “**Make in India**” initiative, and the export of high-quality machines to developed nations. This success is attributed to Biesse’s proficient integration and localization of European expertise, skills, and technology within its Indian operations.

Biesse Exports 10,000 machines to 75+ countries

The company offers premium machines and technological capabilities that meet European standards, exemplifying its commitment to excellence. Biesse consistently advances its cutting-edge technology as a premier brand, exporting approximately 80 per cent of its total production worldwide.

*Speaking on the announcement, **Sayed Ahmed, CEO, Biesse India**, said, “Biesse’s manufacturing facility in Bangalore is the largest outside Italy, contributing significantly to India and its major markets. The company empowers its employees with advanced manufacturing skills, enabling them to produce world-class machines.*

We continuously focus on scaling up production and enhancing the skills of our workforce here. This achievement reflects the dedication and expertise of our workforce. Biesse is poised for exponential growth in the coming years and aims to increase our market share in other industries like glass, stone & advanced material and thereby be recognized as a company providing solutions for multi-material processing.”

Biesse India is not only exporting machines globally but also sending trained engineers to its subsidiaries globally to support markets where we have supplied machines from India.

The Indian government’s initiatives to impose trade barriers against substandard imports have further increased the demand for high-quality, made-in-India products. The growing demand for BIS-certified machines, factory automation, and the rising market in Tier 2 and Tier 3 cities projects a significant boost in Biesse’s sales.

Biesse is expanding its product range and investing in product development to serve our markets better by addressing the production problems of our customers globally through ‘**Made in India**’ products at our Bengaluru facility. Biesse has its own competent technical product team who are constantly innovating and working on new projects to serve customers better.

About Biesse

Biesse is a globally recognised company specialising in the manufacturing of integrated lines and machines for processing wood, glass, stone, plastic, composite materials, and future materials. Established in Italy in 1969 and listed on the Euronext STAR segment of the Italian Stock Exchange, Biesse supports the business evolution of its clients across the furniture, housing and construction, automotive, and aerospace industries.

Currently, approximately 80 percent of Biesse’s consolidated revenue is derived from international markets, facilitated by a growing global network that includes four manufacturing campuses and over 30 showrooms, reaching more than 160 countries.

Thanks to its rooted competence embodied by 4,200 employees, Biesse empowers the imagination of industry-leading companies and prestigious names in Italian and international design to make the potential of any material shine.

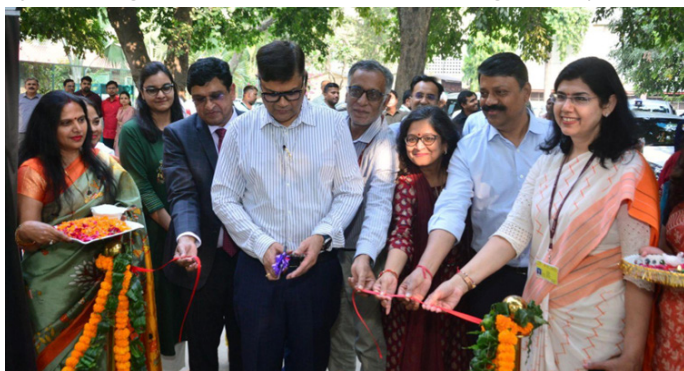
Source: News Voir

Bisleri International Collaborates with Ministry of Education (GOI) for the Initiative, Special Campaign 4.0 ‘Workspace Beautification Initiative’

The initiative aligns with the Swachh Bharat mission, promoting sustainability across all dimensions of work

New Delhi, Delhi, India

In a significant move towards promoting sustainability and adopting the principles of a circular economy, Bisleri International Pvt. Ltd., in collaboration with the Ministry of Education, Government of India, installed recycled plastic benches at Shastri Bhawan premises. Under Education Ministry, Government of India’s Special Campaign 4.0 – ‘Workplace Beautification Initiative’ this effort underscores the shared commitment of Public Private Partnership to environmental responsibility by creating a sustainable and welcoming workspace.



Bisleri International collaborates with Ministry of Education for Workplace Beautification Initiative

The inaugural ceremony was presided by Shri Sanjay Kumar, IAS, Secretary, Department of School Education & Literacy, Ministry of Education, Government of India along with Mr. Angelo George, CEO of Bisleri International in the presence of Additional Secretary and Joint Secretaries of the Department.

Shri Sanjay Kumar, IAS, Secretary, Department of School Education & Literacy, Ministry of Education, Government of India, addressing the gathering, emphasized the significance of the project, “This is a significant step towards achieving our vision of a sustainable future and integrating it into our everyday operations. The Ministry of Education, in partnership with Bisleri, is leading by example in adopting eco-friendly solutions and championing the circular economy.”

Mr. Angelo George, CEO of Bisleri International Pvt. Ltd., reinforced the company’s commitment to sustainability, stating, “We are honored to collaborate with the Ministry of Education on this significant initiative. This endeavor closely aligns with the mission of Swachh Bharat, integrating environmental responsibility

into every facet of our operations and creating a lasting, positive impact. This campaign underscores our shared commitment to environmental stewardship by transforming workplaces into sustainable environments that inspire employees and foster a greener future for all.”

The event featured eco-friendly benches and tables made from recycled plastic, as well as plastic collection banks to encourage responsible waste management. The benches, crafted from recycled materials, were embellished with paintings by Mouth and Foot Painting Artists (MFPA) in recognition of their creativity. Additionally, the corridors of Shastri Bhawan were adorned with the artworks of these artists, celebrating both inclusivity and creativity.

About Bisleri International Pvt. Ltd.

With a legacy of over 54 years, Bisleri International Pvt. Ltd has grown to become one of the largest premium beverage businesses in India. Being the makers of the country’s largest-selling packaged drinking water, Bisleri follows a stringent process of 114 quality tests and a 10-stage purification. It remains true to its core value of providing consumers with pure, safe and healthy water.

Bisleri International has a strong presence with 128 operational plants and a robust distribution network of over 6,000 Distributors and 7,500 Distribution Trucks across India and neighboring countries. It offers a range of beverages that are produced for all occasions. Whether it is the promise of goodness, trust, and purity with Bisleri Mineral Water, or a daily dose of health offered through Vedica Himalayan Spring Water. Besides, Bisleri International has ventured into fun-filled refreshments with a diverse range of carbonated drinks available in multiple flavors, such as Pop, Rev, Limonata and Spyci Jeera. These Bisleri products are also available on the e-commerce platform – Bisleri @Doorstep. This D2C platform reassures customers that they will receive a safe and uninterrupted supply of their most trusted brand at their doorstep.

The core values of Bisleri International lie in yielding growth and embedding sustainability by being responsible in all aspects of the business. The organization has unveiled Sustainability 2.0 with Bisleri Greener Promise that focuses on creating greener future for all through implementing initiatives under the program of recycling, water conservation and sustainability.

Source: News Voir

India proposes fund to help developing nations fight plastic pollution



The developed countries would be required to periodically contribute to the fund and allow private sector donations based on agreed guidelines.

India has proposed setting up a dedicated multilateral fund to support developing countries in tackling plastic pollution.

According to the proposal submitted during the final round of negotiations for a legally binding international agreement on plastic pollution in Busan, South Korea, the fund would be modelled on the successful multilateral fund established under the Montreal Protocol, which addressed ozone depletion.

India's proposal says the developed countries should provide financial and technical support, including access to advanced technologies, to help developing nations meet the rules and targets set by the upcoming global agreement on plastic pollution.

According to the proposal, the fund would provide grants (not loans) to developing countries to make it easier for them to transition to eco-friendly technologies and practices.

The developed countries would be required to periodically contribute to the fund and allow private sector donations based on agreed guidelines, according to a statement issued by the Union environment ministry.

The proposal says that compliance by the developing countries should depend on the developed countries covering the extra costs involved in transitioning to environment-friendly alternatives.

India has suggested the formation of a subsidiary body with equal representation from developed and developing countries to oversee the fund's operations, including creating policies, managing resources, and ensuring fair distribution of funds.

The subsidiary body would also handle technology transfers.

In 2022, the United Nations Environment Assembly (UNEA) adopted a historic resolution to tackle plastic pollution on a global scale.

This led to the creation of the Intergovernmental Negotiating Committee (INC) tasked with developing a legally binding international agreement on plastic pollution by 2024.

Since 2022, the INC has held four sessions in Uruguay, France, Canada, and Kenya. The current session in Busan, which runs from November 25 to December 1, is expected to finalise the agreement.

Source: Business Standard

India suggests funding proposal for plastic phase-out



India's proposal suggests that parties under the agreement, shall establish a mechanism for providing financial and technical assistance, including the transfer of technologies to developing countries from developed countries.

India has circulated a proposal for the financial arrangement to implement a global legally binding instrument on phasing out plastic pollution, currently being negotiated in South Korea's Busan where the fifth session of the Intergovernmental Negotiating Committee to develop an international legally binding instrument on plastic pollution, including in the marine environment (INC-5) is being held.

India's proposal suggests that parties under the agreement, shall establish a mechanism for providing financial and technical assistance, including the transfer of technologies to developing countries from developed countries. This is for achieving a "just transition" towards sustainable production and consumption of plastics.

The mechanism is to enable their compliance with control measures as specified under the treaty. The compliance, by developing countries with respect to control measures shall be linked to provision of the incremental cost as assessed by the Subsidiary Body under the treaty, the proposal seen by HT states.

This proposed mechanism will include a new dedicated multilateral fund. It may also include other means of multilateral, regional and bilateral co-operation.

Countries are expected to agree on an international legally binding instrument on plastic pollution, including in seas and oceans by end of this week.

INC Chair Luis Vayas circulated a non-paper in late October this year that captures common ground among INC members on which they are likely to agree to.

This non-paper has a preamble which lists the reasons for phasing out plastics. It also lists exemptions that may be allowed. And it discusses plastic product design, supply (this is to do with managing the supply of primary polymers to achieve sustainable levels of production and consumption), emissions, plastic waste management, just transition, finance to aid transition, and implementation and monitoring.

Chair Luis Vayas clarified on Monday that the Non-Paper is entirely bracketed (which means every aspect is up for discussion) , and has been proposed as a "starting point for negotiations".

"This session is a pivotal opportunity to deal with one of the most pressing global environmental problems. Plastic waste is about 80% of all marine pollution, with an estimate of 8 to 10 million MT entering oceans annually. Plastic production soared from 2.3 million tonnes in 1950 to 448 million tonnes 2015. The economic and environmental costs of this are profound. Microplastics impact human organs and are associated with serious health risks including cancers," said Vayas during a press conference on Monday.

The world is producing twice as much plastic waste as two decades ago, with the bulk of it ending up in landfill, incinerated or leaking into the environment, and only 9% successfully recycled, according to a 2022 Organisation for Economic Co-operation and Development (OECD) report. Almost half of all plastic waste is generated in OECD countries, according to the Outlook. Plastic waste generated annually per person varies from 221 kg in the United States and 114 kg in European OECD countries to 69 kg, on average, for Japan and Korea. Most plastic pollution comes from inadequate collection and disposal of larger plastic debris known as macroplastics, but leakage of microplastics (synthetic polymers smaller than 5 mm in diameter) from things like industrial plastic pellets, synthetic textiles, road markings and tyre wear are also a serious concern.

More than 99% of plastic is made from fossil fuels. If plastic's life cycle were a country, it would be the fifth largest emitter of greenhouse gases in the world. If plastic production continues as planned, by 2050 the accumulation of greenhouse gas emissions from plastic could use 10-13% of our entire remaining carbon budget, according to Break Free From Plastic.

Source: Hindustan Times

Plastic waste to be converted into automotive fuel in Ayodhya

LUCKNOW: Poised to become one of the biggest religious capitals of the world, Ayodhya is gearing up to spread an eco-friendly message.

The temple town has entered into an agreement with a private company to responsibly use and convert plastic waste generated here into automotive fuel.

"The idea is make Ayodhya a totally single-use plastic free city, " said Ayodhya municipal commissioner Vishal Singh.

To make it happen, the Ayodhya Municipal Corporation has signed a concession agreement with Bengaluru-based MK Aromatics Limited that runs India's first plastic-to-fuel plant in Chennai.

The agreement was signed recently between Vishal Singh and Imran Rizvi (Zergam) co-promoter and director of the company. With our patented technology, we deal in conversion of post-consumer waste plastics to synthetic crude oil which serves as value added petroleum hydrocarbon derivatives. We manufacture various aromatic hydrocarbon solvents, aliphatic hydrocarbon solvents, carbon, and its by-products for various industrial usages,” Rizvi told TOI.

Ayodhya’s plant will be north India’s first and largest having a capacity of 20 tonnes per day which translates into an annual capacity of 7,300 tonnes. In due course, the daily capacity would be doubled.

Officials in the state government associated with the project said after successful implementation in Ayodhya, all urban local bodies, blocks and large panchayats in the division will be tagged to the project. Sharing the plan for Ayodhya, Rizvi said: “Our work will involve collection of plastic wastes from 100 points and its segregation at a pre-processing centre in Ayodhya. The centre will be like a mini refinery where plastic waste will be first converted to crude oil and later into automotive grade diesel which will be sold to industries and farmers to be used in generators, tractors, pump sets, heavy machinery, heavy vehicles used in earth work etc on subsidised rates.”

It will create employment for extremely marginalised persons, particularly women, in the society, he said.

“As many as 100 collection boxes would be installed and only women enrolled to operate them. Several battery-operated transportation rickshaws would be provided to collect the waste and transport to the centre,” he said.

Source: The Times of India



Why become a Plexconcil Member?

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

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

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

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

Membership Benefits

- Discounted fees at International Trade Fairs and Exhibitions
 - Financial benefits to exporters, as available through Government of India
 - Disseminating trade enquiries/trade leads
 - Instituting Export Awards in recognition of outstanding export performance
 - Assistance on export financing with various institutions and banks
 - Networking opportunities within the plastics industry
 - Special price for Dun & Bradstreet's DUNS Registered Solution, Global Profiler, and ESG Report
-

The Plastics Export Promotion Council added the following companies/firms as new members during October-2024. We would like to welcome them aboard!

Sr. No	Name of the Company	Address	City	Pin	State	Email
1	Acefour Accessories Private Limited	3rd Floor, 301 & 314, Atl Corporate Park, Saki Vihar Road, Chandivali, Powai,	Mumbai	400072	Maharashtra	arnob@acefour.in
2	Adiva Polymers Limited	E-138, Unnamed Road Riico Indl. Area Bhiwadi,	Alwar	301019	Rajasthan	mohak@adi-vapolymers.com
3	Amirul Enterprise	364,069 Chandipur, Shri Shri Kali Mandir Dhusia Sultanpur Bazar Dhusia Purba Medinipur Dhusia,		721659	West Bengal	sknasirulis-lam771@gmail.com
4	B. R. Ecopet India Private Limited	Shop No. 18, Ramjanaki Mandir, Jiwaji Ganj, Morena,	Morena	476001	Madhya Pradesh	brecofet@gmail.com
5	Bunty International	Sa.20/170-1 Rupanpur, Sarnath Varanasi,	Varanasi	221007	Uttar Pradesh	gstvaranasi2022@gmail.com
6	D.J. Irrigation	Plot No.D-78, Satpur, M.I.D.C.,	Nashik	422007	Maharashtra	umesh_hanswani@mail.com
7	Hair Hut Enterprise	Ground Floor, Chakdiyarpara, Islampur Bus Stop,Vill-Char Garamgari Baharempore,	Murshidabad	742304	West Bengal	contact@hairhutent.com
8	Himalaya Polytech Private Limited	A-8/4,Jhilmil Industrial Estate,	East Delhi	110095	Delhi	finance@hplpolymers.com
9	Jayachandran Global Refineries Private Limited	Door No 18 Ranga Swamy Road,R.S. Puram,Coimbatore,Tamil Nadu,Coimbatore,641002	Coimbatore	641002	Tamil Nadu	pradeep@jcgroups.net
10	Jaydeep Polycolours Private Limited	815, Gidc Estate Ranoli Vadodara,	Vadodara	391350	Gujarat	jaydeep_polycolours@yahoo.co.in
11	Kalp Flexibles Private Limited	Plot No. 78 79 80 81 82 Kohinoor Industrial Park,	Ahmedabad	382433	Gujarat	kunal@kalpflexibles.com
12	Kelvin Plastic Pvt Ltd	Surevy No. 108/P, Rajkot Gondal National Highway No. 27, Near Toll Plaza,	Bhunava	360311	Gujarat	export@kelvinpipe.com
13	Ktmac Global Private Limited	Khata No 43/46 Gali No 10, Badrola, Mujeri Industrial Area Piala,	Faridabad	121004	Haryana	sales@ktindia.org
14	Maverick Corporation	6/3 Banerghatta Main Road, Begihalli Bangalore Bengaluru Rural Karnataka 560083	Bengaluru	560083	Karnataka	sandeep@maverickcorp.in
15	Navkar Industries	J-40 /1 Midc Area, Ajanta Road,	Jalgaon	425003	Maharashtra	db@navkarmats.com
16	Pro Flexi Packaging Private Limited	B-4/148c, Safdarjung Enclave,	South West Delhi	110029	Delhi	proflexipack@gmail.com
17	Qrego Fabtech Llp	Block No. 217, 318 N.H. No.8, At Astagam Navsari,	Navsari	396433	Gujarat	qregofabtech@gmail.com
18	R K Natural Foods	Rz-E-270, Nihal Vihar Nangloi New Delhi,	West Delhi	110041	Delhi	info.rknatural@gmail.com
19	Raj Laboratories	Unit No. 16, Agarwal Udyog Nagar, Sativali Road, Waliv, Vasai East,	Palghar	401208	Maharashtra	rajlab@hotmail.com
20	Satyu Polypack	Plot No. 16-A 16-B And 16-C , Survey No 380/1, Modern Industrial Estate, Kachigam	Daman	396210	Dadra & Nagar Haveli And Daman & Diu	satyupolypack@gmail.com
21	Spanco Nettingedge Private Limited	Plot No. 206, Horizon Industrial Park, Bamangam, Karjan, Vadodara	Vadodara	391243	Gujarat	spanco.technology1@gmail.com

► New Members

22	Therm O Pack	Survey No.192/2 School Street Ellakaimangalam Village Oragadam Industrial Corridor Kanchipuram Tamil Nadu 631604	Kanchipuram	631604	Tamil Nadu	info@thermopack. in
23	Tools4frp Private Limited	183, Udyog Vihar, Phase-Vi, Sector 37,	Gurugram	122004	Haryana	contact@tool- s4frp.com
24	Ultramarx International	C/108 ,Mustafa Apt, Tanwar Complex Kausa Mumbra	Thane	400612	Maharashtra	ahsan.ashrafi@ ultramarx.com
25	Vimal Mineral	L119, Beside Murali Hotel,Kattedan Hyderabad,Hyderabad,Telanga- na,Rangareddy,500077	Hyderabad	500077	Telangana	vimalmineralind@ gmail.com
26	Vin Dip India Private Limited	D 47 & 48 Phase 1 Ida Jeedimetla, Shapur Nagar	Hyderabad	500055	Telangana	ananth.bomma- devara@vindip. com
27	Vosh Industries	21/B Kesakak Compound I.B. Patel Rd, Goregaon East	Mumbai	400063	Maharashtra	voshindustries@ gmail.com
28	Westcoast Fabritext Private Limited	Thol Road,, Survey No.643, Nanikadi Village,Nani Kadi Part	Kadi	382715	Gujarat	westcoastfabri- text@gmail.com