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FROM THE Editor

Dear Readers,

As the world continues to grapple with environmental challenges, sustainability has become an undeniable priority in every sector. Plastics revolutionized industries, from packaging to medical devices, due to their versatility, durability, and low cost. The key to a sustainable plastic future lies in embracing innovation and a circular economy model, where plastic products are designed for reuse, recycling, and eventual reprocessing into new products. One of the most promising advances in the plastics industry is the increased use of recycled materials. Innovations in chemical recycling are now enabling plastics to be broken down and reused with minimal degradation of quality. By improving recycling infrastructure and technologies, the plastic industry can minimize waste and keep valuable materials in circulation for longer periods. Bioplastics—plastics derived from renewable biological sources such as plants, algae, or fungi—offer a promising alternative to conventional petroleum-based plastics could help reduce the environmental footprint of plastic waste. Moreover, the shift to bioplastics should not replace efforts to reduce overall plastic consumption. It should instead complement strategies aimed at improving waste management. Sustainability in the plastics industry is not just about innovation; it also requires robust policies including bans on single-use plastics and extended producer responsibility (EPR) laws. These policies encourage businesses to take responsibility for the lifecycle of their products and incentivize them to design for recycling or reuse.

On the consumer side, greater awareness about the environmental impact of plastic waste is driving changes in purchasing habits, opting for reusable bags, containers, and bottles, and supporting companies that prioritize sustainable practices. While the challenges are undeniable, the plastic industry has a pivotal role to play in advancing sustainability. By shifting focus to designing products with a longer lifecycle, investing in recyclable and biodegradable materials, and enhancing recycling infrastructure, the industry can contribute to reducing plastic waste. Corporate social responsibility (CSR) programs that focus on reducing environmental impacts are no longer optional—they are necessary for brands to maintain consumer trust and remain competitive in an increasingly eco-conscious market. The journey toward sustainable plastic solutions will require collective effort, involving manufacturers, consumers, governments, and researchers. Although plastic has undeniably created challenges, it also holds the potential for a more sustainable future. By prioritizing innovation, circularity, and responsible consumption, we can create a future where plastic is no longer a burden on the planet but a resource managed responsibly for generations to come.

As you all know that our Maha Kumbh - INDPLAS 24- The Future is East to be held at Biswa Bangla Mela Prangan, Kolkata from 28th February 2025 to 3rd March 2025 is round the corner, I invite everybody to join, contribute and participate in the event.

Wish you all a very Happy New Year with lots of opportunities and business prospects.

Thanking you,

Maniesh K Singhania
Editor

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PRESIDENT *Message*

Dear IPFians,
Season's Greetings!

As we stand at the threshold of a transformative era in the plastics industry, I am excited to share our vision and strategic focus for the coming year, encapsulated in our upcoming INDPLAS'25 - the 10th International Exhibition on Plastics.

Our theme, "Future is East," is not merely a slogan but a strategic imperative that recognizes the immense potential of Eastern India, particularly West Bengal, as a pivotal investment destination for the plastics sector. The eastern region represents a landscape of unprecedented opportunities, characterized by robust infrastructure, supportive government policies, and a dynamic industrial ecosystem.

The Government of West Bengal has demonstrated remarkable commitment to industrial growth, offering comprehensive support to entrepreneurs and industrialists willing to establish and expand their operations. Their proactive approach, including attractive investment policies, infrastructure development, and investor-friendly initiatives, makes the region an attractive destination for plastics manufacturing.

INDPLAS'25, scheduled from 28th February to 3rd March 2025 at the Biswa Bangla Mela Prangan (Milan Mela) in Kolkata, will serve as a powerful platform to showcase these opportunities in Plastic Sector. Under the leadership of Mr. Ashok Jajodia, Chairman of INDPLAS'25, we have meticulously planned an event that will highlight the eastern region's potential, facilitate networking, and provide insights into emerging trends and technologies in the plastics industry.

We strongly encourage our industry peers to explore the eastern market, leverage the supportive governmental environment, and consider establishing manufacturing units in West Bengal. The region offers a conducive ecosystem for growth, with advantages such as strategic location, skilled workforce, and progressive industrial policies. Above all, West Bengal has good local market as well as offer potential for export of the plastic goods.

The plastics industry in Eastern India is poised for significant expansion, and now is the opportune moment to be part of this transformative journey. INDPLAS'25 will be your gateway to understanding and capitalizing on these emerging opportunities.

I look forward to seeing you at INDPLAS'25 and witnessing the collective potential of our industry in shaping the future of Eastern India.

Shri Lalit Agarwal
President

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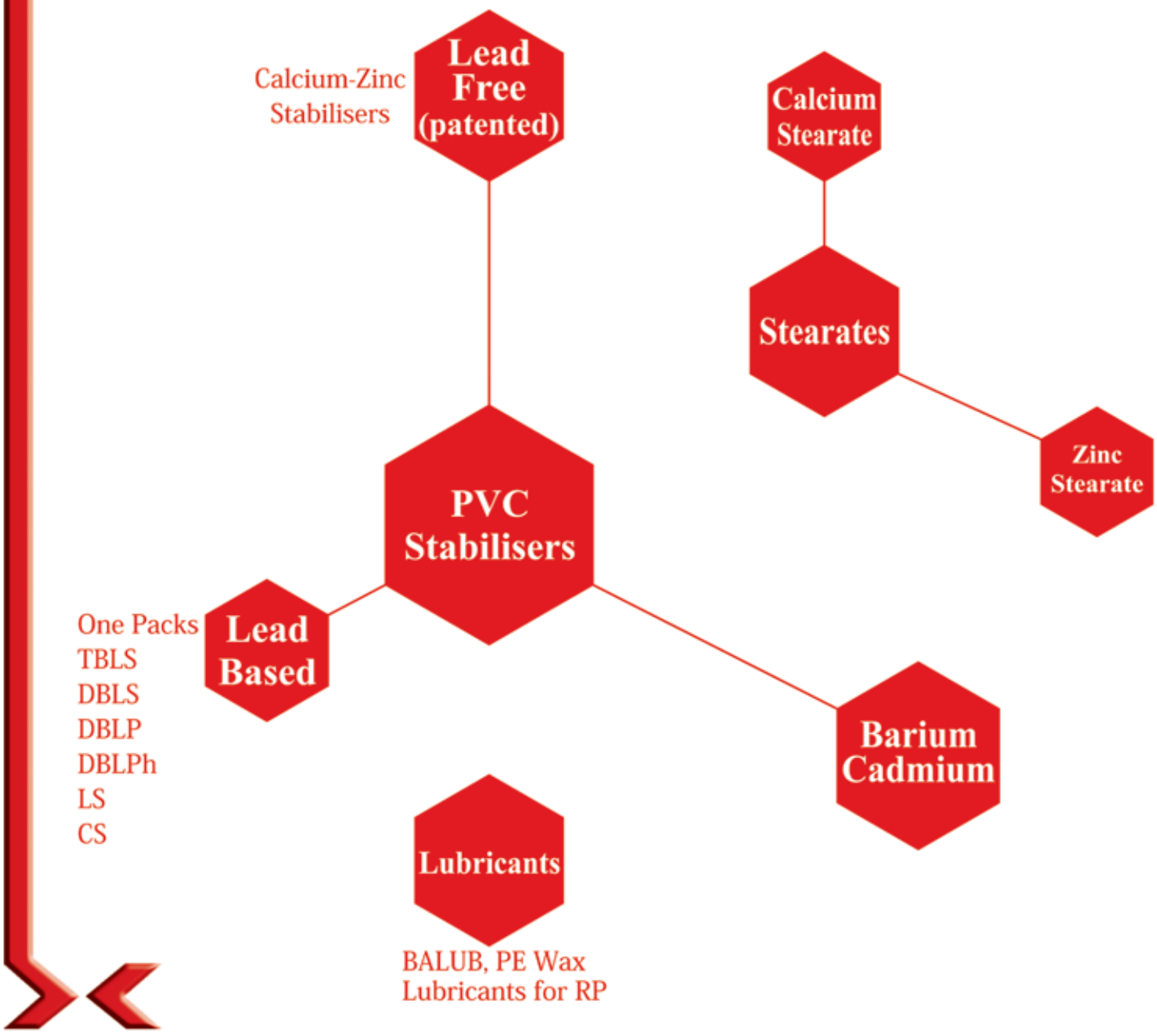

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HONY. SECRETARY *Message*

Dear Members,

The Indian Plastics Federation (IPF) continues to make remarkable strides in promoting the plastics industry and fostering meaningful interactions. The past few months have been filled with impactful events that have benefited our members and the community at large. I extend my heartfelt gratitude to Mr. Sudarshan Kr. Tawri, Chairman of the Seminar Committee, and his team for their exemplary work in organizing these initiatives.

The seminar, "Mastering Growth: Accelerate Your Business with the Power of TRIO", held on August 24, 2024, at Hotel Kenilworth, Kolkata, was a resounding success. Featuring expert speakers like Mr. Moloy Chakravorty, Ms. Tripti Jaisinghania, and Mr. Vineet Bansal, it provided actionable insights on business growth, brand building, and digital transformation. Over 80 attendees benefitted from the discussions and networking opportunities, concluding the event with a delightful dinner.

Another significant milestone was the Open House Session on Fire Safety Norms and Procedures on September 5, 2024, at Rotary Sadan, Kolkata. This session, graced by senior fire department officials, addressed critical fire safety regulations. The interactive discussions offered clarity and solutions for members' concerns, making it a highly appreciated initiative.

The Bengal Shopping Festival, held from September 20 to 24, 2024, showcased the innovative use of plastics through the IPF stall, which highlighted the importance of recycling and responsible plastic usage. It was an excellent platform for members to display their products and connect with the public, creating awareness about the positive aspects of plastics.

The Bengal Plastic Recycling Conference on September 25, 2024, in collaboration with the West Bengal Pollution Control Board, was another landmark event. It addressed pressing issues of plastic waste management and recycling, featuring distinguished speakers and panellists. With 244 attendees, this conference fostered meaningful dialogue and paved the way for sustainable practices in the plastics industry.

These events have significantly contributed to enhancing knowledge, fostering collaborations, and promoting innovation within the industry. The Indian Plastics Federation has been extremely active, organising and participating in numerous events that has brought values to our members and the broader industry.

I am particularly proud of our humanitarian efforts, such as distributing relief materials to 500 flood-effected residents in Hooghly District, demonstrating the plastics industry's commitment to social welfare.

The 65th Annual General Meeting reaffirmed the leadership of our existing office bearers which was held on 30th September 2024 at The Park Hotel, Kolkata, setting the stage for continued progress and innovation in the coming years.

IPF has also participated in the 11th Speciality Films & Flexible Packaging Global Business Summit 2024 concluded successfully on 1st October 2024 at the Jio World Convention Centre, Mumbai. Representing the Indian Plastics Federation at the event were Mr. Ankit Birmecha and Mr. Sumit Jalan.

The MSME Tool Room (Central Tool Room & Training Centre) held its 92nd meeting of the Governing Council and 47th Annual General Meeting on 22nd and 23rd October 2024 at Nirmal Bhavan, New Delhi. The meeting was attended by Mr. Jayanta Bandyopadhyay, Executive Secretary, IPF.

The 7th meeting of the District Level Monitoring Committee on review monitoring and tracking of application by industries for statutory clearance was held on 6th November 2024 at the Administrative Office of the DM, Howrah. Mr. Jayanta Bandyopadhyay, Executive Secretary, IPF attended the meeting.

The 2024 edition of Jaco Corp, an inter-school business festival organised by St. James' School in Kolkata, took place on 8th November 2024. The esteemed Chief Guest of the programme was Shri Lalit Agrawal, President of the Indian Plastics Federation.

The meeting was called by the Department of Technical Education, Training & Skill Development Govt. of West Bengal at Karigari Bhavan on 11th November 2024. Mr. Manesh Kumar Sharma, Secretary General, Indian Plastics Federation attended the meeting.

I thank all the participants and organizers for their unwavering support and dedication. Together, we continue to strengthen the Indian Plastics Federation and advance the industry's growth.

Warm regards,
Shyam Lal Agarwal
Hony. Secretary
Indian Plastics Federation

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Indplas®'25 - Launch Function

BHUBANESHWAR PROMOTION

The Indplas'25 Preview Seminar was held on 18th December 2024 in Bhubaneswar was an exciting start to outreach efforts. The Chief Guest of the event was Shri Gokulananda Mallick, Hon'ble Minister of State, MSME, Govt. of Odisha, he emphasized Odisha's potential as a hub for the plastics sector, with the availability of power, land and raw materials making it an ideal investment destination and urged attendees to focus on exports and highlighted the governments readiness and wholehearted support to MSMEs in setting up new units. The Guest of Honour was Shri Bibhuti Bhushana Dash, IOFS, Special Secretary, MSME Dept. Govt. of Odisha. The other dignitaries on the dais were Mr. Amit Agarwal, Vice President, IPF, Mr. Ashok Jajodia, Chairman, Indplas'25, Mr. Shyam Lal Agarwal, Hony. Secretary, IPF.


AND
PREVIEW OF Indplas '25
2024 (Wednesday)

PLASTINDIA 2026 LAUNCHED: PROPELLING INDIA'S PLASTICS INDUSTRY TOWARDS SUSTAINABILITY, INNOVATION AND GLOBAL LEADERSHIP

The Plastindia Foundation unveiled **PLASTINDIA 2026**, spotlighting the plastics industry's vital role in India's economic growth and sustainability. Hon'ble Commerce Minister Shri Piyush Goyal called for innovation and a target of 20% annual growth rate. The event highlighted ambitious plans for a zero-waste exhibition and the industry's commitment to education, innovation, environmental responsibility and global collaboration for future success.

The Plastindia Foundation officially launched PLASTINDIA 2026, the 12th edition of the prestigious international plastics exhibition, conference and convention, at a grand ceremony held at the Grand Hyatt in Mumbai on 23rd August, 2024. Graced by the Hon'ble Minister of Commerce and Industry, Government of India, Shri Piyush Goyal, who inaugurated the launch, underscoring the pivotal role of the plastics industry in India's economic growth, sustainability goals and its journey towards becoming a developed nation.

The packed house during the launch witnessed unprecedented enthusiasm along with convergence of industry leaders and stakeholders from around the globe. Along with Shri Piyush Goyal and Shri Sunil Singhi, Hon'ble Chairman of the National Traders' Welfare Board, Ministry of Commerce & Industry, Government of India; Alok Tibrewala, Chairman of the National Executive Council for PLASTINDIA 2026; Ravish Kamath, President of the Plastindia Foundation; Raju Desai, Vice President of the Plastindia Foundation; Dharmendra Gandhi, Hon. Treasurer of the Plastindia Foundation; Pradeep Rathod, Chairman of the National Advisory Board of the Plastindia Foundation; Thomas Franken, Director K, Portfolio Plastics & Rubber at Messe Düsseldorf GmbH; and Jigish Doshi, Immediate Past President of the Plastindia Foundation, set the tone for the event.

A highlight of the evening was the symbolic lighting of the lamp ceremony. Utilising an innovative LED diya whose circuit completed with water, the attendees, seated at their individual tables, collectively poured water into the diya, illuminating it and signifying unity and collective effort.

A Catalyst for Growth and Innovation

In his keynote address, Shri Piyush Goyal commended the plastic industry's positivity, enthusiasm

and commitment. He acknowledged the substantial contributions of the Plastindia Foundation and the plastics sector to India's economic growth. Particularly impressed by the industry's modest request for collaboration, he emphasised the immense potential the plastics industry holds for India.

Shri Piyush Goyal urged industry leaders to harness India's talent and skills, stressing the importance of economies of scale, innovation and technology adoption to enhance competitiveness. "It's time we start capturing world markets, taking confident strides towards self-reliance, and engaging with the rest of the world from a position of strength," he remarked.

He revealed that both the Hon'ble Prime Minister Shri Narendra Modi and the Hon'ble Home Minister Shri Amit Shah have expressed strong support for the plastics industry, recognising its significant contribution to employment and its bright future. Shri Piyush Goyal highlighted the Prime Minister's particular closeness to the plastics sector.

Announcing plans to host the CEO's conclave alongside PLASTINDIA 2026 in the prestigious Leader's Summit Room - where the G20 Summit was held - Shri Piyush Goyal invited industry leaders to be his guests for an evening of interaction and dinner. He encouraged the Plastindia Foundation to consider hosting the exhibition more frequently, given the rapid advancements in the plastics industry.

Setting the tone for future endeavours, he proposed the tagline **'Bharat Forever'** for subsequent editions of PLASTINDIA, emphasising the lasting impact the industry will have on India's future. Shri Piyush Goyal envisions India hosting not just world-class, but the world's largest exhibitions, aligning with the nation's aspiration to become a developed nation - a **'Viksit Bharat'**.

He underscored the need for bold thinking and ambition, stating, "If India wants to become the third-largest economy by 2027, grow from a USD 3.5 trillion economy to a USD 35 trillion economy in the next 25 years, and provide prosperity and a better quality of life to every single child born here, then it's time to think big." He added that embracing technology and modern advancements will position India at the forefront of global progress.

A Distinguished Head Table!

Lighting the Lamp of Knowledge!

A Mesmerising Talk by
Hon'ble Minister of Commerce and Industry,
Government of India, Shri Piyush Goyal.

Shri Piyush Goyal encouraged the plastics industry to aim for a 20% annual growth rate, surpassing the country's nominal GDP growth of 11%. He highlighted that today, plastics is creating its impact and finding newer applications across industries. Plastics provide all the ingredients that the modern world is looking for, like its versatility, durability, flexibility and lightweight properties that meet modern demands. "We should aspire to increase our global trade share from the current 1.8% to 20% and eventually reach USD 100 billion in exports," he urged.

Expressing confidence in India's ability to overcome challenges, he stated, "There will be a million problems, but we have a billion minds to solve them." He assured that the government is willing to take every possible step to support the plastics industry, emphasising the importance of quality standards to prevent the influx of substandard imports as we have the capability to do better than them.

Addressing environmental concerns, Shri Piyush Goyal advocated for a greater focus on the circular economy.

Government Support and Collaboration

Shri Piyush Goyal assured industry stakeholders of the government's unwavering support. He announced the formation of a dedicated team from the Department for Promotion of Industry and Internal Trade (DPIIT) within the Ministry of Commerce and Industry to assist the Plastindia Foundation for any requirements from any State or Central Government so as to address any challenges faced by the sector.

Acknowledging Industry Leaders, Sponsors and Industry Status

Ravish Kamath extended a warm welcome to all dignitaries and participants. He highlighted the significant contributions of key industry players, whose support has been instrumental in the sector's growth, and underscored the indispensable role of plastics in modern life and India's journey towards becoming a developed nation.

He acknowledged the unwavering support from major sponsors, including Reliance Industries, Lohia Corp, Supreme Industries, Alok Masterbatches, Cosmo Films Ltd., HPCL-Mittal Energy Ltd., IVL Dhunseri Petrochem Industries and Neelgiri Machinery Global Pvt. Ltd.

He detailed the remarkable growth of the Indian plastics industry over the past decade. The industry expanded from a market size of USD 15 billion in 2010 to over USD 37 billion in 2023 and is projected to reach USD 50 billion by 2026. Employment in the sector currently stands at approximately 4 million people, expected to grow to 5.5 million by 2026.

He emphasised the industry's substantial contribution to the Indian economy, accounting for approximately 1.5% of India's GDP in 2023, with expectations to reach nearly 2% by 2026. India's plastic exports have also seen significant growth,

The Most Awaited Moment!

with exports worth approximately USD 10 billion in 2023, projected to increase to USD 15 billion by 2026.

PLASTINDIA 2026: Bharat Next

Alok Tibrewala expressed his appreciation for the Minister's presence and support. He unveiled the theme for PLASTINDIA 2026, **'Bharat Next'**, symbolising the growth of the plastics industry across all sectors and its commitment to innovation.

Ambitious plans for PLASTINDIA 2026 were announced, aiming to make it the world's largest plastics exhibition. Scheduled to be held from 5th to 10th February, 2026 at the Bharat Mandapam (Pragati Maidan) in New Delhi, the event aims to cover the entire 5,00,000 square metres of this mega venue, accommodating over 1,500 domestic exhibitors and 500 international participants. An expected footfall of over 6,00,000 visitors underscores the event's magnitude.

In order to meet the enormous industry demands, in addition to the 20 halls, we are also considering the construction of world-class temporary structures for the event. The focus is on enhancing the visitor experience through technological advancements, including a dedicated mobile app, improved networking facilities and efficient services. In a significant move, the Plastindia Foundation has booked almost the entire Convention Centre for four days to host the biggest conferencing, convention and workshop the industry has ever seen.

An industry first, PLASTINDIA 2026 will be a zero-waste exhibition, ensuring no waste from the exhibition grounds goes to landfills. To enhance the visitor experience, the concept of a 'Tatkal Gate' is being explored for seamless entry.

A special promotion was announced: exhibitors who book booth space before 31st October, 2024 will receive a special discount of Rs. 800 per square metre. Those who participated in PLASTINDIA 2023, will get an additional Rs. 800 per square metre as a loyalty discount.

Global Perspectives

Addressing the gathering, Thomas Franken emphasised the importance of global collaboration. He expressed confidence in the event's potential to attract participants from around the world.

He highlighted the themes of the upcoming K Show in Germany, focusing on the circular economy, sustainable practices and technological innovations shaping the industry's future. "These themes will also play a significant role in the next edition of PLASTINDIA in 2026," he added.

Thomas Franken underscored emerging trends and the need for the industry to adapt to global shifts, particularly in technology and market demands.

Education and Skill Development

Ravish Kamath highlighted that the cornerstone of the industry's future lies in education and skill enhancement. The **Plastindia International University (PIU),** located in Vapi, Gujarat stands as a testament to this commitment. Dedicated to plastics and sustainability, PIU aims to nurture the next generation of industry professionals. Investment in education is seen as crucial for fostering innovation and expertise in the plastics domain.

Industry Opportunities

Pradeep Rathod addressed the evolving landscape of the plastics industry, acknowledging the opportunities and challenges posed by technological advancements, regulatory changes and shifting public perceptions. He emphasised the collective responsibility to navigate these changes with foresight and determination. He underscored the need for the industry to champion sustainable practices, enhance collaboration and embrace technological innovations to remain globally competitive.

A Call to Ambition

In his concluding remarks, Shri Piyush Goyal emphasised that innovation is the way forward. He urged industry captains to have dedicated teams and to be bold in their aspirations. "If we all come together with new ideas and innovate new products, the industry will grow, employment will increase for millions, and our businesses will flourish," he stated.

He highlighted India's journey toward self-reliance **(Atmanirbhar Bharat)** during the **'Amrit Kaal'**, as the nation marches toward becoming a developed country. He noted that India has transformed from being a fragile economy to the world's fifth-largest economy, with substantial foreign exchange reserves. "According to every survey, the next few decades belong to India," he affirmed.

Shri Piyush Goyal acknowledged the significant

contribution of plastics to every person's life and lifestyle, urging the industry never to underestimate its impact. "Your contribution is nothing less than service to the country," he said. He encouraged the industry to embrace best practices, innovation, technology, economies of scale and high quality, asserting that with these, there is no stopping India's progress.

He concluded with confidence, stating, "Let us decide that India's plastics industry will be the best in the world. Remember, the Indian plastics industry is second to none. With quality, innovation and technology, we can achieve greatness." Quoting Shah Rukh Khan, he added, "If we desire something earnestly, the universe conspires to make it happen."

Looking Ahead

Raju Desai delivered the vote of thanks, expressing gratitude to all the speakers, attendees, sponsors, exhibitors, partners, the organising team and the media.

"As we look forward to PLASTINDIA 2026, we are filled with optimism and determination," he said, "This event will not only showcase our industry's strengths, but also pave the way for future advancements."

He invited guests to participate actively in the upcoming exhibition and to join in collaborative efforts to drive the industry forward.

Closing Note

The event concluded with networking opportunities and a dinner, fostering camaraderie among industry participants. The atmosphere was one of enthusiasm and collective resolve to make PLASTINDIA 2026, a resounding success.

A Vision that Spellbound the Industry,
Alok Tibrewala,
Chairman of the National Executive Council
for PLASTINDIA 2026,
addressing the gathering.

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Unlocking Eastern India's Potential for Plastics and SME Growth

AMIT KUMAR AGARWAL

Vice President, Indian Plastics Federation;
Co-Chairman of
Exhibition Organising Committee, Indplas'25;
Kolkata

In dialogue with POLYMERS Communiqué, Amit Kumar Agarwal discusses opportunities available for the plastics industry, emerging markets, technology advancements and highlights of Indplas'25 event. Indian companies can boost global competitiveness by investing in innovation and sustainability, while SMEs will benefit from agility and advanced technology, he says.

Q. What opportunities does Eastern India offer for the plastics industry?

The strategic location of Eastern India indeed presents abundant business opportunities for the plastics industry, which can be significantly enhanced by various factors, including a growing domestic market, easy access to neighbouring countries, skilled labour availability and strong government support.

Here's a breakdown of how these factors contribute to creating a dynamic and favourable environment for the plastics industry.

- Domestic Market Access: Catchment area includes key states of Bihar, Jharkhand, Odisha and the North-Eastern states, all with growing demand for plastic products in packaging, construction and automotive sectors.
- Proximity to Neighbouring Countries: Eastern India is close to Bangladesh, Nepal, Bhutan, Myanmar and Southeast Asia, providing easy import / export routes for plastics.
- Cost-effective Labour: Skilled and unskilled manpower is abundant from Eastern and North-Eastern states, offering competitive labour costs.
- Government Support: The government has launched various programmes encouraging business growth and ease of operation in the region. On the other hand, government-owned financial institutions like the WBIDC and WBFC provide financial assistance to the industry along with institutions like CIPET and SARP that engage in upskilling the local labour force and providing the plastics industry with the latest technology and innovations.
- Raw Material Availability: The presence of four major polymer producers namely Haldia Petrochemicals Ltd., Indian Oil Corporation Ltd., BCPL and IVL Dhunseri ensure a steady and cost-effective supply of petrochemical products for plastic production.
- Infrastructure and Ports: Kolkata and Haldia Ports facilitate easy imports and exports. The upcoming Tajpur Deep Sea Port will further boost trade efficiency.
- Power Availability: Stable and affordable power supply supports industrial operations in the region.

- Lower Operation Cost: Eastern India offers cost-effective operations, skilled labour, strategic ports, strong infrastructure, favourable policies and access to key markets.

Q. How can Indian companies better compete globally?

To compete on a global scale, Indian companies must prioritise innovation through strategic investments in research and advanced technologies. Ensuring that their products not only meet, but exceed international quality standards, while at the same time embracing sustainable practices will be the key. Enhancing production efficiency, particularly by adopting automation, will enable them to control costs and maintain a competitive edge. A strong global presence requires building reputable brands and effectively marketing to international audiences. Collaborations with foreign companies and the expansion of supply chains are essential for accessing new markets. Additionally, government support, workforce training and a commitment to exceptional customer service will be critical as companies adapt to diverse markets and scale their growth internationally.

Q. How do you foresee the growth of small and medium enterprises within the plastics industry?

SMEs in the plastics industry are set for growth, driven by agility and adoption of technologies like 3D printing, smart moulding and automation. This allows them to compete on efficiency, customisation and serve niche markets in sectors like medical devices, automotive and sustainable packaging.

With rising demand for eco-friendly solutions, SMEs can lead in biodegradable, recycled and plant-based plastics. Government incentives and access to funding and global markets further support their growth. Collaborative innovation with larger companies also boosts their capabilities, positioning SMEs to thrive in a competitive, sustainability-focused industry.

Q. What are the key features of Indplas'25 exhibition? What latest technologies or innovations are expected to be on display?

The Indplas'25 exhibition will showcase the latest innovations and technologies in the plastics industry, with a strong focus on sustainability, advanced manufacturing and live demonstrations of cutting-edge machinery.

Key Attractions

- Live demonstrations of injection, extrusion, roto moulding, predictive maintenance, automation and cobots enhancing speed, precision and safety.
- Live demonstrations of 3D printing technologies using biodegradable filaments will highlight custom production capabilities, particularly for industries like automotive, aerospace and healthcare.
- The exhibition will showcase biodegradable plastics, plant-based materials and advanced recycling technologies like chemical recycling and closed-loop systems.
- Energy-efficient processing, waste-to-energy tech and innovations driving sustainability and digital transformation in plastics. It will serve as a key platform for professionals to explore how the industry is evolving to meet environmental and technological challenges.

Q. How is Indplas'25 supporting small and medium enterprises within the plastics industry?

Indplas'25, with the theme 'Future is East, Future is Plastics', offers a key platform for small and medium enterprises (SMEs) in the plastics industry. The exhibition focuses on emerging markets in the East - especially India, Bangladesh, Nepal, Burma and Bhutan - where demand for plastics is growing in sectors like automotive, packaging, construction and electronics.

The event will showcase cutting-edge plastics processing technologies, sustainable innovations and recycling solutions, empowering SMEs to compete and lead in these fast-expanding markets. It will also emphasise on sustainability and circular economy, providing SMEs a chance to highlight biodegradable plastics, recycled materials and eco-friendly packaging.

The concurrent seminars at Indplas'25 on investment opportunities, skill development, recycling, and industry outlooks will equip SMEs with essential knowledge and tools to foster growth. By emphasizing innovation, networking, and market expansion, these sessions aim to empower small and medium enterprises, driving their development and success in a competitive and evolving plastics industry.

With networking opportunities and exposure to new technologies, SMEs can access business opportunities, collaborate with industry leaders and enhance growth in the evolving plastics sector.

संशयात्मा विनश्यति

(The doubting soul is destroyed)

Doubt means indecision. An indecisive soul, which has no determination; which has no resolution; which has no decision; which has no will. Doubt is the name of that state of mind, when the mind thinks like "either-or, this or that"

There was a very wonderful thinker in Denmark, Soren Kierkegaard. He has written a book, its name is, "Either-or-This". It is not that he has only written a book; he himself was filled with the same doubts. He was in love with a girl, but for years he could not decide whether to marry her or not! He could not decide whether to have a love marriage or not! So much time passed that the girl got tired. She also got married. Then one day he went to her house to inform her that he have not been able to decide yet. But he came to know that the girl is not there now. It has been a long time since she got married.

This Soren Kierkegaard wrote the book, "Either-or-This". Many times people saw him standing at crossroads, walking two steps on one path, then returning; then walking two steps on the other path, then returning. The village children would run after him and shout, "either-or-that! His whole life was spent in such indecision-to be or not to be, to do or not to do.

When the mind is filled with such doubts very deeply, then destruction is attained. Why? Because one who cannot decide whether to do or not to do, can never do anything. One who cannot decide whether to become this or that, can never become anything.

Decision is needed for creation, a decision without doubt is needed. Indecision is enough for destruction. One does not have to take a decision for destruction.

If any person wants to destroy himself, then no decision is needed for this. Just sit without decision, destruction happens on its own. If someone wants to climb the mountain peak, then hard work has to be done, decision has to be taken. But if you want to roll down from the mountain peak like a stone towards the valleys, then there is no need for any decision and no need for any labour.

In this world, downfall happens easily, without any decision. In this world, destruction comes on its own, without our support. But in this world,

Ramesh Kumar Rataria
Past President, IPF

creation does not happen without our resolve. Nothing is created in this world without the involvement of our full labour, power, mind, body. Destruction happens on its own.

If the house is on fire, what will be the condition of a soul filled with doubt? Should I go out or not? This will be the condition of a mind filled with doubt.

The fire will not stop for your doubt, nor for your decision. The fire will keep increasing. And a mind filled with doubt is such that the more the fire increases, the more intense will be its internal denial. The more intense the thought will start running, should I go out or not! The fire will not stop. Destruction will result. That man will die inside the house.

A mind filled with doubt wastes time, and hence is destroyed. Time is an opportunity. And such an opportunity, which is not even found and is lost. A moment comes in hand; two moments never come together. Even the most powerful man on this earth never gets more than one moment. Only one moment comes in hand, a tiny moment. We do not even know that it has come and gone.

A person filled with doubt wastes all the moments of life. Because doubt requires a lot of time, and only one moment is in hand. By the time he thinks, the moment is gone. Ultimately, only death comes in the hands of doubt; one cannot get a hold on life; life is lost. Life is lost in the decision itself whether to do something or not.

Rothschild was a very big billionaire of America. Someone asked him what is the secret of your success? You were poor, you became a billionaire; what is the secret of your success? He said, I did not miss a single opportunity. Whenever an opportunity came, I jumped and grabbed it.

The other person asked what is your secret and key to catching an opportunity?

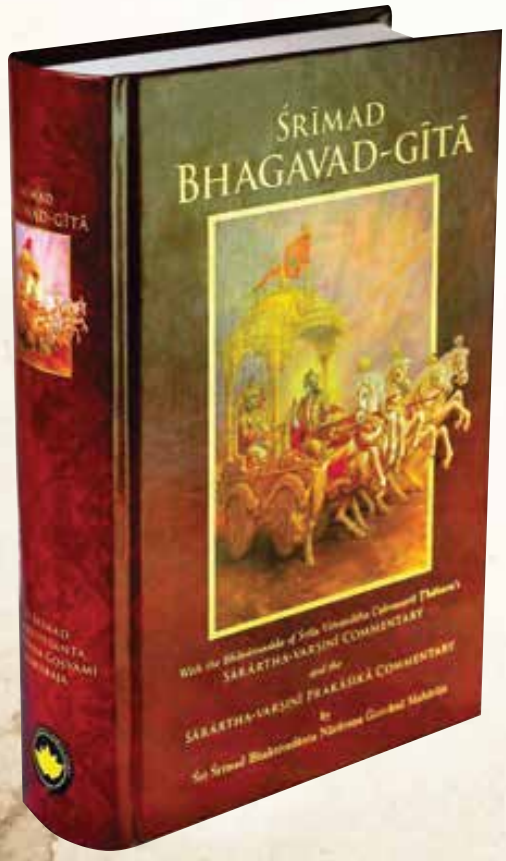
He said, when an opportunity came, I did not think whether to do it or not. I always made a rule that if you have to regret, then regret after doing it; never regret after not doing it. Because there is no point in regretting after not doing it. Because the done can be undone, but what is left undone cannot be done again. The house that is built can be demolished. But what is not built, the time in which it could have been built is lost; now it cannot be built.

In fact, an undoubted person never regrets. The final sum of life is less the sum of what we have done and more the sum of the decisions we have taken without any doubt. At the end of life, what we have done is lost; but the mind that has done it, the ability to do, and do, and take decisions, the strength of determination and the ability to remain without doubt keeps on accumulating. That is the final wealth in our hands. The ability to take our decisions without any doubt is our soul.

The man asked, I also want to do this, but I don't know when the opportunity comes! How do you know that the opportunity comes? And if the opportunity ever comes, then by the time we know, it is gone! So how do you take a leap to catch it?

So Rothschild said that I don't jump, I keep jumping. Whenever the opportunity comes, I ride it. It is not that I stand and wait for the opportunity to come, then I will jump and ride it. Because when the opportunity comes, and by the time I know, it will be gone. Everything in this world is ephemeral. I keep jumping. I keep jumping. Whenever the opportunity comes, the horse of opportunity finds me jumping. I keep jumping. Because Rothschild said, there is no harm if the jump goes in vain; but there is a lot of harm if the horse of opportunity goes empty.

When Krishna says that the doubtful soul attains destruction, he is talking about an even deeper opportunity. Rothschild is talking about the opportunities of this material world. Krishna is talking about the ultimate opportunity that life is an ultimate opportunity, in this ultimate opportunity, if someone wants, he can attain the ultimate achievement – eternal happiness,bliss, ecstasy,. He can attain that achievement where every particle of life starts dancing and is filled with nectar; where all the darkness of life is destroyed; and where all the flowers of life bloom with fragrance; where the dawn of life comes and the song of bliss is born. This is spiritual attainment.



Mr. Alok Tibrewala
Director
Swastik Plastoalloys Pvt. Ltd.

The plastics industry is gearing up for one of its largest, most innovative, and well-organized trade exhibitions in the world- Plastindia 2026. Following the resounding success of the Plastindia 2023 event, the 2026 edition to be held at the world-class Bharat Mandapam in Delhi from 5th – 10th February, promises to set a new benchmark in terms of scale, global participation, and industry significance.

Plastindia 2026 launch event in Mumbai was a major milestone in this journey, and now, with 90% of the domestic bookings already filled and over 45,000 square meters of space secured within just two months of the launch function, the countdown to Plastindia 2026 has begun in earnest. The momentum for Plastindia 2026 has been gaining acceleration day-by-day.

There is an overwhelming demand for space dedicated to live machinery displays. Given the situation Plastindia 2026, in all its likelihood might extend its exhibition space coverage to around 62,000 square meters. This increased space allocation reflects the growing importance of the plastics industry globally and the expanding interest in India as a key player in this sector.

The event's organizing team has since been in close communication with the authorities at Bharat Mandapam, where the expo will be held, to explore the possibility of securing additional space for live machinery displays. The team has been relentlessly following up with the Ministry of Commerce, Government of India, and officials at Bharat Mandapam to ensure that the infrastructure can accommodate this ever-growing demand.

The Plastindia 2026 team is leaving no stone unturned in its efforts to attract the maximum number of international exhibitors and visitors. With the global nature of the plastics industry, international participation is central to the success of the event. The team has already begun reaching out to overseas partners, embassies, and international trade bodies to secure their participation in this much-anticipated event.

In addition to this, the team has embarked on a comprehensive program to develop strong vendor relationships through one-on-one meetings. These strategic vendor tie-ups are set to ensure that Plastindia 2026 will feature state-of-the-art infrastructure, with a seamless exhibition experience that will be remembered for years to come.

In line with the global aspirations of Plastindia 2026, the event will also host a high-profile CEO Conclave. This exclusive gathering will bring together the top 100 industry leaders, including CEOs from international companies, global retailers,

and cutting-edge technology providers. The Conclave will provide a platform for industry leaders to explore investment opportunities in India, while also examining what the global market has to offer.

An essential aspect of Plastindia 2026 will be its diverse range of seminars and conferences, aimed at driving industry innovation, collaboration, and knowledge-sharing. The PI team has already secured most of the conference areas at Bharat Mandapam, and work is underway to develop a schedule that promises over 100 conference sessions. These conferences will focus on the most pressing issues in the plastics industry today, from sustainability and recycling to technological advancements and market trends.

As Plastindia 2026 draws closer, the team remains committed to delivering an event that exceeds expectations. With tireless efforts underway to ensure robust vendor development, a dynamic CEO Conclave, groundbreaking seminars, and seamless event infrastructure, Plastindia 2026 is set to be a transformative experience for all attendees. The event is not just about showcasing products and technologies—it is about creating a lasting impact on the global plastics industry, highlighting India's role in shaping the future of the sector, and fostering international collaboration.

Plastindia 2026 is poised to be a historic event, and with the full support of the Indian government, the international community, and the organizing team, it promises to be the biggest and most influential plastics industry expo ever held.

India: Changing Environment, Development & Sustainability

Maniesh K Singhania
Director
Vintech Polymers Pvt. Ltd.

In recent years, the packaging industry has witnessed a paradigm shift towards sustainability, driven by environmental concerns, regulatory pressures, and consumer demand for eco-friendly products. Among the various strategies to reduce the environmental footprint of packaging, the adoption of water-based and solvent-less inks, coatings and adhesives in flexible packaging applications stands out as a transformative approach. This comprehensive discussion explores the benefits, challenges, and future prospects of these eco-friendly technologies, highlighting their significance in fostering sustainable packaging solutions.

Sustainable packaging innovations

Traditionally, the packaging sector has relied heavily on solvent-based materials due to their superior performance attributes, including quick drying times, robust adhesion, and vibrant color representation. However, the environmental and health hazards associated with volatile organic compounds (VOCs) emitted by these solvents have prompted a revaluation of their use. Water-based and solvent-less technologies emerge as compelling alternatives, offering a pathway to reduce VOC emissions and improve the sustainability profile of packaging materials.

Transitioning to water-based inks and coatings

Water-based inks and coatings replace traditional solvents with water, significantly diminishing VOC emissions. This transition not only benefits the environment by reducing air pollution but also enhances workplace safety by minimizing exposure to toxic substances. The adoption of these materials in flexible packaging is particularly noteworthy, given their potential to comply with stringent environmental regulations without compromising product quality.

Despite their environmental advantages, water-based inks and coatings face challenges related to drying times and substrate adhesion. To address these issues, ongoing research focuses on formulation enhancements and process innovations, such as advanced drying techniques, that can improve efficiency and performance.

Integrating water-based inks without PVC

A critical aspect of advancing sustainable packaging is the design and utilization of water-based inks that do not rely on polyvinyl chloride (PVC) as a raw material. PVC is known for its negative environmental impact, particularly regarding recycling processes and the

release of harmful chemicals. Water-based inks offer a promising solution, as they can be formulated without PVC, thus eliminating these environmental concerns. This approach not only aligns with sustainability goals but also supports the recycling and reuse of packaging materials, further reducing the packaging industry's ecological footprint.

Exploring solvent-less coatings

Solvent-less coatings eliminate the use of volatile organic solvents, relying instead on physical drying processes like UV, LED and EB curing. These coatings are prized for their zero VOC emissions, energy efficiency, and compatibility with recycling processes. The application of solvent-less coatings in flexible packaging aligns with circular economy goals, facilitating the recycling and reuse of packaging materials.

The integration of solvent-less coatings into packaging production, however, requires significant upfront investment in specialized curing equipment. Despite this, the long-term environmental and economic benefits, including lower energy consumption and reduced regulatory compliance costs, present a compelling case for their adoption.

The emergence of solvent-less adhesives

Solvent-less adhesives represent another critical advancement in sustainable packaging materials. These adhesives provide a strong bond without the need for volatile solvents, thereby eliminating VOC emissions during the curing process. Their use in flexible packaging is particularly advantageous for products that require strong, durable seals without compromising the package's recyclability or the product's safety.

Like solvent-less coatings, the adoption of solvent-less adhesives necessitates adjustments in production processes and equipment. However, their environmental benefits, coupled with improvements in safety and efficiency, justify the transition. Manufacturers are increasingly recognizing the value of solvent-less adhesives in achieving sustainability goals while maintaining, if not enhancing, packaging performance.

Economic and environmental benefits

The shift towards water-based and solvent-less materials in packaging offers notable economic and environmental advantages. By reducing VOC emissions, companies can mitigate their environmental impact, enhance worker safety, and align with global sustainability standards. These practices can lead to cost savings through lower energy consumption, reduced regulatory compliance expenses, and potential eligibility for environmental incentives. Furthermore, eco-friendly packaging solutions can bolster a brand's reputation, appealing to the growing segment of environmentally conscious consumers.

Overcoming challenges through innovation

Adopting water-based and solvent-less technologies is not without its challenges. Issues such as slower drying times, substrate compatibility, and the initial cost of new equipment pose hurdles to widespread adoption. However, the packaging industry is responding with innovative solutions, including the development of new ink and adhesive formulations, investment in advanced curing technologies, and collaborations across the supply chain to enhance the performance and applicability of these materials.

Future directions for sustainable packaging

The future of sustainable packaging lies in continued innovation and the development of eco-friendly materials. Efforts are underway to improve the performance and cost-effectiveness of water-based and solvent-less technologies, making them viable alternatives to traditional solvent-based materials across a wider range of applications. Additionally, the exploration of renewable raw materials for the production of inks, coatings, and adhesives further highlights the industry's commitment to sustainability.

Digital printing technologies paired with eco-friendly materials offer exciting opportunities for customization and efficiency in packaging production. The precision and flexibility of digital printing enable the judicious application of inks and coatings, minimizing waste and facilitating short-run, customized packaging solutions.

The integration of water-based and solvent-less inks, coatings, and adhesives in flexible packaging is a testament to the industry's dedication to environmental stewardship and innovation. While challenges remain, the benefits of these technologies – ranging from reduced VOC emissions to improved recyclability of packaging materials – highlight their pivotal role in advancing sustainable packaging practices. As the industry continues to evolve, it is clear that the future will be shaped by solutions that not only meet functional and aesthetic requirements but also prioritize ecological and health considerations. The journey towards sustainable packaging requires a collaborative and forward-thinking approach, where innovation and responsibility converge to create packaging solutions that are not only efficient and effective but also benign to our planet.

KNOW THE PLASTIC: A SMARTER PATH TO SUSTAINABILITY

In today's "Plastic Age," eliminating plastic entirely may not be practical. However, adopting a thoughtful approach—"Know the Plastic"—can help us make informed decisions to minimize its environmental impact while appreciating its benefits.

Making Better Choices: Reducing Plastic's Impact

Instead of focusing solely on rejection, let's prioritize awareness and action:

Opt for sustainable packaging: Support brands using eco-friendly materials.

Ditch single-use plastics: Embrace reusable alternatives in daily life.

Engage with initiatives: Join movements that advocate for plastic-free living.

Recycle and repurpose: Take part in community recycling and find creative ways to reuse plastics.

The Positive Side of Plastic: Innovations and Applications

1. Transforming Healthcare:

   Plastic enables life-saving innovations like syringes, prosthetics, and organ preservation tools.

2. Advancing Sustainability:

   Recyclable and biodegradable plastics, along with plastic-to-fuel technologies, are paving the way for a greener future.

   Plastic plays a key role in renewable energy solutions, such as solar panels and wind turbines.

3. Everyday Necessities:

   Lightweight, affordable, and versatile, plastic is indispensable in transportation, electronics, and food preservation.

Its durability and cost-effectiveness reduce waste and improve accessibility across industries.

Shifting the Mindset

Plastic is not inherently bad—it's how we use and dispose of it that matters. By focusing on reducing, reusing, and responsibly managing plastic, we can enjoy its benefits while curbing its environmental harm.

Let's replace "No to Plastic" with "Know the Plastic," fostering a culture of informed choices and meaningful actions for a sustainable future.

Manish Maheshwari
CEO
Anuman Engineering Industries

THE PLASTICS EXPORT PROMOTION COUNCIL

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Mr Alok Tibrewala
Regional Chairman (East)

Express gratitude and optimism as we approach 2025. Highlight the remarkable achievements of the plastics industry, especially the export milestones. In October 2024, India reached an impressive USD 1,142 million in plastic exports, marking a significant 22.5% growth over the USD 932.6 million recorded in October 2023. The cumulative export value from April to October 2024 stands at USD 7262.5 million, reflecting at 11.5% increase over the USD 6512.5 million achieved during the same period last year.

The Eastern region has also been contributing significantly to India's plastic export growth. In the fiscal year 2023-24, exports of products under the purview of Plexconcil from this region reached USD 982.30 million, reflecting a steady increase compared to USD 952.70 million in the previous fiscal period. This consistent growth highlights the potential and resilience of the Eastern region's plastic sector including human hair exports, further reinforcing its role in driving India's overall export achievements. However, there remains immense untapped potential in the global market.

Global Outreach and Promotional Efforts

- Plexconcil's initiatives in key international markets (e.g., Dubai, Russia, Mexico, and Brazil).
- Focus on creating visibility through trade fairs, buyer-seller meets, and outreach programs.

Resilience Amid Global Challenges

- Industry adaptability despite geopolitical tensions and global complexities.
- Emphasis on exporters' efforts to maintain quality and delivery standards.

Plexconcil remains committed to supporting trade and enhancing the export landscape for our members. Our initiatives will continue to prioritize the needs of our exporters, addressing challenges and helping them reach their full potential. The path forward holds immense promise, and we are here to provide the resources, guidance, and advocacy needed to ensure our industry's sustained success.

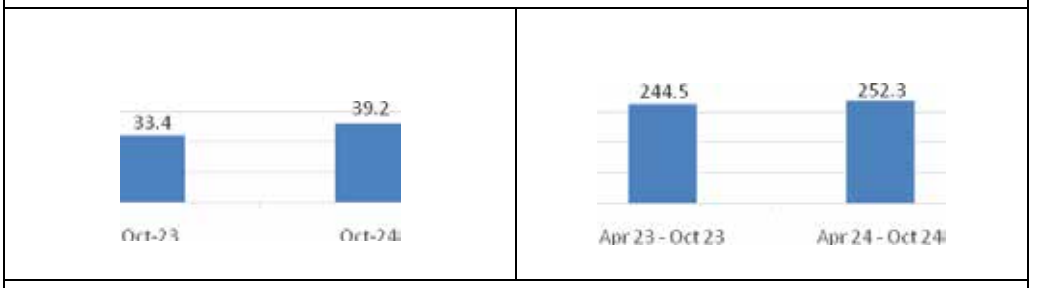
Thank you to each of our members for your hard work, dedication, and commitment to excellence. Together, we will achieve our goals and continue to elevate India's position in the global plastics market. Let us work hand in hand, inspired by the vision of a successful and prosperous future for India's plastics sector.

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

(USD Billion)



Source: Ministry of Commerce & Industry, Government of India

TREND IN PLASTICS EXPORT

During October 2024, India exported plastics worth USD 1,142 million, higher by 22.5% from USD 933million inOctober 2023. Cumulative value of plastics export during April 2024 –October2024 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

(USD Million)

Source: Ministry of Commerce & Industry, Government of India

PLASTICS EXPORT, BY PANEL

In October 2024, yet again export performance saw a substantialsurge across all product categories,marking a significant milestone as it is the second time this year that every panel reported positive results, withPlastic 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%

Panel	Oct-23	Oct-24	Growth	Apr 23-Oct-23	Apr 24-Oct-24	Growth
	(USD Mn)	(USD Mn)	(%)	(USD Mn)	(USD Mn)	(%)
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

Exports of **Consumer & houseware products** witnessed ansurge of 13.3% in October2024 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 October2024 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.

InOctober2024, 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 October2024. 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** increasedby 13.1% in October2024 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 October2024 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 October2024, 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 nowwitnessing 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** risenby 35.0% due to improved sales of Rigid tubes and pipes of Polymers of vinyl chloride (39172390); Flexible tubes of plastics (burst pressure >= 27,6 MPa) (391731); Flexible tubes of plastics (391739) and Fittings of plastics for tubes& pipes (391740).

Plastics raw materials exportswere 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 increasedby 4.0% in October2024 due to highersales 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%

HS Code	Description	Apr 23-Oct 23 (USD Mn)	Apr 24-Oct 24 (USD Mn)	Growth (%)
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%
39119090	Other polysulphides, polysulphones and other polymers and prepolymers 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 >= 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%

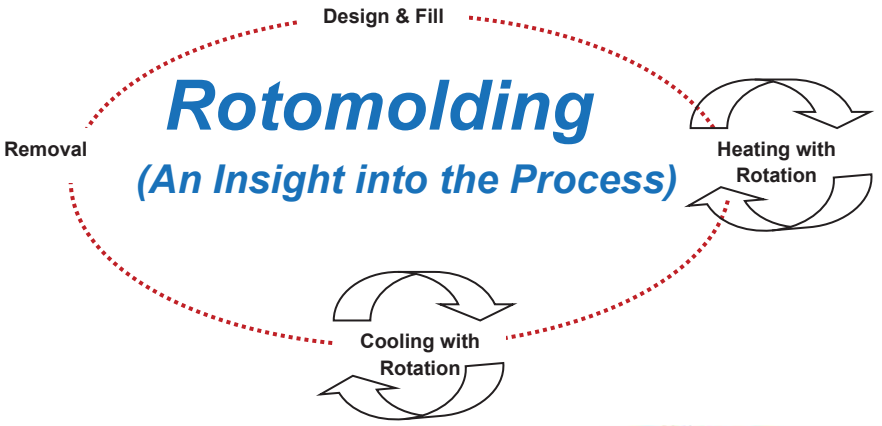
Source: Ministry of Commerce & Industry, Government of India






Rotomolding

(An Insight into the Process)









Introduction

Rotomolding often called rotational molding or rotational casting is a versatile process to produce hollow items of any size & preferred shape. The process has diversified itself to produce product sizes ranging from small ear syringes, toys, automotive products, industrial & infrastructure products to thousands of liters of water tanks. Rotational molding is one of the cheapest systems of molding compared to injection & blow molding because of low tooling & mold costs. The process offers the product with low stress, design flexibility, less resin scrap, better control of wall thickness, weight & intricate design adjustment & also multi wall moldings.

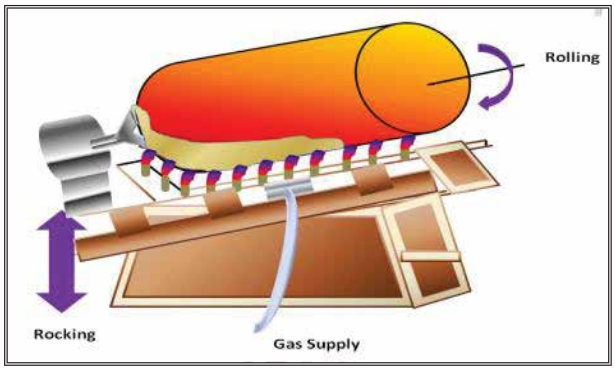
Production Process

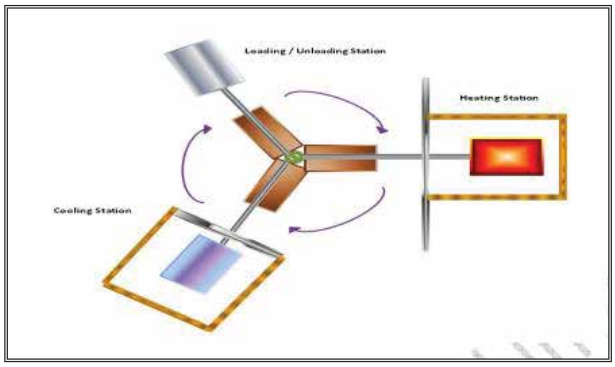
The process primarily consists of five steps

1. Pulverization: Pellets are converted to free-flowing powder form by grinding, often called attrition. Reduction in particle size is required to obtain better heat transfer from the mold & better flow characteristic for further steps of processing.
2. Loading the pulverized powder into the mold & closing the mold.
3. Heating of the mold so that the powered resin fuse together & adhere to the surface of the mold. Heating is done either directly or by convection mode i.e by hot air inside the oven
4. Cooling of the mold done by cooling air or cold-water spray or combination of both
5. Unloading of the product from the mold.

Machinery Details

Two basic types of rotational molding are found in commercial industries:





1. Open flame rock n roll : Clamshell Machines

The design involves the concept of a rocking action about one axis (rock.) and a full 360° rotation about a perpendicular axis (roll) & is heated with open flame. All the stages of rotomolding are done in the same station.

2. Fixed arm machine i.e two, three or four arm machines: Turret Carousel Machines, Shuttle Machines, Swing machine & Vertical wheel machines

Many rock n roll machine have been replaced by fixed arm machine as it's significantly increased the productivity and also enabled the production of complex parts of higher volume. Fixed arm machines are fully automated with computer controls that facilitate the molder to process the function according to its choice. Recent inventions of Rotolog computer system within mold graphics enabled the processors to monition & control the processing inside the oven.

New types of machines called "Datome" have also come up where the heating is being done by infrared radiation.

General Properties of PE for Rotomolding

- Resin - Polyethylene (LLDPE & HDPE) are the ideal choice of resin for rotomolding processors as its comes with better mechanical properties like higher stiffness, excellent low temperature impact properties & environmental stress cracking resistance, chemical resistance & most important processability. Crosslinaked PE is also available where crosslinking agents are added during molding cycle to form the thermoset. Other rotomolding resin include PP, PVC, Nylon, PC & Polyester

Polyethylene Specification

- MFI - 3 to 20 g/10min. The higher the MFI - lower the molecular weight, better the flow ability, lowers mechanical & ESCR properties. Narrow & optimum molecular weight distribution resins are preferred as they give uniform melt properties & also ensure zero shear velocity required in rotomolding process. MFI acts as a primary viscosity controller.
- Type of Co-monomer – Commercially available grades come with different types of co-monomers based on no. of carbon chain. The higher the number of carbon chains as co-monomers the better the product performance as the result of lower density. Octene based LLDPE for rotomolding would give benefit over butene based LLDPE wrt weight reduction, cost reduction by reducing cycle time & thickness, improved functional properties & best suited for complex design product. Crystallinity is controlled by co-monomer i.e. either higher co-monomer content or higher C-chain co-monomer results in lower density as well as crystallinity.
  Selection of co-monomer depends on product compatibility, cost & product properties requirement.

Co-monomer	MFI (g/10min)	Density (g/cc)
Butene LL	3 – 6	0.935 – 0.945
Hexene LL	3 – 6	0.939 – 0.942
Octene LL	3 – 5	0.935 – 0.940
Metallocene LL	3 – 5	0.935 – 0.940
HDPE	2 – 4	0.945 – 0.950
XLPE		>0.950

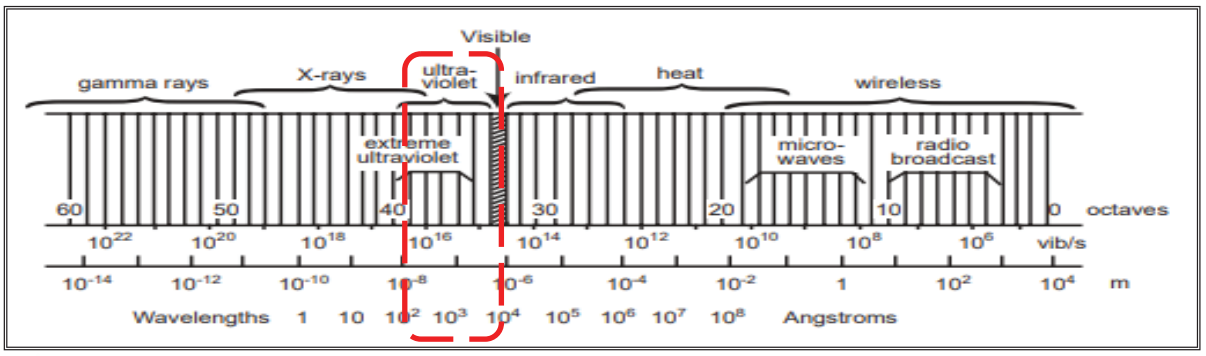
  Co-monomer distribution along the PE chains also defies the product processability & performance. Uniform co-monomer distribution LLDPE would result in good processability & product performance i.e Metallocene based LLDPE would result in good processability compared to Zeigler based LLDPE.
- Densities:
  LLDPE – 0.926 to 0.940 g/cc preferred where high stiffness not required but other properties like impact strength & ESCR are required
  HDPE – 0.941 to 0.959 g/cc preferred where high heat distortion temperature, stiffness & rigidity required.

Depending on product performance requirement - type of resin, MFI & density are chosen.

- Powder – Pellets are not directly roto molded rather taken to 35 mesh powder form through pulverization to obtain proper particle size & distribution. Balance of fine particle (>150 µm) & coarse particle (~500µm) because too fine powder would lead to oxidation & too coarse would results into improper surface due to improper melting in the mold.
- Resin or Powder Stabilization – Most of the rotomolded products involve outdoor applications. So, the resin comes with an additivities package of antioxidant, process stabilizer & sometimes UV stabilization. Colored articles are prepared by mixing pigments (acts as UV Stabilizer) by either dry blending (direct mixing) or during compounding of resin with pigments, additives & subsequently to required particle size by pulverization.

UV Stabilization – Basic Requirement for Rotomolding

UV stabilized resin has become one of basic choices for rotomolder as 65 -75 % of rotomolded products applications are tanks which goes mainly in outdoor applications & rest 25 - 35 % are non-tanks. These tanks & even some non-tanks products are always exposed to outdoor sunlight.

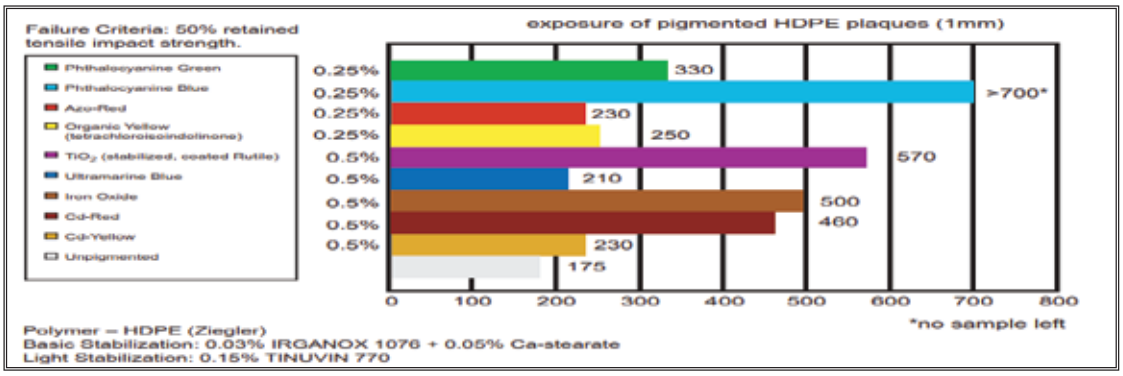


Polyethylene is highly susceptible to degradation on exposure to UV portion of visible lights (Sunlight).
The most destructive frequencies for plastics are shorter wavelength UV portion of visible light which possess higher energy sufficient enough to break the weak chemical bond i.e. C-C or C-H bonds of polymeric material resulting in embrittlement. This process is also called photo degradation leading to weathering of plastics like loss of mechanical properties, fading, and discoloration, cracking & chalking. There are three types of UV lights based on wavelength: UV-A (320 to 380 nm), UV-B (280 to 320 nm) & UV-C (180 to 280 nm).

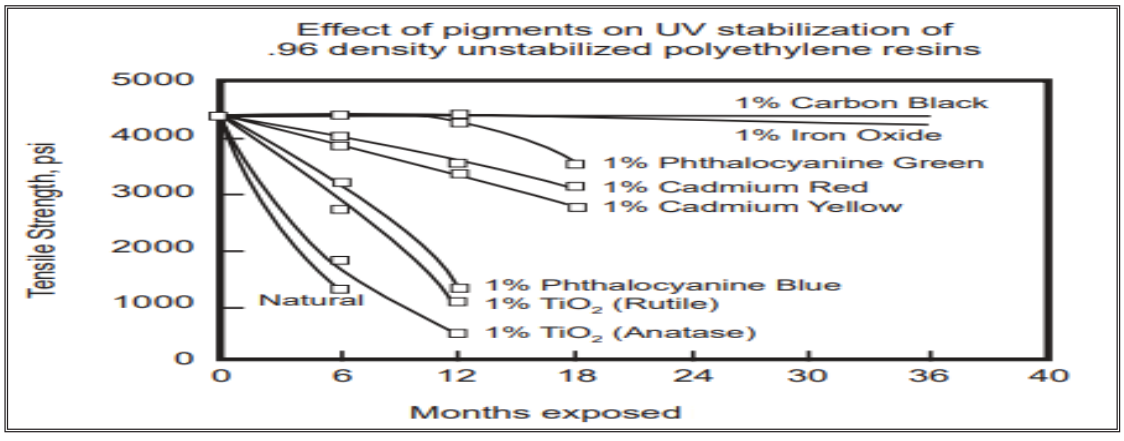
Wavelength of light,nm	Energy contained in this wavelength, KJ/m^2	Type of Bond or Structure in PE	Energy to break bond, KJ/mol
189	647	Carbon – Carbon (C – C)	347
253	473	Carbon – Hydrogen (C – H)	413
315	228	Double Bond Carbon – Carbon (C – C)	607

Polymer degradation is studied by measuring the tensile strength at break & elongation at break properties on the exposed part of the molded product. Conventionally a 50% decrease in the tensile properties from the original values provides clear indication of degradation.

Color pigments & carbon black are industrially used as UV absorbers to achieve UV stability to protect the products from the damaging UV lights. Carbon black is one of the best UV stabilizers among all the colorants due to its highest UV absorption capability. Pigment or carbon black amount, particle size & chemical type affect the UV performance. Pigments also come with a varied range of UV stability, so selection of right color is also important. This UV absorber transforms the UV light energy into heat which is dissipated throughout the products.

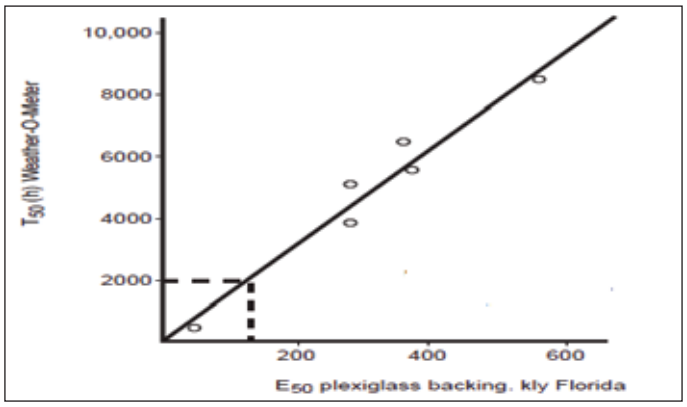


A kilolangley (kly) is a measure of UV exposure per square meter of surface area.



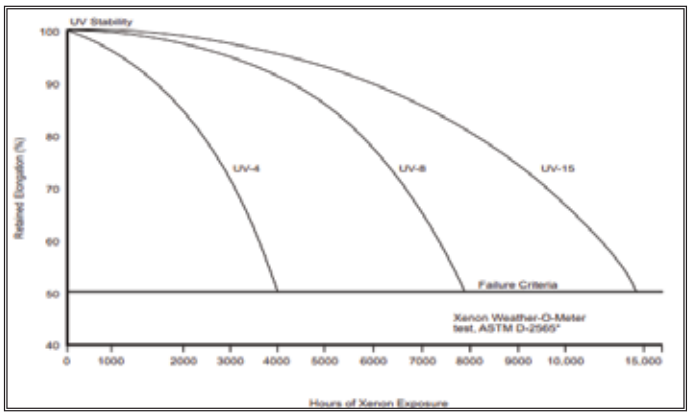
UV performance also depends on geographical locations, changes in climate conditions & elevations. For every 0.5 km increase in elevation, UV exposure increases by 3.5%.

UV test exposure is done at accelerated conditions with instruments called weather – O-meters i.e. Xenon Ci-65 and Ci-5000 as per ASTM ASTM G155. It uses a xenon arc lamp with a borosilicate inner and outer filter, which best simulates the UV band of natural sunlight. UV light intensity is measured by irradiance and expressed in watts per square meter at a given wavelength. Another important parameter is temperature – the higher the temperature means higher the degradation potential.



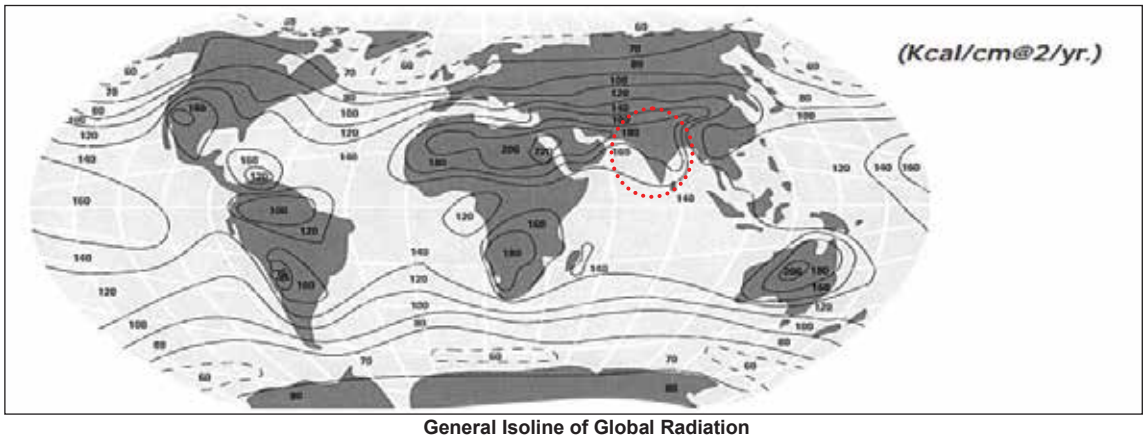
A correlation between Xenon Ci- 65 testing on PE film samples in Florida shows that 2000 hrs in weather-o-meter is approx. 146 kly per year which is almost 1 year exposure in Miami, Florida.

UV Index – Quantification of UV stability of polymeric material is done by UV index symbolized by UV – X where X is number, the larger the X values the better the UV protection.



For example, a material having an X value of 8, UV-8 means that it will withstand 8000 hours of exposure to UV light before the elongation at break will reduced to 50% of the original value

Calculation of years of exposure in correlation to weather-o-meter indoor exposure can be done by knowing the resin rating & Isoline location (Refer fig below)



General Isoline of Global Radiation

Years of exposure = (70 / your Isoline location) * UV rating

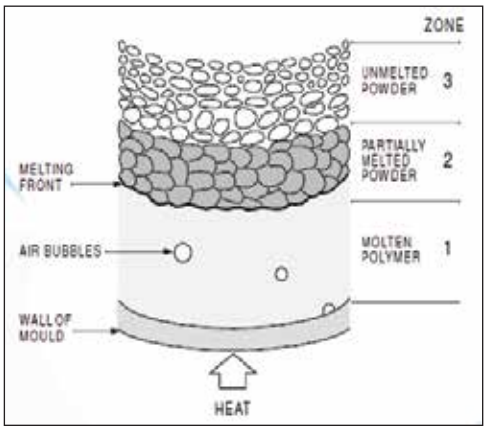
For e.g.
In Florida, Isoline location = 140 Kcal/cm@ 2/yr
Expected years of exposure for UV 8 = (70/140) *8 = 4 years

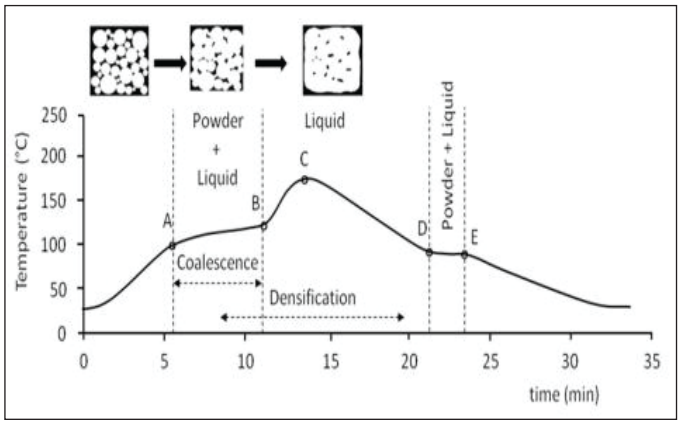
For India, Isoline location = 160 Kcal/cm@ 2/yr
Expected years of exposure for UV 8 = (70/160) *8 = 3.5 years

Rotomolding Processing Recommendations

To obtain quality products, choice of polymer & processing conditions are primary selection criteria. Good polymer choice & optimum processing results in better material fusion & proper moldability. Main process variables include oven temperature, oven residence time, and polymer amount in mold, mold rotation speed, cooling medium, and duration of cooling & demolding temperature.

- Melting temperature (200°C to 350°C) & time - Correct processing temperature & time to be chosen for proper fusion of powder resin & sintering of resin to the mold. Too high temperature leads to degradation whereas too low temperature would result improper melting. For simple parts, a single-stage heating cycle is generally sufficient to produce satisfactory parts. Larger or more complex parts require a two-stage heating program in order to incorporate the higher temperatures needed to initiate the melt flow process, also allowing adequate time for the proper filling of mold.
- Sintering time – Sintering is defined as the formation of homogenous melt from the coalescence of powder particles under the action of surface tension. As the temperatures are raised, small particles of powdered resin lose the surface energy & the adjacent particle coalesce owing to viscosity flow or to diffusion process. The sintering stages vary from the loose powder filling to almost porosity free final compact part.

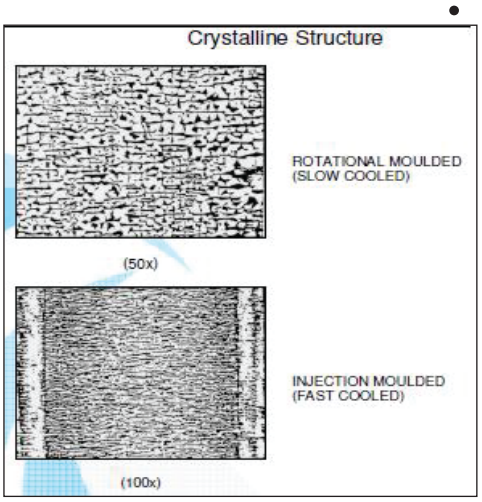




Point A: melting of first powder particle in contact with the internal surface of the mould
AB: coalescence of the grains & formation of the successive molten layers under the effect of meting & densification
Point B: complete resin powder melting
BC: Densification & entrapped air in molten polymer forms the bubbles
CD: The bubble is pushed out of the molten state
D: Crystallization point

Sintering time should be sufficient enough to ensure complete removal of pores or uniform formation of porosity. Insufficient sintering time would lead to poor product performance.

- Cooling time – Since cooling is done either by air or water spray or combination of both, proper cooling is greatly required for proper crystallization of product inside the mold. Smaller cooling time results in shrinkage or warpage issue of the product.



- Rapid cooling from the melt results in low degree of crystallization & fine crystal structure. Lower product density

- Slow cooling or annealing near melt temperature will encourage crystal growth & higher degree of crystallinity with coarse crystal structure. High product density

Optimum processing temperature & cycle time is generally determined experimentally for each oven & recommended to approach from the shorter side and increased until flow – out is achieved.

Value-grab opportunities in rotomolding applications:

- Hygienic and sanitation: Mobile Toilets, Waste bins, Compost, Urinals
- Specialty products like roadside cones, road separators / dividers / blockades, sail boats
- Inclusion of Inspection chambers / Manhole in State Sewerage bodies
- Body for Light Vehicles e.g. Battery-Operated Rickshaws, Bus Stops Shelter (Body / Roof)
- Auto Sector – Commercial vehicle segment like Fuel Tanks, Canopy, Wheel Arch, Mud Flap, and Expansion tanks, etc.
- Retail sector – POS, Mannequins, Display racks, Trolleys.
- Material Handing sector- Insulated boxes, Trolleys, Crates, Bins, Pallets, Tots, Milk cans, etc.
- Entertainment sector- Toys, recreation, Fun stations, Furniture's, etc.
- Opportunity in toys, decorative and play items in parks, schools and other public places.

References:

1. Technical Literature – Rotomolding, Samsung General Chemicals
2. Technical Literature - Team Innovation
3. Tip from Technology ExxonMobil Chemical
4. Celine T. Bellehumeur, Polymer Sintering and its role in Rotational Moulding, McMaster University
5. www.petanks.com

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The Making of Ddev Group

Ddev Group, now a conglomerate, began its journey in 1977 in Kolkata under the Brand Name Kkalpana. The foundation was laid by Late Dalam Chandji Surana, who foresaw the potential of polymer compounding in India. The corporate journey took a significant turn in 1985 under the leadership of Narrindra Suranna, the current Chairman and Managing Director of Ddev Plastiks Industries Ltd. (DPIL). We have established greenfield manufacturing facilities on both the eastern and western coasts of India. Following a successful public issue and stock market listing, the company expanded nationally and internationally through mergers and acquisitions.

Today, Ddev Group's products span various sectors, including wire & cable, packaging, footwear, pipes, automobiles, consumer durables, electrical appliances, and electronics. The company has established a consistent market presence in over 50 countries, including Europe, Africa, the Middle East, and the SAARC countries, extending to Latin America. From a modest factory with a 3,000 tonnes per annum capacity, Ddev Group has grown into a multi-unit, multi-location manufacturing entity with a capacity exceeding 250,000 tonnes per annum. This growth has been driven by continuous investment in state-of-the-art manufacturing facilities and human talent.

Ddev Group has always invested in best of the class equipment and simultaneously nurtured human resources and operates five factories in India, strategically located in the East and West - thereby minimising transportation cost to customers.

The Business

Ddev Group operates five factories in India, strategically located in the East and West to minimize transportation costs for customers. The company believes in being close to its customers, understanding their needs and desires, and customizing products to add value. A dedicated team of engineers and scientists focuses on research and development, providing a competitive edge. Ddev Group sources materials from world-class suppliers like Indian Oil, Reliance Industries, OPAL, HMEL, Formosa, Qatar Petrochemicals, SABIC, and LG Chemicals, adhering to the philosophy that quality is made to happen.

In the wire and cable sector, Ddev Group indigenously manufactures XLPE cable compounds for low, medium, and high voltage grades, along with non-strippable and strippable semiconducting compounds. We have successfully developed and marketed the 66 KV XLPE and semiconducting compounds for the first time in India. The company is also ready with halogen-free flame-retardant compounds, meeting the needs of the decade. Additionally, we have developed and gained market acceptance for an Anti-Tracking compound for Medium Voltage Covered Conductor. Recently, we received UL Certification for our XLPE Compounds, a first of its kind in the country.

Another addition in the In PVC compounds, we offer FRLS, anti-termite, anti-rodent, RoHS, and REACH compliant grades. Additionally, Ddev Group has invested in a colour and additive masterbatch unit and state-of-the-art facilities for manufacturing halogen-free flame-retardant compounds in Dadra & Nagar Haveli. DPIL Group is committed to sustainability, actively implementing rainwater harvesting systems and installing solar power solutions. At its largest factory in Surangi, solar energy now meets 20% of the facility's power requirements.

As a responsible corporate citizen, Ddev Group has invested significantly in upcycling plastic waste at their plants in Falta and Bhasa, West Bengal. While contributing to the 'Make in India' initiative, the company strongly believes in the philosophy of 'make locally but think globally.'

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Contact us at Petrochemical.Marketing@hpcl.in | Tel.: 02223030000 | Website: www.hindustanpetroleum.com

About Organization:

Hindustan Petroleum Corporation Limited (HPCL), one of the leading organizations in India's energy sector, is expanding its presence in the petrochemical domain through its joint venture, HPCL Rajasthan Refinery Limited (HRRL). HPCL holds a 74% stake in HRRL, with the remaining 26% owned by the Government of Rajasthan.

HRRL is in the advanced stages of commissioning a world-class Greenfield refinery-cum-petrochemical complex at Pachpadra in Rajasthan. This facility, set to be operational in the near future, will have a refining capacity of 9 MMTPA and a petrochemical production capacity of 2.4 MMT, focusing on key products such as Polypropylene (PP), Polyethylene (PE), and aromatics. Designed to meet India's growing demand for petrochemicals, the complex will play a pivotal role in reducing the country's import dependence in this sector.

The Petrochemical business line is aimed at creating exponential value for the Indian economy, Indian people, our customers, and our employees. Harmonizing with the Make in India campaign, HPCL's Petrochemical business supported by HRRL refinery cum petrochemical complex a state of the art know as jewel of the Desert is a major step towards fostering innovation, enhancing skill development, augment intellectual property, facilitate investment & build best in class manufacturing infrastructure. The business will be instrumental in the sustainable economic development of the country & will contribute to the Prime Minister's goal of making India a 5 trillion economy.

Petrochemical complex has ~2 MMTPA of Polymer line and ~0.4 MMTPA of Chemical Butadiene, Benzene and Toluene.

POLYPROPYLENE (PP) UNITS:

HPCL is setting up two Polypropylene plant of Gas Phase Technology, licensed from Lummus Novolen Tech GmbH, Germany, with production capacity of ~1 MMT/annum.

These plants have the flexibility to manufacture various grades of PP Homo Polymer, Random Copolymer and Impact Copolymer for meeting the demand of diverse application segments.

LLDPE / HDPE SWING UNITS:

HPCL is setting up Two Swing plant of Gas Phase – UNIPOLTM PE technology licensed from Univation Technologies, USA, to produce both LLDPE and HDPE, with total production capacity of ~1 MMT/annum. These swing plants have the flexibility to produce a wide range of Polyethylene grades for various applications, including the metallocene LLDPE grades.

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HMEL operates a state-of-the-art crude oil refinery of 11.3 Million MT/annum capacity at Bathinda in Punjab and **a Polypropylene Unit of Gas Phase Technology, licensed from Lummus Novolen (McDermott) Tech, GmbH** with a capacity of 0.5 Million MT/annum.

HMEL has set up a world class Dual Feed Cracker Unit for production of 1.2 Million MT/annum of Polyethylene (PE) and 0.5 Million MT/annum of Polypropylene (PP) to cater all major application segments, in the same premises. The details of each unit & its technology as mentioned below.

Unit Name	Licensor	Technology	Capacity (KTA)
Dual Feed Cracker	Lummus, USA	Lummus	1200
Swing Unit (LLDPE/HDPE)	Univation Technologies, USA	UNIPOL™ PE	2 X 400
Dedicated HDPE Unit	Chevron Phillips Chemical, USA	MarTECH™	450
PP Unit – 1	Novolen, Germany	Lummus Novolen Tech, GmbH	500
PP Unit – 2	Lyondell Basell, Italy	Spheripol – II	500

HMEL produces PP Impact Copolymer, Random Copolymer and **Speciality Terpolymer** along with Homo-Polymer variants in the PP unit - 2. These swing plants produce wide range of HDPE & LLDPE grades for various applications including the **Metallocene LLDPE** for flexible packaging. Dedicated HDPE unit produces wide range of HDPE grades, with very special attributes of **Large Blow Molding** grades.

HPCL-Mittal Energy Limited (HMEL), INOX Tower, Plot No.17, Sector-16A, Noida – 201301 (U.P), India. Tel: 0120-4634500. Corporate Site: www.hmel.in

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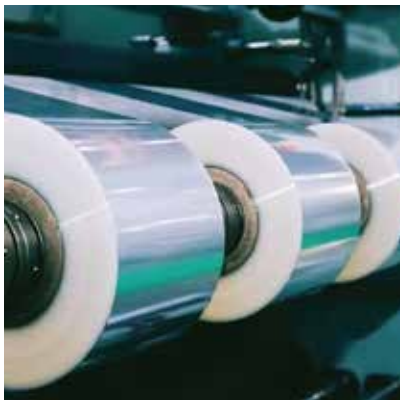

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We are excited to introduce you to Dhunseri Poly Films Private Limited, a new player in the BOPET film manufacturing industry, located in the Eastern Zone of India, incorporated on 28th of November 2020 as a wholly owned subsidiary of Dhunseri Ventures Limited.

The company is focused on producing high-quality BOPET (Biaxially oriented polyester) films to serve various industries. We have recently launched our first Greenfield Project of,10.5-meter Bruckner polyester film production line in West Bengal, India, which has started its commercial production in December 2023.

Also, we plan to install two BOPP (Biaxially oriented Polypropylene) lines as part of our expansion by FY 2025-2026 in Kathua, Jammu & Kashmir with a proposed annual capacity of 128,400 TPA.

Dhunseri Poly Films is a part of the Dhunseri Group, led by Mr. C.K. Dhanuka , which has interests in multiple sectors, including PET chips production (with plants in India and Egypt in JV with the Indorama Group of Thailand), Tea plantations in Assam (India) and Malawi (Africa), Confectionery retail business in Singapore with a recent expansion into the U.S. market.

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At Platinum Industries Ltd., we are reinforcing our position as a leader in the specialty chemicals sector by integrating Innovation, Sustainability, and Global Expansion into our core strategy. Our diverse product range spans critical industries such as Agriculture, Construction, Wires and Cables, Healthcare, and Consumer Goods, highlighting our commitment to delivering versatile and essential solutions.

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Research & Development at Platinum Industries Ltd.

Pioneering Innovation, Sustainability, and Excellence

Broad Spectrum Solutions:

Our Diverse End-use Applications

Agriculture:

In the agriculture sector, our PVC stabilizers play a critical role in the production of pipes used for portable water transport. These pipes are essential for efficient irrigation systems and water distribution in farming, directly contributing to the agricultural industry's productivity. The growing need for durable, reliable, and cost-effective water management solutions in agriculture underpins the strong demand for our products in this sector.

The global market for PVC pipes, specifically for irrigation, is projected to experience significant growth, with a CAGR of 4.1% from 2023 to 2032. This growth is supported by increased adoption of advanced irrigation systems like drip and sprinkler irrigation, which rely heavily on PVC pipes for effective water distribution. The demand for such systems is expected to rise as the agriculture sector continues to focus on maximizing crop yields while conserving water

Construction:

uPVC Pipes and Fittings: The construction industry continues to grow and is driven by urbanization and infrastructure development. Our stabilizers enhance the durability and performance of PVC pipes and fittings used in construction and plumbing. The demand for reliable and long-lasting materials in construction projects positions this application for significant growth.

- The global construction market is projected to grow at a CAGR of 4.2% from 2021 to 2028, fuelled by increasing urbanization and infrastructure investments.

Profiles and Panels: Stabilizers are essential in manufacturing high-quality window/door/technical profiles and panels for various construction projects. The need for innovative and durable building materials drives the demand for our products.

- The profiles and panels market is expected to grow in tandem with the construction sector, providing a stable and expanding demand for our stabilizers.

Wires and Cables:

Wires and Cables: Our additives improve the heat resistance and longevity of electrical wires and cables used in vehicles. With the automotive industry increasingly focusing on electric vehicles (EVs), the demand for high-performance wiring solutions is set to rise.

- The global EV market is projected to grow at a CAGR of 21.7% from 2021 to 2028, increasing the demand for advanced electrical components.

Healthcare:

Medical Devices: Our specialty chemicals are used to produce safe and reliable medical devices, ensuring compliance with stringent health standards. The growing healthcare industry and increasing

At Platinum Industries Ltd., our commitment to Research & Development (R&D) goes beyond technological advancements—it represents a dedicated pursuit of innovation, sustainability, and quality. As one of India's foremost manufacturers of PVC and CPVC additives, we understand that continual evolution in product development is vital to remain competitive in an ever-changing global market. Our R&D efforts are firmly aligned with the future, ensuring that we deliver pioneering solutions that exceed the expectations of our customers and stakeholders.

Advanced R&D Infrastructure: Where Innovation Begins

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Group founded in the 1960s, Creative Ecotech Group emerged in a nascent industrial packaging sector characterized by challenges and limited infrastructure. Through resilience and innovation, we have established ourselves as a pioneering leader, with the third and fourth generations committed to advancing our legacy with INDIA transforming into a global hub for industrial packaging and poised to become 3rd largest economy.

We offer a comprehensive range of high-quality packaging solutions, including HDPE/PP woven bags, BOPP bags, PP fabrics, liners, shrink and stretch films, tarpaulins, pond-lining films, UV films, mulch films, polythene bags, and cap covers. Our products are meticulously produced with precision and durability to meet diverse needs of various industries. We have complete in house manufacturing right from granules to printed/laminated/stitched products.

Our operations prioritize sustainability and ethical practices, supported by advanced manufacturing technology and a skilled team of technologists. We proudly hold ISO 9001:2015 certification from Technischer Überwachungsverein (TUV), accredited by UKAS, and are SMETA-audited, underwriting our commitment to social, ethical and environmental inclusiveness. Our facilities integrate solar power generation and recycling initiatives, reinforcing our dedication to a sustainable future.

We also take pride in our long-standing partnership with GAIL (Gas Authority of India Limited) and BCPL (Brahmaputra Cracker and Polymer Limited) as Consignment Stockists and Del Credere Agents of Eastern India. Our commitment to excellence in service has been recognized with consecutive "Excellent Consignment Stockist" awards for 2019-2020,2022-2023 and 2023-2024.

At Creative Ecotech Group, we align our operations with key United Nations Sustainable Development Goals (SDGs), including gender equality (SDG 5), solar power utilization (SDG 7), recycling (SDG 12), and overall sustainability (SDGs 6, 8, and 9). With state-of-the-art infrastructure, we consistently deliver superior quality products while promoting responsible and eco-conscious practices.

As a leader in global packaging industry, Creative Ecotech Group is committed to empowering our clients with innovative cost-effective solutions that drive success and foster a strong partnership.

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We are also very pleased to inform you that we believe in a long term relationship with our customers, by providing them the best quality products and services along with a very competitive price.We further inform you that our company has been awarded an ISO 9001:2008 Certificate for quality management system.

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In 2002, RAUNAQ became a manufacturer by setting up a "State of Art" Plant of PVC extrusion at Birshibpur, Uluberia, Howrah, which was inaugurated by the then Chief Minister and in last 22 years, developed it's stature as one of the leading manufacturers in BHARAT, with the capacity of production 18000 MTA.

The remarkable contribution of the Group in the infrastructure segment is to enhance the face value and acceptability of Polymer products in the form of Door, Ceiling and Wall Panel, Highlighter, Partition, Furniture and many more. The continuous R & D and Innovation, create a new horizon for RPVC Door market and compelled the others to follow RAUNAQ

The Marketing network of RAUNAQ spread across Bengal, North Eastern States, Bihar, Odisha, UP and Andhra Pradesh through Distributors, Dealers and numerous consumers.

Based on the market demand, the group has established a new plant to manufacture the PVC/WPC (Wood PVC Composite) Solid Door Frame, Board for Door, Furniture & Interior Application & Louver – a Luxury Interior Decoration Panel.

RAUNAQ Group extends thanks to all it's Distributors, Dealers and also IPF for continuous patronage towards the Group.


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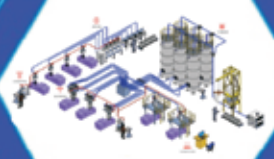

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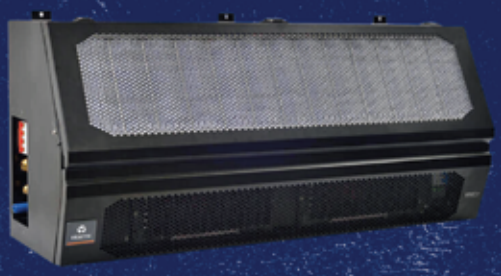

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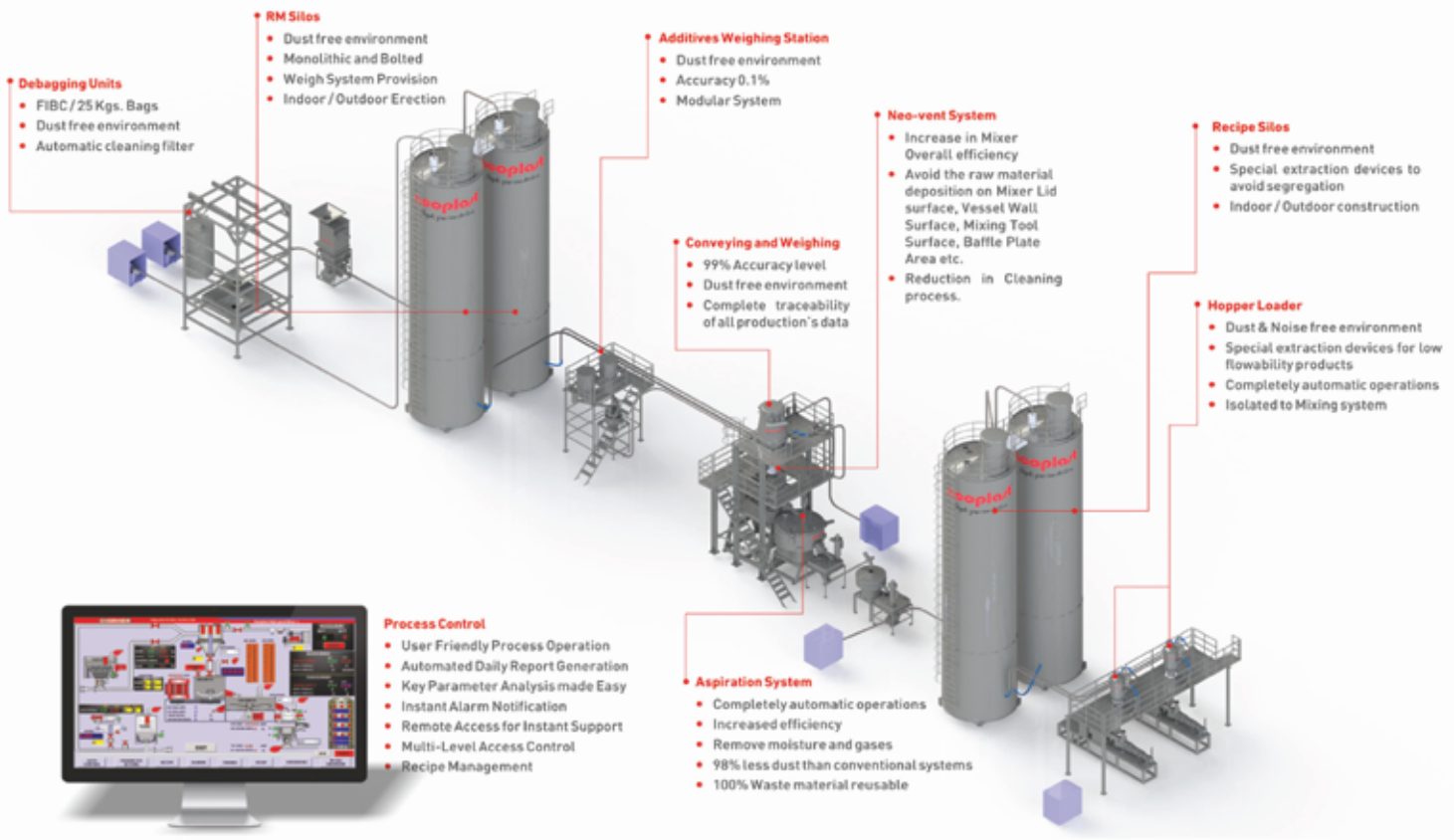

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THE INVENTION AND IMPACT OF NYLON: A REVOLUTIONARY SYNTHETIC POLYMER

Nylon, a ground-breaking synthetic polymer, was invented in 1935 by Wallace Carothers, an American chemist working at DuPont. Carothers and his team were researching polyamides, a class of polymers known for their strength and durability. They discovered that combining adipic acid and hexamethylene diamine produced a material that was not only strong and flexible but also highly resistant to wear. This new polymer was initially called "Polymer 66," based on the six carbon atoms in each of its primary building blocks, but it later became widely known as Nylon 6,6.

The first commercial production of Nylon began in 1939, marking a significant milestone in material science. Early applications included toothbrush bristles, which showcased Nylon's stiffness and resistance to water, and women's stockings, where its silk-like qualities revolutionized hosiery. During World War II, Nylon became indispensable for military applications, particularly in the manufacture of parachutes, ropes, and tire cords. Its lightweight yet durable nature made it an ideal substitute for silk, which was in short supply due to the war.

The name "Nylon" was coined by DuPont's marketing team. Although the exact origin of the term is debated, one popular theory suggests it symbolizes transatlantic collaboration, blending the names of "New York" and "London." This branding decision underscored the global significance of the innovation and helped establish Nylon as a household name.

After the war, Nylon's applications expanded dramatically. It became a popular material for clothing, carpets, upholstery, and industrial textiles. Beyond textiles, Nylon also found uses in engineering plastics, where its strength and heat resistance were valuable in manufacturing gears, bearings, and other high-performance components. Its versatility allowed it to dominate industries ranging from fashion to automotive engineering.

Nylon revolutionized the textile industry by introducing a synthetic alternative to natural fibers like silk and cotton. Its production did not rely on agriculture, making it a cost-effective and scalable solution to meet growing consumer demand. This innovation also paved the way for the development of other synthetic materials, such as polyester and acrylic, transforming global manufacturing processes.

Today, Nylon remains a ubiquitous material, used in applications ranging from everyday clothing to advanced industrial and engineering products. Its properties—strength, flexibility, and resistance to wear—continue to make it a material of choice for countless innovations. Additionally, ongoing research has led to the creation of eco-friendly variants and recycling methods, ensuring Nylon's relevance in a world increasingly focused on sustainability.

The invention of Nylon not only marked the beginning of the synthetic polymer era but also highlighted the power of scientific innovation to address practical challenges. From its early days in toothbrushes and stockings to its role in modern engineering, Nylon exemplifies the transformative potential of chemistry and its lasting impact on industries and daily life.

Manish Maheshwari
CEO
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Newsletter

FOR THE MONTH OF
AUGUST 2024

"Tithi Bhoj" organised by Indian Plastics Federation

On 14th August 2024, the Indian Plastics Federation (IPF) sponsored a special event called "Tithi Bhoj" at the request of various state government officials as a part of their celebration for India's Independence Day, 15th of August, 2024. The program was held in collaboration with several government schools, which were carefully chosen by the government officials to host this meaningful initiative. The event aimed to bring together students, educators, and local communities in a spirit of unity and celebration. The arrangements for the event were meticulously planned and executed, ensuring that all participants had a memorable experience.

The event was well-received, with participants expressing their appreciation for the efforts made to organise such a thoughtful and engaging program on the day of Independence Day, Mr. Manesh Sharma, Secretary General, Mr. Jayanta Banerjee, Exec. Secretary, Mr. Talent Sarkar and Mr. Rajesh Hela of Indian Plastics Federation visited various schools.


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Launch of PLASTINDIA 2026 Exhibition.

PLASTINDIA 2026 exhibition has been officially launched in a grand ceremony on August 23rd 2024, held at the Grand Hyatt, Mumbai. graced by the esteemed presence of Hon'ble Minister Shri Piyush Goyal, Department of Commerce and Industry, Government of India. This marks the beginning of an extraordinary journey towards shaping the future of the Indian plastics industry. The road to Bharat Next starts here, paving the way for innovation, growth, and a brighter tomorrow. The dais was shared by Mr. Alok Tibrewala, Chairman - National Executive Council 2026, and Past President, Indian Plastics Federation.

PLASTINDIA exhibition will be held from February 5th to 10th 2026 at Bharat Mandapam, (Pragati Maidan), New Delhi. Bookings are open. The event was attended by Mr. Lalit Agrawal, President, IPF and Managing Committee member of Plastindia, Mr. Amit Agarwal, Vice President, Mr. Shyam Lal Agarwal, Hony. Secretary, Mr. Saurabh Garodia, Hony. Jt. Secretary, Mr. Sudarshan Kumar Tawri, Hony. Treasurer, Mr. Manish G Bhaia, Past Hony. Secretary, Mr. Rajesh Mohta, Past President, IPF, Mr. Ashok Jajodia, Past President, IPF and Co-Chairman – National Executive Council 2026, Mr. Sisir Jalan, Past President, IPF and Managing Committee member of Plastindia.

Seminar on "Mastering Growth: Accelerate Your Business with the Power TRIO".

On August 24, 2024, the Indian Plastics Federation hosted a transformative seminar titled "Mastering Growth: Accelerate Your Business with the Power of TRIO" at Hotel Kenilworth, Kolkata. The event, orchestrated by Seminar Sub-Committee Chairman, Mr. Sudarshan Kr. Tawri, Co-Chairman, Mr. Rajat Rateria, and Mr. Saksham Surana, was a resounding success, with over 80 participants in attendance, and questions and answers were also conducted.

Mr. Lalit Agrawal, President of the Indian Plastics Federation, extended a warm welcome to delegates and speakers, praising the Seminar Sub-Committee for their impactful organization. The seminar featured insightful presentations from industry leaders: Mr. Moloy Chakravorty, a Business Coach; Ms. Tripti Jaisinghania, a Marketing Expert; and Mr. Vineet Bansal, a Tech Entrepreneur.

Key topics included strategies for building a profitable business, optimising revenue and profits, attracting top talent, and the importance of brand building and digital transformation for the plastic industry. The mementos were presented to the speakers. The seminar was concluded with the dinner to all the participants. The event provided valuable knowledge and networking opportunities, leaving attendees enthusiastic about applying new business strategies.


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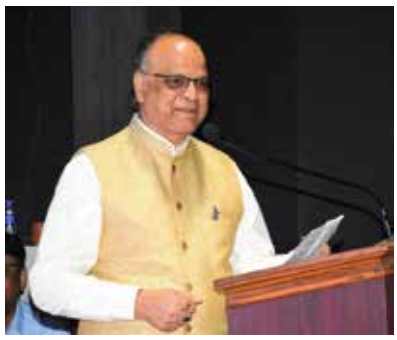
Newsletter FOR THE MONTH OF SEPTEMBER

Open House Session on Norms and Procedure for Fire Safety Certificate and Fire License.

The Indian Plastics Federation had organised an Open House session on Fire Safety Certificate and Fire License norms and Procedures on 5th September 2024 at Rotary Sadan, Kolkata, followed by Hi-tea.

The speakers in the Open House Session were **Shri Utpal Bhadra, IAS, Special Commissioner and Special Secretary, Dept. of Fire and Emergency Services, Govt. of West Bengal, along with Mr. Tarun Kumar Dutta, Divisional Fire Officer, North Kolkata and Mr. Raja Bhattacharya, Senior Instructor, Institute of Fire Services, Behala.** The other dignitaries on the dais were Mr. Lalit Agrawal, President, IPF, Mr. Alok Tibrewala, Past President, Mr. Sudarshan Kumar Tawri, Hony. Treasurer, IPF and Mr. Jayanta Banerjee, Exec. Secretary, IPF.

The session was attended by 70 IPF members. The session provided valuable insights into the process of applying for or renewing fire licenses. Through a comprehensive presentation, the fire department officials shared crucial information, addressing the industry's needs and concerns. The open house session for interactive discussions, ensuring that members could clarify their doubts directly with the authorities. The speakers were felicitated by the members of IPF.









Bengal Shopping Festival from 20th to 24th September 2024

The Bengal Shopping Festival was organised by the Confederation of West Bengal Trade Associations (CWBTA) jointly with the Government of West Bengal. This event was a flagship event of the Govt. of West Bengal and was initiated by the **Hon'ble Chief Minister, Mamata Banerjee**. Her vision was to make this a great grand success. The event was inaugurated by **Hon'ble Minister, Dr. Shashi Panja, from the Department of Industry, Commerce, and Enterprises, Government of West Bengal and Smt. Chandrima Bhattacharya, Hon'ble Minister, Department of Environment, Government of West Bengal** along with other government officials.

The Indian Plastics Federation participated by setting up a stall to promote a positive image of plastics among government officials and the general public. The festival commenced with a grand inauguration and a **5-day Trade Expo** at Biswa Bangla Mela Prangan in Kolkata (Milan Mela Expo Centre) from Friday, 20th Sept to 24th Sept 2024, running from 11:00 am to 7:00 pm daily. The Indian Plastics Federation has given the opportunity to the members to showcase their products at the stall and several members showcased their products, taking advantage of the platform to highlight the significance of plastics in modern industries. A general awareness on single use plastic, everyday used plastic, industrially used plastic and proper recy-

cling of plastic was shared with the visitors and school students who visited the stall and a leaflet on **"Use of Plastics in Our Everyday Life"** was circulated. The stall was visited by Mr. Lalit Agrawal, President, Mr. Amit Kr. Agarwal, Vice President, Mr. Shyam Lal Agarwal, Hony. Secretary, Mr. Saurabh Garodia, Hony. Jt. Secretary, Mr. Sudarshan Kumar Tawri, Hony. Treasurer, Mr. Alok Tibrewala, Past President, Mr. Ashok Jajodia, Past President, IPF and many other committee members of the Federation. Mr. Manesh Sharma, Secretary General and Mr. Rajesh Hela had represented the organisation at the event.

Bengal Plastic Recycling Conference

On 25th September 2024, the Indian Plastics Federation in association with West Bengal Pollution Control Board organised a comprehensive day-long event titled the Bengal Plastic Recycling Conference at Hotel Hyatt Regency, Kolkata. This significant gathering brought together industry leaders, government officials, and sustainability experts to address the pressing issues surrounding plastic recycling and waste management in the region. The conference commenced with an inaugural session. The **Chief Guest** was **Dr. Rajesh Kumar, IPS, Member Secretary, West Bengal Pollution Control Board**, joining him on the dais was Mr. Amit Kumar Agarwal, Vice President, IPF, Mr. Alok Tibrewala, Past President, Mr. Devendra Surana, Coopted Member IPF, Ms. Sangeetha Raghuram, Exec. Director, (Water and Circular Economy), PWC India and Mr. Atindra Narayan Chaudhuri, IFCA (Technical Advisor, Indian Flexible Packaging Carton and Allied Industries Association). IPF felicitated the Chief Guest and other speakers, setting a tone of respect and appreciation for their contributions to the field.

After the inaugural session, the conference delved into a series of informative panel discussions and presentations, designed to cover various aspects of plastic waste management and recycling. Ms. Ipsita Roy, Sr. Manager, A.A.Garg & Co., has given the presentation on **Decoding the PWM Act 2016** her talk, offered valuable insights into the legislative framework governing plastic waste in India. The presentation was followed by an interactive question and answer session, allowing attendees to seek clarification and engage in meaningful dialogue about the act's implications and implementation.

After a tea break the conference resumed with a focused panel discussion on **Brand Owners Adaptation Towards PWM & Sustainability**. This session brought together representatives from major consumer goods companies and packaging experts to explore how brands are adjusting their practices to align with sustainability goals and regulatory requirements. Mr. Indroneel Goho, President & CEO, Magpet Polymers Pvt. Ltd., skillfully moderated the discussion. The panel included Mr. Sanjay Ghoshal, Head of Packaging, Diageo India, Mr. K Ganesh, Director – Sustainability and Corporate Affairs, Bisleri International Pvt. Ltd., Mr. Pradeep Kumar Pandey, President, Packaging Development, Emami Ltd., Mr. Dipta Banerjee, Sr. Lead Technologist-Packaging Development and Sustainability, ITC Ltd., Mr. Rudra Mohan Thakur, General Manager-Quality, Safety & Sustainability, Diamond Beverages Pvt. Ltd. This diverse group of experts shared their experiences, challenges, and innovative approaches in adapting to the evolving landscape of plastic waste management within their respective industries.

Mr. Akshaya Rath, Co-Founder & CEO, EcoEx has given the presentation on **EPR-The Way Forward**,

provided attendees with valuable insights into the future of producer responsibility in managing plastic waste, highlighting potential strategies and best practices for implementation.

The next session on **Understanding EPR & Its Compliances**, offered a deeper dive into the regulatory

and practical aspects of extended producer responsibility. Mr. Amit Patel, Head-Business Development and Partnership, Nepra Resource Management Pvt. Ltd., moderated the panel discussion, The panellist included Mr. Anjan Fouzdar, Environmental Engineer, West Bengal Pollution Control Board, Mr. Srikrishna Balachandran, Director-Sustainability Solutions, Recykal, Dr. Amrita Ganguly, Executive Director, Deloitte India and Mr. Chandan Sengupta, Independent Director, Rungta Greentech Ltd., and Mr. Akshaya Rath, Co-Founder & CEO, EcoEx. This diverse panel provided a comprehensive overview of EPR compliance requirements, challenges, and opportunities for businesses operating in West Bengal and beyond.

The networking lunch organised by IPF for the speakers and members. The post lunch session commenced, **Gearing up by Platics Processors Towards Integrating PCR Polymer**, addressed the

technical and operational aspects of incorporating post-consumer recycled (PCR) materials into plastic production processes. The panel comprised industry experts including Dr. Pankaj Kumar Sinha, Marketing Head-India, IVL Dhunseri Petrochem Industries Ltd., moderated this technical discussion. The panel comprised industry experts including Mr. Devendra Surana, Managing Director, Magpet Polymers Pvt. Ltd., Mr. Santosh Raj, Head of Technical Centre, Alpla and Mr. Vanshay Goenka, Director, Cool Caps Industries Ltd. These speakers shared their experiences and insights on the challenges and opportunities associated with integrating recycled materials into plastic manufacturing, offering practical advice for processors looking to enhance their sustainability efforts.

The conference concluded with a forward-looking session titled **Opportunities Opening Up in Waste to Wealth**. Mr. Prabhjot Sodhi, Sr. Program Director, Circular Economy Centre for Environment Education moderated this final panel discussion. The panel included Ms. Sriyam Mall, Co-Founder & CEO, Hulladek Recycling, Ms. Shobha Raghavan, CEO, Saahas Zero Waste, Ms. Antara Ray, Director, PWC, Mr. Amit Patel, Head-Business Development and Partnership, Nepra Resource Management Pvt. Ltd., and Mr. Ashish Agarwal, National Security, Recycle India Foundation. This session highlighted emerging technologies, business models, and policy initiatives that are creating new opportunities in the circular economy, particularly in the context of plastic waste management.

Mr. Sudarshan Kumar Tawri, Hony. Treasurer, IPF, delivered a heartfelt vote of thanks, expressing gratitude to all the speakers for their valuable contributions and insights shared throughout the day. The conference proved to be a resounding success, with 244 IPF members in attendance, all of whom benefited greatly from the wealth of knowledge and expertise shared during the various sessions.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State's plastic industry focuses on recycling

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The 65th Annual General Meeting of Indian Plastics Federation

The 65th Annual General Meeting (AGM) of the Indian Plastics Federation (IPF) was held on 30th September 2024 at The Park Hotel, marking a significant occasion. The event witnessed the presence of esteemed members and stakeholders from the plastics industry, who gathered to discuss the federation's accomplishments over the past year and chart the course for the future.

The following Office Bearers were re-elected to serve for the term 2023-2024:

Mr. Lalit Agrawal, President
Mr. Amit Kumar Agarwal, Vice President
Mr. Shyam Lal Agarwal, Honorary Secretary
Mr. Saurabh Garodia, Honorary Joint Secretary
Mr. Sudarshan Kumar Tawri, Honorary Treasurer

The AGM provided a platform for the newly elected office-bearers to outline their vision for the upcoming year and emphasize their commitment to furthering the objectives of the IPF.








MEDIA COVERAGE

IPF hosts 65th AGM in Kolkata

MI News Service, Kolkata: The Indian Plastics Federation (IPF) held its 65th Annual General Meeting in Kolkata on Monday, focusing on key initiatives related to plastics recycling and the rapid growth of the industry in West Bengal. The event featured discussions led by prominent figures such as Lalit Agrawal, President of IPF, and Amit Kumar Agarwal, Vice President of IPF, along with the esteemed presence of Saurabh Garodia, Hony. Jt. Secretary, Shyam Lal Agarwal, Hony. Secretary, and Sudarshan Kumar Taori, Hony. Treasurer.

In his remarks, Lalit Agrawal, President of IPF, highlighted the association's vital role in shaping the economy. He emphasized, "IPF, the premier association of plastic processors and manufacturers in India, has over 900 members and significantly contributes to the state's economy. Despite negative perceptions, global plastic consumption is surging, with 450 million metric tons consumed worldwide, 25 million metric tons in India, and 2.5 million metric tons in West Bengal. This contributes ₹35,000 crore to the state GDP and provides employment to 6 lakh individuals. To tackle waste management challenges, we are promoting recycling, source segregation, and public education. IPF has organized conferences, participated in the West Bengal Shopping Festival, and will soon launch educational programs and skill development courses at our Knowledge Centre in Poly Park."

Amit Agarwal, Vice President of IPF, provided insights into future events. "We are excited to announce Indplas'25 Exhibition, from February 28 to March 3, the largest plastic exhibition in Eastern India, spanning 10,000 square meters."

In addition, IPF highlighted the importance of skill development, with ongoing efforts to train the workforce at the IPF Skill Development Centre in Polypark, Dulagarh.

আরও দু'টি পলিপার্ক গড়ার উদ্যোগ রাজ্যে

নিজস্ব প্রতিনিধি, কলকাতা: রাজ্যে নতুন করে আরও দু'টি পলিপার্ক গড়ার কথা জানাল ইন্ডিয়ান প্লাস্টিকস ফেডারেশন। বর্তমানে হাওড়ার সাঁকরাইলে যে পলিপার্কটি রয়েছে, তা ছাড়াও উলুবেড়িয়ায় ৫০ একর জমির উপর একটি শিল্পতালুক গড়বে এই সর্বভারতীয় সংগঠন। তার পাশাপাশি দুর্গাপুর এক্সপ্রেসওয়ের ধারে আরও একটি পার্ক তৈরির জন্য জমি খোঁজা হচ্ছে বলে জানিয়েছেন ফেডারেশনের কর্তারা। আগামী কয়েক বছরে বাংলায় তিন হাজার কোটি টাকা বিনিয়োগ হবে বলে দাবি করেছেন তাঁরা। ফেডারেশন কর্তাদের অভিযোগ, প্লাস্টিক শিল্পের জন্য এরাজ্যে দক্ষ শ্রমিকের অভাব রয়েছে। সেই জায়গাতেই দক্ষ শ্রমিক তৈরির উপর জোর দিচ্ছেন তাঁরা। সাঁকরাইলে একটি ট্রেনিং সেন্টার খোলা হবে। ন্যাশনাল স্কিল ডেভেলপমেন্ট কর্পোরেশনের অনুমোদনের জন্য প্রস্তাবটি আটকে আছে বলে জানিয়েছেন তাঁরা।

পলি পার্ক তৈরিতে রাজ্যে লগ্নি-ভাবনা

এই সময়: রাজ্যে কমপক্ষে দু'টি নতুন পলি পার্ক তৈরি করা হবে বলে জানিয়েছে দেশের প্লাস্টিকের পণ্য প্রস্তুতকারী সংস্থাগুলির সংগঠন ইন্ডিয়ান প্লাস্টিক ফেডারেশন (আইপিএফ)। সোমবার তাদের ৬৫তম বার্ষিক সাধারণ সভায় এ কথা জানান সংগঠনের প্রেসিডেন্ট ললিত আগরওয়াল। এ দিন ললিত বলেন, 'এর জন্য আগামী কয়েক বছরের মধ্যে ৩ হাজার কোটি টাকা বিনিয়োগ করা হবে। নতুন দুই পলি পার্ক তৈরি হলে সেখানে আনুমানিক ২ লক্ষ অতিরিক্ত কর্মসংস্থান হবে।'

হাওড়ার উলুবেড়িয়ায় প্রায় ৫০

দাবি আইপিএফ-এর

একর জমির উপর একটি প্লাস্টিক পার্ক তৈরির পরিকল্পনা রয়েছে।' উলুবেড়িয়ার পার্কের জন্য সরকারের তরফে ১৫০ একর জমি চিহ্নিত করা হয়েছে। প্রাথমিক ভাবে ৫০ একর জমির উপর আনুমানিক ৫০০ কোটি টাকা বিনিয়োগে এই পার্ক তৈরির পরিকল্পনা রয়েছে। পরে দরকার মতো খোটা জমিই ব্যবহার করা হবে। আমরা বেশ কয়েকটি প্রয়োজনীয় ছাড়পত্র পাওয়ার জন্য অপেক্ষা করছি। সেগুলি পেলেই পার্ক তৈরির কাজ শুরু হবে বলে তিনি জানান।

আর একটি পার্কের জন্য দুর্গাপুর এক্সপ্রেসওয়ের পাশে উপযুক্ত জমি খোঁজা হচ্ছে বলে জানিয়েছেন সংগঠনের জয়েন্ট প্রেসিডেন্ট অমিত আগরওয়াল। এর পাশাপাশি একটি স্কিল ডেভেলপমেন্ট সেন্টার তৈরির কথাও জানানো হয়েছে।

অমিতের কথায়, 'দেশের প্লাস্টিক শিল্পক্ষেত্রে বার্ষিক ১২-১৫ শতাংশ হারে বাড়ছে। এই দ্রুত বৃদ্ধির সঙ্গে তাল মেলাতে গেলে দক্ষ কর্মীর প্রয়োজন। আর সেই কারণে সাঁকরাইলের সুখা রস প্লাস্টিক পার্কে একটি স্কিল ডেভেলপমেন্ট সেন্টার তৈরি করেছে আইপিএফ। পশ্চিমবঙ্গ শিল্পোন্নয়ন নিগমের সহযোগিতায় তৈরি এই পার্কে সার্বিক ভাবে ৫ হাজার কর্মীকে প্রশিক্ষণ দেওয়া হবে।' ইতিমধ্যেই বিষয়টি নিয়ে ন্যাশনাল স্কিল ডেভেলপমেন্ট কর্পোরেশনের (এনএসডিসি) থাকছু হয়েছে। সেখান থেকে অনুমোদন এলে প্রশিক্ষণের কাজ শুরু করা যাবে।

আগামী বছরের ২৮ ফেব্রুয়ারি থেকে ৩ মার্চ বিশ্বখাদ্য প্রাঙ্গণে তাদের 'ইন্ডপ্লাস'২৫' প্রদর্শনীর আয়োজন করেছে আইপিএফ। মোট ৩২০টি সংস্থা এই প্রদর্শনীতে যোগ দিতে চলেছে। এর মধ্যে ৩২০টি ঘরোয়া এবং বাকি ৩০টি সংস্থা বিদেশনাম, তাইওয়ান এবং ইউরোপের দেশগুলি থেকে আসছে। কেন্দ্র কিসা নিয়ে কড়াকড়ি কবায় কিসা সংস্থাগুলি প্রদর্শনীতে যোগ দিতে আসছে না বলে অমিত জানান। যদিও এর ফলে ভারতীয় সংস্থাগুলির লাভ হবে বলে তিনি মনে করেন।

इंडियन प्लास्टिक फेडरेशन का 65वां वार्षिक आम बैठक आयोजित

❑ पंगलम में रीसाइक्लिंग और उद्योग के विकास पर जोर

कोलकाता, समाचार : इंडियन प्लास्टिक फेडरेशन (आईपीएफ) ने अपनी 65वीं वार्षिक आम बैठक का आयोजन किया, जिसमें प्लास्टिक रीसाइक्लिंग और पश्चिम बंगाल में इस उद्योग के तीव्र विकास पर खास ध्यान केंद्रित किया गया। इस बैठक में आईपीएफ के अध्यक्ष ललित अग्रवाल, उपाध्यक्ष अमित कुमार अग्रवाल, सचिव श्याम लाल अग्रवाल, संयुक्त सचिव सौरभ कोठारिया और कोषाध्यक्ष सुदर्शन कुमार टावरी सहित प्रमुख सदस्य उपस्थित थे। अपने संबोधन में, अध्यक्ष ललित अग्रवाल ने अर्थव्यवस्था को आकार देने में इंडियन प्लास्टिक फेडरेशन की भूमिका को रेखांकित किया। उन्होंने कहा कि आईपीएफ के 900 से

अधिक सदस्य हैं, जो भारत के प्रमुख प्लास्टिक प्रोसेसर और निर्माता हैं और यह संघ राज्य की अर्थव्यवस्था में महत्वपूर्ण योगदान दे रहा है। प्लास्टिक के प्रति सकारात्मक धारणाओं के बावजूद, वैश्विक स्तर पर इसकी खपत बढ़ रही है। आज दुनिया भर में प्लास्टिक की खपत 450 मिलियन मीट्रिक टन, भारत में 25 मिलियन मीट्रिक टन और पश्चिम बंगाल में 2.5 मिलियन मीट्रिक टन है। राज्य की जीडीपी में इसका योगदान 35,000 करोड़ का है और यह 6 लाख से अधिक लोगों को रोजगार प्रदान कर रहा है। इंडियन प्लास्टिक फेडरेशन के उपाध्यक्ष अमित कुमार अग्रवाल ने भविष्य की संभावनाओं पर जानकारी देते हुए कहा कि हम 28 फरवरी से 3 मार्च तक इंडप्लास'25 प्रदर्शनी का आयोजन करने जा रहे हैं। यह पूर्वी भारत में 10,000 वर्ग मीटर में फैली सबसे बड़ी प्लास्टिक प्रदर्शनी होगी। दुनियाभर के प्रदर्शक इसमें हिस्सा लेंगे और एक्सक्लूसिव के लिए नवीनतम नवाचार प्रदर्शित करेंगे। हमें 200,000 से अधिक आगंतुकों के आने की उम्मीद है। बैठक में प्लास्टिक अपशिष्ट प्रबंधन पर विशेष रूप से जोर दिया गया। इसमें प्लास्टिक अपशिष्ट प्रबंधन शिक्षा को स्कूली में प्रारंभ करने का प्रस्ताव रखा गया, ताकि युवा पीढ़ी के बीच जागरूकता बढ़ सके। रीसाइक्लिंग प्लांट की आवश्यकता और बढ़ती मांग को पूरा करने के लिए नए संयंत्रों की योजनाओं पर भी चर्चा की गई।

विश्व में तेजी से बढ़ रही है प्लास्टिक खपत

इंडियन प्लास्टिक फेडरेशन ने आयोजित की 65वीं वार्षिक बैठक

इंडियन प्लास्टिक फेडरेशन की वार्षिक आम बैठक में मौजूद पदाधिकारीगण.

संवाददाता, कोलकाता

इंडियन प्लास्टिक फेडरेशन (आइपीएफ) ने सोमवार को अपनी 65वीं वार्षिक आम बैठक का आयोजन किया, जिसमें प्लास्टिक रीसाइक्लिंग और पश्चिम बंगाल में इस उद्योग के तीव्र विकास पर खास ध्यान केंद्रित किया गया. इस बैठक में आइपीएफ के अध्यक्ष ललित अग्रवाल, उपाध्यक्ष अमित कुमार अग्रवाल, सचिव श्याम लाल अग्रवाल, संयुक्त सचिव सौरभ कोठारिया और कोषाध्यक्ष सुदर्शन कुमार टावरी सहित प्रमुख सदस्य उपस्थित थे.

अपने संबोधन में, अध्यक्ष ललित अग्रवाल ने कहा कि आज दुनिया भर में प्लास्टिक की खपत 450 मिलियन मीट्रिक टन, जबकि भारत में 25 मिलियन मीट्रिक टन और पश्चिम बंगाल में 2.5 मिलियन मीट्रिक टन है. राज्य की जीडीपी में इसका योगदान 35,000 करोड़ रुपये का है और यह छह लाख से अधिक लोगों को रोजगार प्रदान कर रहा है. इस मौके पर इंडियन प्लास्टिक फेडरेशन के उपाध्यक्ष अमित कुमार अग्रवाल ने कहा कि आइपीएफ द्वारा 28 फरवरी से तीन मार्च तक इंडप्लास'25 प्रदर्शनी का आयोजन किया जायेगा, जिसमें हमें 200,000 से अधिक आगंतुकों के आने की उम्मीद है.

बैठक में पश्चिम बंगाल के प्लास्टिक उद्योग की प्रगति पर भी चर्चा की गयी, जिसमें बताया गया कि राज्य में 5,500 परिवर्तन इकाइयां हैं, जो प्रति वर्ष 2.5 मिलियन मीट्रिक टन पॉलिमर का प्रसंस्करण करती हैं और स्वरूप छह लाख लोगों को रोजगार प्रदान करती हैं.

Newsletter FOR THE MONTH OF OCTOBER 2024

Indian Plastics Federation took part in distributing Relief Materials to 500 flood-affected residents of Hooghly District.

Shri Alok Tibrewala, Past President of the Indian Plastics Federation, recently took part in a significant social responsibility initiative, distributing relief materials to 500 flood-affected residents of Hooghly District. He expressed his privilege in being able to contribute to this humanitarian effort alongside the esteemed **Mrs. Mukta Arya, IAS, District Magistrate of Hooghly, West Bengal.**

The relief materials provided included essential plastic items such as buckets, jugs, jerrycans, mosquito nets, water bottles, and tiffin boxes. These items are not only practical but also play a critical role in aiding the daily needs of those affected by the floods. This initiative exemplifies the plastic industry's dedication to contributing to society and offering vital support during times of crisis. Through such efforts, the industry reaffirms its commitment to social welfare and community development.

11th Speciality Films & Flexible Packaging Global Business Summit 2024.

The 11th Speciality Films & Flexible Packaging Global Business Summit 2024 concluded successfully on 1st October 2024 at the Jio World Convention Centre, Mumbai. ElitePlus is the largest business summit focused on flexible films, laminates for packaging, and niche applications which was held from 30th September to 1st October 2024.

The two-day international conference hosted at Jio World Centre, BKC, Mumbai, was a resounding success. Representing the Indian Plastics Federation at the event were Mr. Ankit Burmecha and Mr. Sumit Jalan.

92nd Meeting of the Governing Council & 47th Annual General Meeting of MSME Tool Room & Training Center (CTTC) at Nirmaan Bhawan, New Delhi

The MSME Tool Room (Central Tool Room & Training Centre) held its 92nd meeting of the Governing Council and 47th Annual General Meeting on 22nd and 23rd October 2024 at Nirmal Bhavan, New Delhi. The meeting was attended by Mr. Jayanta Banerjee, Executive Secretary, IPF.

The meeting was attended by senior officials included Dr. Rajnesh, IAS, Addl. Secretary and Development Commissioner (MSME), Govt. of India, Smt. Sudha Kesari, IAS, Addl. Development Commissioner MSME, Govt. of India, Shri Narendra Kr. Gupta, IAS, Under Secretary, Ministry of MSME, Govt. of India and other Governing Council members. Mr. Banerjee highlighted the potential collaboration between IPF and MSME Tool Room by offering access to the IPF member database to facilitate direct business opportunities. He also shared about the Indplas'25 Exhibition, scheduled from 28th February to 3rd March 2025 at Kolkata and invited MSME Tool Room to participate and showcase their services.

Newsletter FOR THE MONTH OF NOVEMBER 2024.

District Level Monitoring Committee Meeting:

The 7th meeting of the District Level Monitoring Committee on review monitoring and tracking of application by industries for statutory clearance was held on 6th November 2024 at the Administrative Office of the DM, Howrah. Mr. Jayanta Bandyopadhyay, Executive Secretary, IPF attended the meeting and discussed about the problems being faced at IPF Poly Park II at Uluberia. Representatives of the land owners were also present there. DM Madam, ADM-LR assured and spoke with SDO Sadar Howrah to solve the problems as early as possible. DM Madam also announced that the Synergy Howrah will be organised very shortly and requested all the associations to support and participate in the event. She also announced that fire station at Sudhaross Poly Park is under process.

Shri. Lalit Agrawal, President, Indian Plastics Federation was invited as Chief Guest at Opening Ceremony of Jaco Corp 2024:

The 2024 edition of Jaco Corp, an inter-school business festival organised by St. James' School in Kolkata, took place on 8th November 2024. The esteemed Chief Guest of the programme was Shri Lalit Agrawal, President of the Indian Plastics Federation. His inspiring speech left a lasting impact on the students and participants, motivating many to explore the world of business. Mr. Agrawal shared his personal journey and highlighted the immense potential of the plastics industry, which is poised to experience significant growth in the coming years. As a booming industry, plastics play a vital role in various sectors, including packaging, healthcare, and infrastructure, making it an essential contributor to the country's economic development.

Meeting with the Department of Technical Education, Training & Skill Development, Govt. of West Bengal:

The meeting was called by the Department of Technical Education, Training & Skill Development Govt. of West Bengal at Karigari Bhavan on 11th November 2024. The meeting was chaired by Mr. Anoop Kumar Agarwal, I.A.S., Addl. Chief Secretary of the Department and Smt. Dawa Lhamu Phinjo, I.A.S., Special Secretary along with other government officials from various departments.

The purpose of the meeting with the industry chambers was to encourage their participation in employing trained manpower. The government emphasized the database of skilled personnel through Rojgar Sangam Yojana West Bengal portal, which allows industry representatives to identify and recruit candidates according to their requirements. The initiative calls upon industry leaders to take an active role in creating employment opportunities for skilled individuals. The Federation was represented by Mr. Manesh Kumar Sharma, Secretary General, Indian Plastics Federation. Mr. Sharma informed the government officials that IPF has established Knowledge Centre at Polypark. The centre offers both theoretical and practical training in areas such as injection and blow moulding, extrusion and pipes manufacturing. It was proposed that department can help us provide students for training and IPF don't need any monitory support. The government officials appreciated IPF's commitment to training and skill development in these specialised areas.


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PLASTIC WASTE MANAGEMENT IN INDIA: ROLE OF LOGISTICS IN THE CIRCULAR ECONOMY

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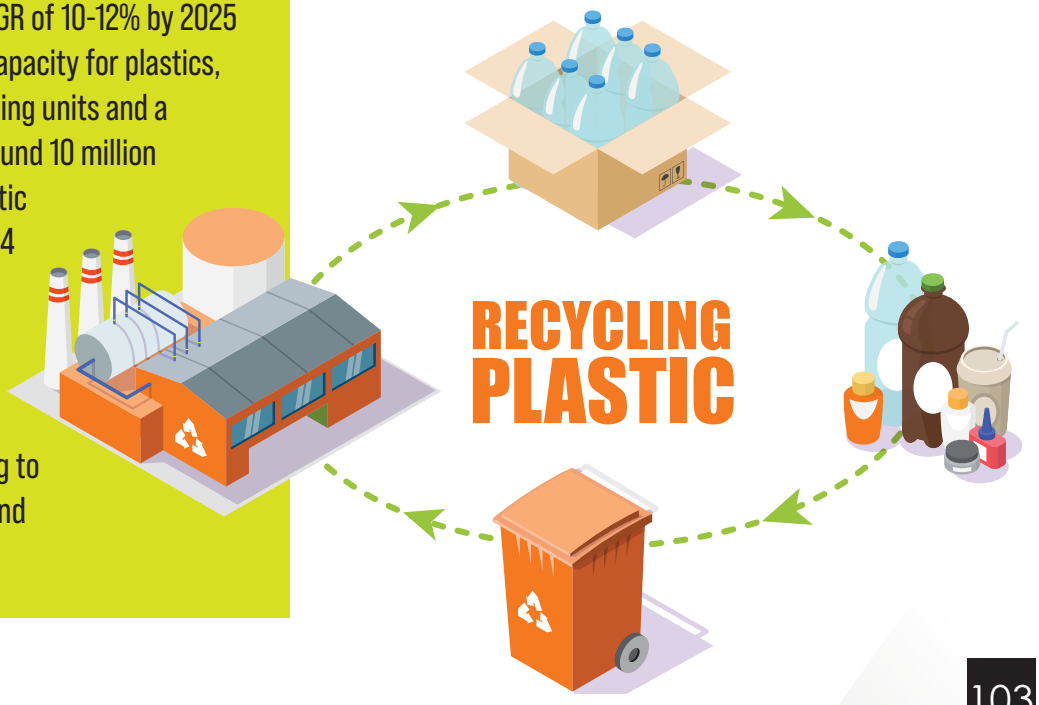
India's plastic industry is a significant contributor to the country's economy, with a growing demand for plastic products driven by various sectors such as packaging, construction, automotive, and consumer goods. The Indian plastic industry was valued at approximately $50 billion in 2020 and is expected to grow at a CAGR of 10-12% by 2025 with a large production capacity for plastics, with over 30,000 processing units and a combined capacity of around 10 million tons per annum. The plastic industry employs around 4 million people directly and indirectly. India exports plastics to over 150 countries, with a significant portion going to the Middle East, Europe and Southeast Asia.

India is facing a significant plastic waste management challenge, with millions of tons of plastic waste generated annually. The logistics sector plays a crucial role in addressing this issue by enabling the efficient collection, transportation, and processing of plastic waste. In this article, we will explore the role of logistics in plastic waste management in India and its contribution to the circular economy.

The current Challenges in Plastic Waste Management in India can be majorly categorised into:

1. **Inadequate waste collection infrastructure:** Many Indian cities lack proper waste collection systems, leading to plastic waste accumulation in landfills and waterways.
2. **Lack of segregation:** Plastic waste is often mixed with other waste, making it difficult to recycle.
3. **Insufficient recycling capacity:** India's recycling infrastructure is limited, resulting in a significant portion of plastic waste being sent to landfills or incinerated.
4. **Limited awareness:** Many Indians are unaware of the importance of proper plastic waste disposal and recycling.



I am limiting the scope of this article to the Role of Logistics in Plastic Waste Management and trying to address the question on how logistics can combat the challenges in plastic waste management.

a. Collection and Transportation: Logistics companies can design efficient collection routes and transportation networks to gather plastic waste from households, businesses, and community centers. All stakeholders need to come together and encourage the Government to create a comprehensive policy framework for plastic waste management, including guidelines for logistics providers.

b. Segregation and Sorting: Logistics providers can invest in segregation and sorting facilities to separate plastic waste from other materials, increasing the quality and quantity of recyclable materials. Logistics companies need to be provided incentives to partner with recycling facilities.

c. Storage and Warehousing: Logistics companies can provide secure storage and warehousing facilities for plastic waste, reducing the risk of contamination and theft.

d. Recycling and Processing: Logistics providers can partner with recycling facilities to ensure the efficient transportation of plastic waste to processing centers.

This can be done by Logistics companies working closely with Government agencies, waste generators, and recycling facilities to create a cohesive waste management system. They can leverage technology, such as GPS tracking and data analytics, to optimize collection routes, reduce costs and improve efficiency.

The logistics sector plays a vital role in addressing India's plastic waste management challenge. By investing in efficient collection and transportation systems, segregation and sorting facilities and recycling infrastructure, logistics companies can contribute to the circular economy and help reduce plastic waste in India. Collaboration with stakeholders, investment in technology, employee training and community engagement are essential best practices for logistics providers to ensure the success of plastic waste management initiatives.

By working together, logistics providers, Government agencies, and stakeholders can create a more efficient and effective plastic waste management system in India, contributing to a cleaner and more sustainable environment.

PLASTIC MYTHS DEBUNKED:
10 SMART REPLIES TO HALF-TRUTHS AND MISC ONCEPTIONS

As members of the plastics industry, we often face questions based on half-truths or misconceptions. This guide provides effective responses to help you highlight the essential role plastics play in modern life while addressing common concerns.

1. Q: How has plastic transformed industries and everyday life for the better?

A: Plastics have revolutionized countless industries due to their lightweight, durable, and versatile nature. They play a key role in healthcare (disposable syringes, PPE), food packaging (extending shelf life), and transportation (fuel-efficient vehicles). Plastics not only reduce resource use but also improve efficiency, providing solutions that alternative materials often can't match.

2. Q: Why don't we just ban plastics?

A: Banning plastics could create more environmental issues than it solves. Alternatives like glass, paper, or metal often have a larger carbon footprint due to increased energy consumption during production and transport. Instead of a ban, we should focus on responsible use, improving recycling practices, and developing biodegradable alternatives.

3. Q: Aren't plastics harmful to marine life?

A: The problem lies in how plastic waste is managed, not the material itself. The plastics industry is working on solutions such as biodegradable plastics, enhancing recycling programs, and supporting better waste management systems to prevent plastic from reaching marine ecosystems.

4. Q: Why is the government banning plastics?

A: The government isn't banning all plastics. The focus is on single-use plastics, like straws, cutlery, and plastic bags, which are challenging to recycle and are often littered. Plastics that are durable and recyclable, such as those used in packaging and bottles, are still allowed. The goal is to encourage sustainability without eliminating the benefits of plastics.

5. Q: Can't we switch to glass or metal instead of plastic?

A: Glass and metal alternatives come with higher environmental costs. They are heavier, require more energy to produce, and create more emissions during transportation. Plastics often offer a more sustainable solution when considering the full lifecycle of a product, from production to disposal.

6. Q: What is the plastics industry doing about recycling?

A: The industry is leading several initiatives to promote recycling and sustainability. Companies are purchasing plastic waste from aggregators, processing it into flakes, and then converting these flakes into recycled pellets. These pellets are used to create new products, reducing the need for virgin plastics. Additionally, the Indian government mandates that 30% of all

plastic products incorporate recycled material, driving further innovation toward a circular economy.

7. Q: How can we reduce the negative impact of plastics?

A: Education and proper waste management are key. Consumers can reduce the impact by reusing, recycling, and disposing of plastics responsibly. The plastics industry is continuously working on developing recyclable, biodegradable, and sustainable plastic alternatives to minimize environmental harm.

8. Q: Are plastic bottles and bags the biggest pollutants?

A: Any material can pollute if not disposed of properly. However, plastic bottles and bags are among the most recycled items globally. In India, initiatives like Extended Producer Responsibility (EPR) are increasing recycling rates and reducing single-use plastics. By improving waste management systems and increasing awareness, the impact of these plastics can be significantly minimized.

9. Q: Why should I trust plastics despite the negative news?

A: Much of the negative perception surrounding plastics is based on misinformation. Plastics are crucial for modern life, offering benefits in fields like healthcare, food preservation, and packaging. When managed properly, plastics can be incredibly safe and environmentally friendly, providing more sustainable solutions than many alternatives.

10. Q: Isn't plastic the main reason for land pollution?

A: Plastic waste only becomes a problem when it's not disposed of correctly. The issue is not the material itself but the lack of proper waste management and recycling infrastructure. With improved recycling methods and responsible disposal, plastics can have a much smaller environmental footprint compared to many other materials.

This guide provides a comprehensive approach to addressing misconceptions and showcases how the plastics industry is working toward a more sustainable and responsible future. Feel free to share these answers to help reshape public understanding and promote a positive dialogue about the benefits and future of plastics.

Harsh Vardhan Poddar
CEO
Harsh Impex

GLOBAL SCENARIO ON
PLASTICS RECYCLING & SUSTAINABILITY

Suresh Anandarao, CEO
ARS CONSULTING, Bangalore

Preface

Globally, only a small percentage of plastic waste is recycled, while the majority ends up in landfills or is burned. This has led to a growing problem of plastic pollution. In the ever-evolving landscape of environmental sustainability, plastic recycling remains a cornerstone of our efforts to create a more circular economy. As we head into the last quarter of 2024, we stand at a pivotal moment, where the actions we take today can significantly shape the future of our planet. In fact, the plastic recycling market size has grown strongly in recent years.

The global recycled plastics market size was valued at US$ 51.10 billion in 2023 and is projected at US$ 55.46 billion in 2024 growing steadily to US$ 107.13 billion by 2032, exhibiting a CAGR of 8.6% during the forecast period. Asia Pacific dominated the recycled plastic market with a market share of 60.55% in 2023, same trend is continuing in 2024.Substantial growth during this period can be attributed to environmental awareness , regulatory initiatives, resource scarcity, waste management challenges, market competition, EPR & other incentive programs.

Major market drivers

Environmental concerns are a primary driver of the plastic recycling market. The widespread use of plastic products has led to severe environmental pollution, particularly in oceans, where plastic waste poses a threat to marine life. Public awareness campaigns and the growing influence of environmental organizations have heightened consumer awareness and **Regulatory measures** imposed by governments worldwide have implemented stringent norms to curb plastic pollution, fostering the growth of the plastic recycling market. Policies such as bans on single-use plastics, extended producer responsibility (EPR), and recycling targets have compelled industries to adopt recycling practices. For instance, the European Union's Circular Economy Action Plan aims to make all plastic packaging recyclable by 2030, significantly boosting the recycling market.

Technological advancements in recycling technologies have made plastics to be more efficient and cost-effective. Innovations such as chemical recycling, which breaks down plastics into their chemical components for reuse, and mechanical recycling, which involves reprocessing plastics into new products, have expanded the

capabilities of the recycling industry. These technologies have improved the quality of recycled plastics, making them more competitive with virgin materials.

Market segmentation

The plastic recycling market can be segmented as below :

a) By plastic type

- **Polyethylene Terephthalate (PET):** Commonly used in beverage bottles and food containers.
- **High-Density Polyethylene (HDPE):** Used in products like milk jugs and detergent bottles.
- **Polypropylene (PP):** Found in automotive parts, textiles, and packaging.
- **Low-Density Polyethylene (LDPE):** Used in plastic bags and film wraps.
- **Polyvinyl Chloride (PVC):** Utilized in pipes, window frames, and flooring.
- **Others:** Includes polystyrene (PS), acrylonitrile butadiene styrene (ABS), and more specialized plastics.

b) By recycling process

- **Mechanical Recycling :** Involves sorting, cleaning, shredding, and melting plastics to form new products.
- **Chemical Recycling :** Breaks down plastic waste into its chemical constituents for repurposing into new materials.
- **Energy Recovery :** Converts plastic waste into energy through incineration or other thermal processes.

c) By application

- **Packaging:** The largest segment, driven by high consumption of plastic packaging materials.
- **Building & Construction:** Utilizes recycled plastics in products like pipes, insulation, and panels.
- **Automotive:** Uses recycled plastics for manufacturing interior and exterior automotive components.
- **Textiles:** Recycled plastics are used to produce synthetic fibers for clothing and other textiles.
- **Others:** Includes consumer goods, electronics, and industrial applications.

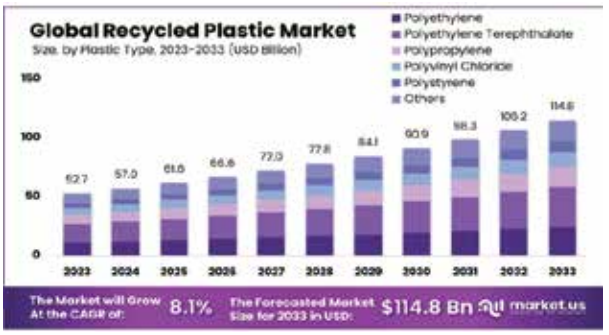
d) By geography

- **North America:** Significant market share due to robust recycling infrastructure and regulations.
- **Europe:** Leading the market with stringent environmental regulations and high recycling rates.
- **Asia-Pacific:** Rapidly growing market with increasing investments in recycling facilities.
- **Latin America:** Emerging market with potential for growth due to increasing environmental awareness.
- **Middle East & Africa:** Developing market with a focus on improving recycling capabilities.

Recycled Plastics Market Dynamics

Driver: Increasing use in packaging, automotive, and electrical & electronics industries

The growing consumption of recycled plastics by major



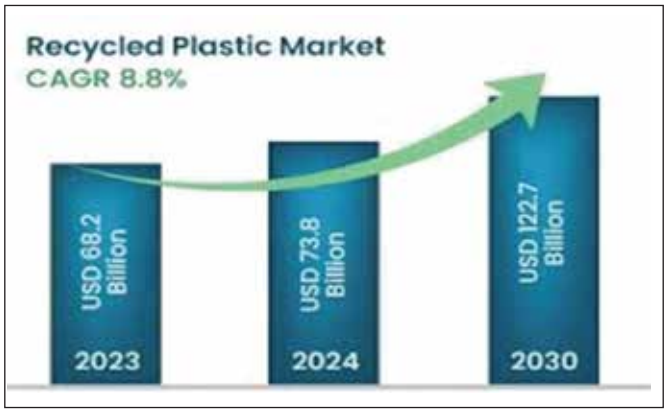
stakeholders in the packaging, automotive, and electrical & electronics industries will directly contribute to the increasing demand for these plastics. Altogether, these companies consume more than 6 million tons of plastic packaging per year. Hence, it is anticipated that the market for recycled plastics would continue to expand as a result of the growing use in packaging, automotive, and electrical & electronics industries.

Restraint: Adverse impact of downcycling

Downcycling is the process in which used and often unused plastics are recycled and refabricated to produce new items of lesser quality. This means that the plastic, instead of becoming another new container, becomes a different, less useful product. Recycled plastics limited use places them at a disadvantage compared to new plastics and other recycled materials. After downcycling, plastic is generally unfit for another round of recycling. As a result, it ends up in a landfill despite having seen a secondary use as a less useful product.

Opportunity: Favourable initiatives to promote use of recycled plastics in developed countries

In the developed economies of North America and Europe, several regulations are in place or have been introduced to promote the recycling of plastics. Moreover, several states in the US offer some tax incentives or credits to promote the recycling of plastics. This is expected to trigger significant growth in public sector funding for waste-related projects. Therefore, such favourable initiatives undertaken by developed economies are expected to create growth opportunities for recycled plastics.



Challenge: Difficulty in collection of raw materials

The recycled plastics market is highly dependent on the proper collection of raw materials (plastic wastes or scraps). Approximately 14% of the global plastic packaging used is recycled, whereas the rest ends up in the oceans each year, causing harm to the aquatic biodiversity. Recycling the remaining 86% of used plastics could create a huge revenue of around US$ 80–120 billion. However, the realization of this revenue cannot be expected without designing new methods. Thus, limitations in the collection of raw materials is a major challenge for the market players.

Challenges
Difficulty removing contaminants
Low yield of pyrolysis products
High energy consumption
Need for catalyst in pyrolysis
Need for appropriate processing for diesel engines
Potential emissions of pollutants during combustion
Need for further research for fuel use

Recycled Plastics Market Ecosystem

Prominent companies in this market include well-established, financially stable recycled plastic manufacturers. These companies have been operating in the market for several years and possess a diversified product portfolio and strong global sales and marketing networks.

Prominent companies in this market include Veolia Environment (France), Indorama Ventures (Thailand), Far Eastern New Century Corporation (Taiwan), Alpek (Mexico), and Berry Global Inc. (US).

Other companies operating in the plastic recycling market include Kuusakoski Group, B&B Plastics Inc., Plastipak Packaging Inc., Carbon Lite Industries LLC, Custom Polymers Inc, MBA Polymers Inc, Clear Path Recycling LLC, Plasgran Ltd, Jayplas Limited, Envision Plastics Industries LLC, WM Intellectual Property Holdings LLC, Green Line Polymers Inc, Biffa, Republic Services, Clean Harbors, Stericycle, Advanced Environmental Recycling Technologies, KW Plastics, The Coca-Cola Company, Lyondell Basell, Loop Industries, Nova Chemicals, Agilyx, The Procter & Gamble Company, PreZero, GreenMantra Technologies, EFS-plastics Inc., Preserve, Next Generation Recycling maschinen GmbH, Interseroh, etc

Plastic Waste Generation in India

India is one of the largest producers of plastic waste globally, generating approximately 26,000 tons of plastic waste daily, equivalent to around 9.5 million tons annually. This high volume is driven by factors such as

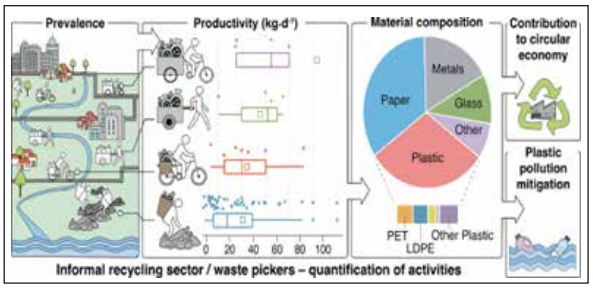
rapid urbanisation, population growth, and increasing consumption of plastic products. The primary sources of plastic waste include packaging, e-waste, biomedical waste, and automotive waste, with packaging waste constituting the largest portion.

Despite the alarming rates of plastic waste generation, India's recycling infrastructure remains underdeveloped. As of 2023, our country managed to recycle about 9.9 million tons of plastic waste, but this figure is expected to grow significantly to 23.7 million tons by 2032 due to ongoing initiatives and improvements in recycling technologies.

The Role of the Informal Sector

A significant portion of India's plastic recycling is handled by the informal sector, which includes small-scale recyclers and waste pickers. This sector is crucial for collecting and processing plastic waste, accounting for around 70% of PET recycling in India. However, the lack of regulation and infrastructure poses environmental and health risks for workers involved in this sector.

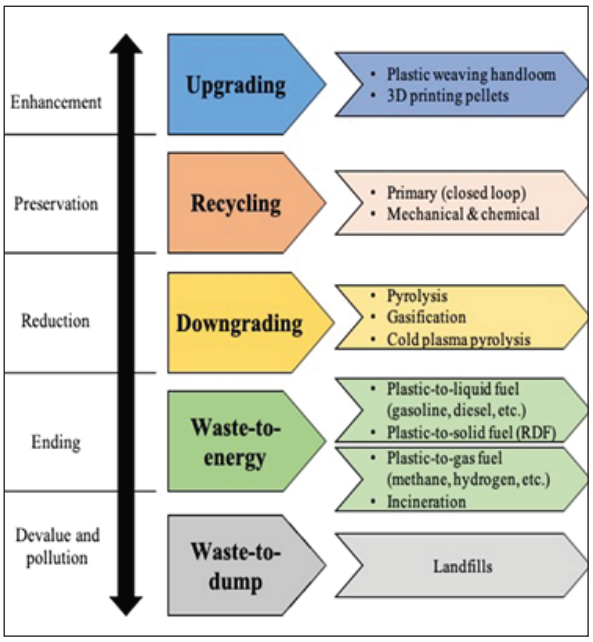
The informal sector's contribution is vital because it effectively manages a large percentage of the plastic waste that would otherwise end up in landfills or pollute the environment. Waste pickers collect between 6.5 to 8.5 million tons of plastic waste annually, recycling about 50-80% of what they collect.



Government Initiatives and Regulations

The Indian government has recognized the urgent need to address plastic pollution and has introduced several initiatives aimed at enhancing recycling efforts such as

- The Plastic Waste Management Rules (Amendment) 2024, which came into effect in March 2024, mandate that manufacturers adhere to Extended Producer Responsibility (EPR) guidelines. These rules require producers to take responsibility for the entire lifecycle of their products, including post-consumer waste management.
- The EPR targets set by the government aim for a minimum level of recycling for different categories of plastic packaging, increasing from 30% in 2024-25 to 80% by 2027-28 for rigid plastics.
- The government has also launched the National Circular Economy Roadmap, which aims to reduce plastic waste going to landfills by promoting sustainable practices across various sectors.



Current Recycling Rates and Challenges

India's overall plastics recycling rate stands at around 60%, with specific rates for PET reaching an impressive 90%. However, challenges remain such as:

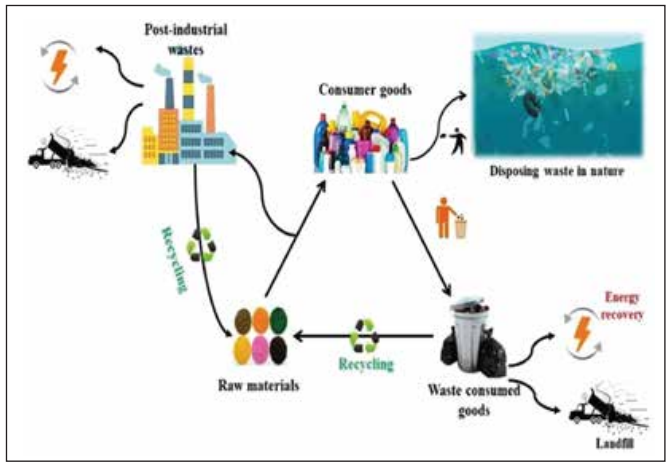
Infrastructure Deficiencies: There is a significant gap in the infrastructure necessary for the efficient collection, segregation, and processing of plastic waste. Many facilities are outdated or lack the technology needed for modern recycling processes.

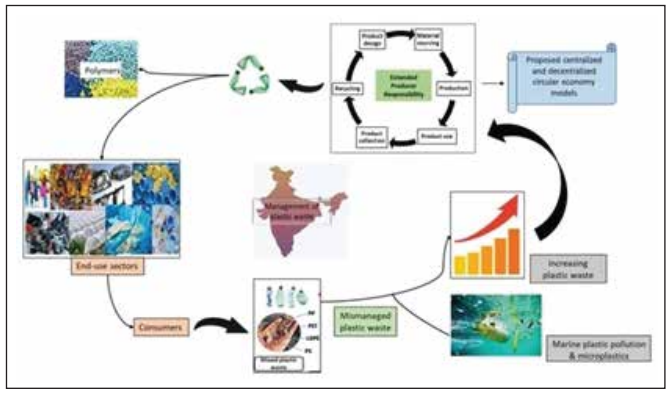
Awareness and Education: While there has been an increase in awareness regarding recycling among consumers and businesses, further education is needed to enhance participation in recycling programs.

Quality Control Issues: The informal sector often produces lower-quality recycled materials due to inadequate processing methods. This downcycling limits the potential applications of recycled plastics in high-value products.

Challenges ahead for Plastics recycling

Due to **lack of knowledge & proper consumer awareness**, different types of plastic are often combined in manufacturing processes, which makes recycling them much more difficult. This often leads to plastics being incinerated, which is a major waste of valuable resources. Plastic recycling market faces several challenges as cited below:

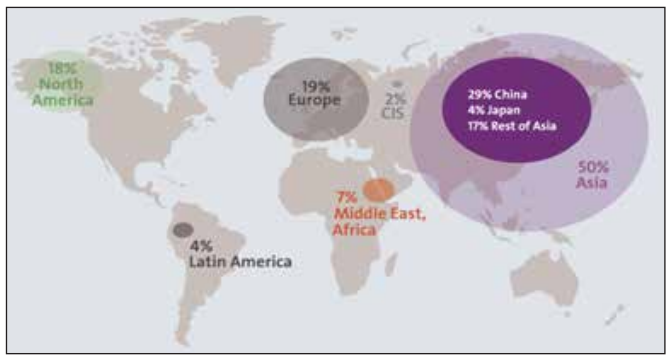




1. **Contamination** of plastic waste with food residues, non-recyclable materials, and other impurities can hinder the recycling process. Ensuring clean and sorted plastic waste is essential for efficient recycling.
2. **Economic viability** of plastic recycling is influenced by the fluctuating prices of virgin plastics, which can sometimes be cheaper than recycled materials. Additionally, the high cost of advanced recycling technologies can be a barrier for some recycling facilities.
3. **Collection and sorting** of plastic waste are critical for the success of recycling programs. However, inadequate infrastructure and public participation in waste segregation can limit the availability of clean recyclable materials.
4. **Design of plastic products** is a vital factor as many products are made without recycling in mind, and some combine multiple materials like metal and paper.
5. **Perception of consumers** on recycled plastic products as lower quality than virgin plastics, which can limit demand.
6. **Market volatility** in terms of fluctuating prices make it difficult for buyers and sellers to plan investments.
7. **Hazardous substances are present in some plastics** like PVC will limit the scope of growth & consumption in sensitive applications like Food , Toys, etc.
8. **Downcycling makes** it vulnerable (ie) when recycled content is used in products of lower value, like when PET from plastic bottles is used in textiles.
9. **Limited availability** of quality material for different types of plastic, each with different degradation behaviours will affect the properties post recycling.
10. **Food contact substances** in higher concentration are found in certain drinks bottled in recycled PET bottles than those bottled in virgin PET.

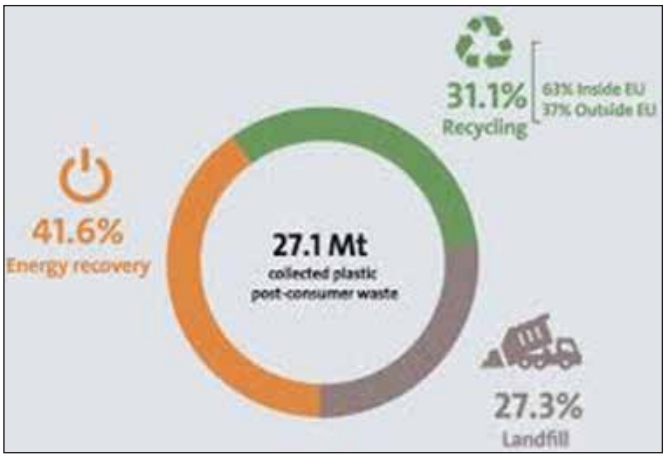
Present Scenario of Plastics Recycling

The increase in consumption of Plastics is expected to propel the growth of the Plastics recycling market going forward. Through plastic recycling process waste or scrap functional plastic items can be recovered without compromising much on quality parameters with the advent of innovative technologies available globally. Plastic recycling process has gained popularity in the past few years, as it has helped decrease carbon emissions and is cost-effective compared to other procedures.



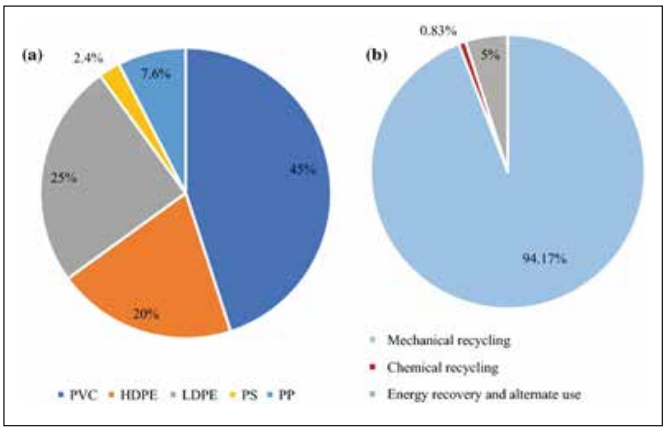
The demand for the worldwide plastic recycling market is projected to rise as a result of rising awareness of the advantages of energy conservation and the growing need to lessen carbon emissions. In addition to the benefits of using recycled plastics, the expanding applications of recycled plastics in the packaging, electrical & electronics, textile, and construction, car, and other industries helps to reduce energy consumption. The maticipated to be fuelled by

rising government regulations and policies regulating the usage of single-use plastics in various nations as well as the increase in investment in the development of new technology leading to improved fuel efficiency.



The increased use of internet purchases increased the need for diverse packaging materials for goods including nursing grooming, electronics, and equipment for personal defense, among other things. As a result, the need for recycled plastics increased during this time period. Throughout the course of the forecast period, the market is anticipated to increase due to rising plastic use in the production of lightweight components used in a broad range of industries, including mechatronics, industrial equipment, and automobiles.

PET recycled plastic is widely utilized in the building and packaging industries. It is used in the initial and subsequent packaging of a variety of items. Low-value goods including plastic timber, roadside curbs, wet roof membranes, ducting, walkways, and flooring, and fences are produced from recycled plastics for use in the construction industry. The use of recycled plastic in food contact packaging applications requires FDA and other regulatory agency approval.

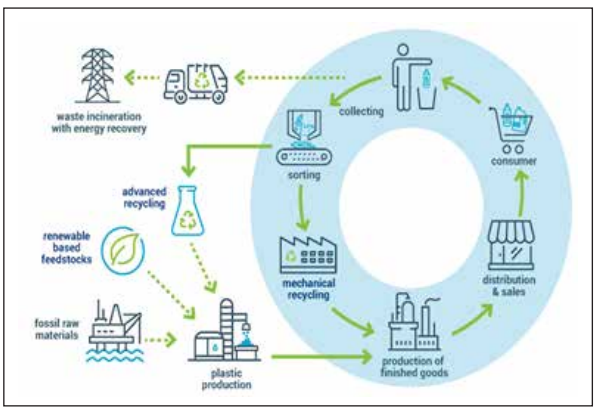


The majority—approximately 80%—of rigid consumer plastic packaging is made of three types of resins: PET, HDPE and PP plastic. Over 70% of the PET and HDPE containers that people put into their curb side bins are sorted, processed and effectively recycled today. But, of course, not all of the consumer plastic out there gets put into recycling bins. So recycling is working, but it could also be working better. Recycling matters, and not only to reduce waste and protect our environment. Recycling is also an important economic engine for Plastic products manufacturing in the present trend. A strong recycling infrastructure is pivotal for building clean, resilient domestic supply chains.

As we look toward the next year 2025, four significant trends are poised to influence and drive the future of plastic recycling.

1. Inconsistent domestic demand for recycled content

Many U.S. companies have the same New Year's resolution: to buy and use more recycled content in their products. American companies have already committed to buying three times more recycled PET by 2025 than is currently available in the domestic market. In vain, U.S. companies sometimes back away from their recycled content commitments. Too often, brand companies cancel contracts for recycled material in favor of less expensive virgin resin or imported material. Addressing demand fluctuations would necessitate the creation of mandatory domestic recycled content minimums and long-term contracts for domestic recycled content supply.



2. Impact of high production of virgin plastic on recycling

Petrochemical companies are pumping out virgin plastic at record rates. The continued high production of virgin plastics directly impacts the recycling industry, as the proliferation of new, inexpensive plastics often undermines the market for recycled materials. Off-spec and wide-spec resin, by products of massive virgin production, are often

sold even further below market rates, amplifying the cost differential with recycled material. When brand companies are making packaging decisions exclusively on price, it can be nearly impossible for recycled content to compete. Addressing the economic imbalance would require decoupling the value of recycled content from its price and redefining it as necessary and important with mandatory domestic content minimums.

3. Importance of verification and certification

When we think about content requirements, it will be increasingly important to also focus on verification and certification within the recycling process. In a circular economy, manufacturers are their own suppliers. Because we want brands to make more content from

domestically sourced recycled material at the end of the chain, many plastic processors are taking initiative to strengthen every link of the recycling chain. Establishing and adhering to the highest standardized protocols is critical for efficiency and credibility in recycling efforts.

4. Implications of changes on a local and global scale

Finally, recycling never operates in a vacuum. The industry is experiencing the pressures posed by local and global action to reduce plastic waste. One example is the U.N. Global Plastic Pollution Treaty, which aims to negotiate a global agreement to end plastic pollution. APR is an active stakeholder in both the U.N. Environment Programme and with the U.S. delegation as the group works to address important topics, including virgin plastic production, microplastics, chemicals of concern, expanding recycling, cleaning up fishing debris and much more. At the global level they are actively advocating for proven policies, like custom, locally appropriate extended producer responsibility (EPR) programs, and tailored, meaningful investments in recycling infrastructure.

As we move into 2025, these trends present a mix of challenges and opportunities for the plastic recycling industry. It is one of the most visible opportunities to address problems caused by plastic packaging waste and also offers benefits like strengthening the supply chain, reducing energy consumption, lowering greenhouse gas emissions and replacing the use of virgin material derived from petrochemicals & fossil fuels.

Rising needs to enhance the Circular economy by recycling

The circular economy is a system that aims to reduce waste and pollution by keeping materials in use for longer. Recycling plastics is a key part of this system . Circular economy solutions for plastics includes:

- Producing plastics from alternative non-fossil fuel feedstocks
- Using plastic wastes as a resource
- Redesigning plastic manufacturing processes and products to enhance longevity
- Reusability and waste prevention
- Collaboration between businesses and consumers

If sustainable plastic recycling and the use of plastics are not intensified, the oceans are estimated to contain more plastic than fish by 2050, and 15% of all greenhouse emissions will come from the production

of virgin plastic. Reusing and recycling products would slow down the use of natural resources, reduce landscape and habitat disruption and help to limit biodiversity loss.

5 Tips to Increase Efficiency in Plastic Recycling Process

- Sorting recyclables
- Integrated machine design
- Consistent feeding of the plastic waste
- Automated smart recycling systems
- Simple and easy-to-maintain machine design

Examples of circular economy initiatives

- **The European Union's plastics strategy:** Aims to make all plastic packaging reusable or recyclable by 2030
- **The U.S. Plastics Pact:** Brings together businesses, government agencies, research institutions, and not-for-profit organizations to work toward a circular economy for plastics
- **The Circular Solutions to Plastic Pollution Integrated Program:** Aimed at accelerating the transition to a circular economy for plastics in the food and beverage sector

Global actions across the plastics lifecycle could probably minimise plastic pollution by 2040

Countries around the world are at a critical juncture in the battle against plastic pollution. OECD(Organization for Economic cooperation & Development) has published a detailed report as countries near the final stages of negotiations to establish a global plastics treaty, models alternative policy scenarios honing in on different areas for action.

This includes curbing production and demand, promoting eco-design, enhancing recycling and closing leakage pathways. It provides insights into the potential environmental benefits and economic consequences of different levels of ambition towards ending plastic pollution by 2040, according to which countries act, how stringent policies are and what stages of the plastics lifecycle they cover.

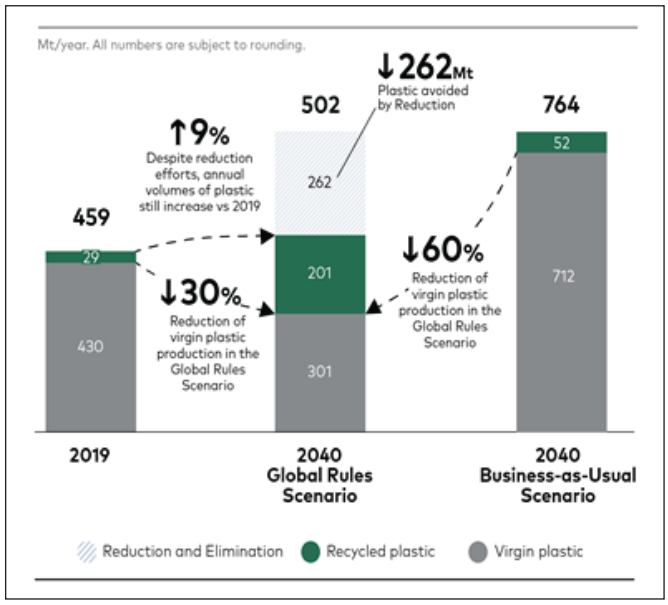
Global production and use of plastics is set to reach 736 million tonnes by 2040, up 70% from 435 Mt in 2020. It will continue to outpace global population growth as demand for plastics is projected to remain high and further increase in OECD countries. Fast growth is similarly expected in emerging economies in Asia, Sub-Saharan Africa and Latin America.

Recycled plastics will continue to make up a mere 6% of all plastics produced in 2040. As plastic volumes booms further, mismanaged waste will increase by 47% and plastic leakage to the environment by 50% by 2040 (from 2020 levels), threatening ecosystems and the people that depend on them.

Partial solutions to plastics pollution will not solve the problem. Focusing solely on waste management without curbing production and demand would reduce plastic leakage to the environment by only 55% compared to business as usual by 2040. If plastic waste is better managed but without dedicated policies to reduce waste volumes, the costs of doing so will significantly increase, making it progressively more difficult for countries to eliminate plastic leakage. Similarly, policy packages with partial geographical coverage or with limited stringency would also fail to reduce plastics use, waste and leakage below 2020 levels.

Ambitious global policy action across the plastics lifecycle (to curb production and demand, design for circularity, enhance recycling and close leakage pathways) can decouple economic growth from plastics use, quadruple the average global recycling rate (from 9.5% in 2020 to 42% in 2040) and nearly end the leakage of plastic waste to the environment (96% reduction from business as usual) by 2040.

OECD projections indicate that policies targeting all stages of the lifecycle, while resulting in a small drop (0.5%) in global GDP, are more cost-efficient compared to strategies focused solely on waste management. The latter would lead to an even larger 0.8% GDP loss by 2040. Developing countries and those with less advanced waste management systems, particularly those in Sub-Saharan Africa, are projected to face the greatest macroeconomic costs.



To support a whole-of-lifecycle approach, the OECD report calls for policies such as plastic and packaging taxes, eco-design criteria and product standards, bans on selected single-use plastics and Extended Producer Responsibility schemes for packaging and durables that could encourage a more sustainable plastics economy. OECD report recognises that additional interventions will be needed to comprehensively tackle other aspects of plastic pollution, such as to mitigate risks related to microplastic pollution, chemicals of concern, plastics-related greenhouse gas emissions and legacy pollution.

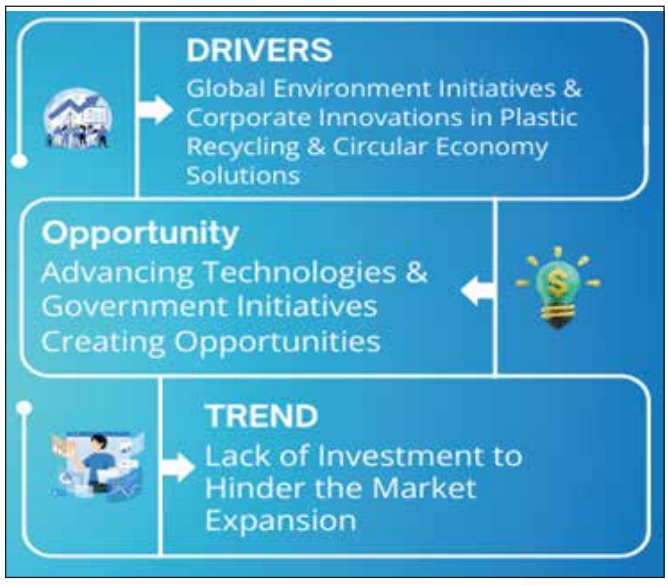
Future trends in Recycling of Plastics

It depends on various factors, as mentioned below :

- Recycling infrastructure needs to be modernized to meet the growing demand for recycling.
- Recycling methods plays a vital role in future . Chemical recycling is a promising method that can increase the amount of plastic that's recycled. However, mechanical recycling is still the most efficient method.
- Consumer behaviour is an essential factor in the eco system. Consumers, businesses and recycling plants need to embrace recycled plastic as the norm.
- Industry changes are very much need , to be specific - Systemic changes are needed from time to time depending on various regions & it may require regulation.
- Research and development can help improve recycling rates, sorting techniques, and more.
- Circular economy can help achieve global sustainability goals. This requires improving the economics of collection and sorting, and investing in emerging technologies.

Some other trends that are emerging in the plastic recycling industry that includes:

- Companies are investing in expanding their recycling capacity.
- The demand for recycled plastic is expected to increase.
- The EU is setting new standards for a profitable and circular plastics economy.
- North America is leading in effective plastic recycling.



Future projections

- Without stronger policies, plastic production and use are expected to increase by 70% by 2040
- The amount of plastic waste produced globally is expected to almost triple by 2060

- The share of plastic waste that is recycled is projected to rise to 17% by 2060

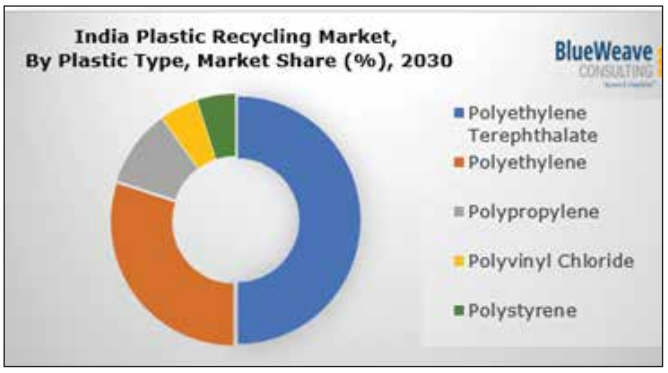
Potential solutions

- Improve waste collection, treatment, and recycling
- Reduce plastic production and demand
- Promote circular design
- Increase product lifespans
- Negotiate a legally binding international agreement to end plastic pollution

Expected Scenario in 2025 : Projections for Recycling Capacity

By 2025, India's plastics recycling market is expected to evolve significantly due to several factors:

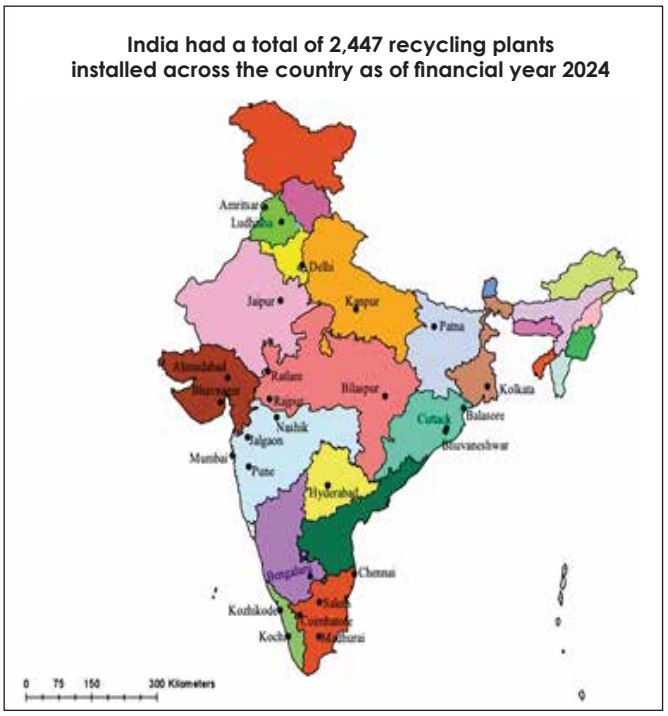
- **Increased Investment:** The sector has attracted substantial investments—over ₹10,000 crores in recent years—driven by progressive government policies that encourage recycling initiatives and sustainable practices.
- **Technological Advancements:** Innovations in recycling technologies are anticipated to improve efficiency and quality in processing recycled plastics. This includes advancements in mechanical recycling and chemical processes that can convert mixed plastics into higher-quality materials suitable for reuse.
- **Enhanced Collaboration:** Partnerships between government bodies, NGOs, and private enterprises are likely to strengthen efforts towards establishing a more robust circular economy model.



Regulatory Impact

The impact of regulatory measures introduced through the amended Plastic Waste Management Rules will become more pronounced by 2025:

- Manufacturers will be required to meet stringent EPR targets, promoting investment in sustainable product design and improving collection systems.
- Enhanced labelling requirements for biodegradable plastics will drive innovation towards more sustainable materials.



Environmental Benefits

The anticipated improvements in recycling rates are expected not only to reduce the volume of plastic waste but also to contribute significantly towards lowering greenhouse gas emissions associated with plastic production and disposal. Estimates suggest that effective implementation of these strategies could decrease emissions by up to 20-50% within the next few years.

India's journey towards enhancing its plastics recycling capabilities is marked by both challenges and opportunities. While significant strides have been made through government initiatives and the active participation of the informal sector, continued investment in infrastructure, technology, and public awareness will be crucial. By 2025, with a focused approach on sustainability and circular economy principles,

India could emerge as a leader in global plastics recycling efforts, making substantial contributions towards environmental conservation and resource efficiency.

SUSTAINABILITY GOALS FOR PLASTICS RECYCLING -2025

Many companies are aiming to reduce the amount of new plastic they use in their products.

They are aiming to increase the amount of recycled plastic they use in their products.

Closed-loop recycling systems recycle plastic forever, instead of sending it to landfills.

- Recycling of plastics reduces the need to extract new raw materials, which can reduce emissions of heat-trapping gases.
- It protects natural resources by reusing processed materials.
- Reduces the amount of plastic waste that ends up in landfills or pollutes natural habitats.
- Preserves ecosystems and protects wildlife.

Other ways to make plastics more sustainable are

Use feedstocks like plant fibers, wood, and starches instead of petroleum-based materials.

Reduce the consumption of single-use plastics.

Reduce, Reuse, Recycle

1.Optimise the sustainability of all product packaging: Many FMCG, Pharma & other companies are improving the stability of their products in order to reduce the use of plastic packaging to a minimum or eliminate it completely. They are gradually replacing disposable packaging materials made from primary plastics with plastics made from recycled materials. They are exploring innovative alternatives for replacing non-recyclable packaging, for example a packaging material for inlay of hard floor cleaner is made from a paper pulp used instead of Styrofoam.

2. A few FMCG companies target a recycling plastic content of up to 50%: They are reducing and systematically replacing the amount of virgin plastic in their products. To manufacture the spray lances for their pressure washers, they have in part switched to recycled plastic and use nylon 66. The recycled material used is extracted from fabric in returned airbags and material left over from their production process.

3. Sustainable practices : Consumers are looking for brands to take responsibility for the lifecycle of their products . For example, Companies are integrating rPET into their supply chains to meet environmental goals.

Future prospects

The future of the plastic recycling market looks promising, with several trends expected to shape its growth:

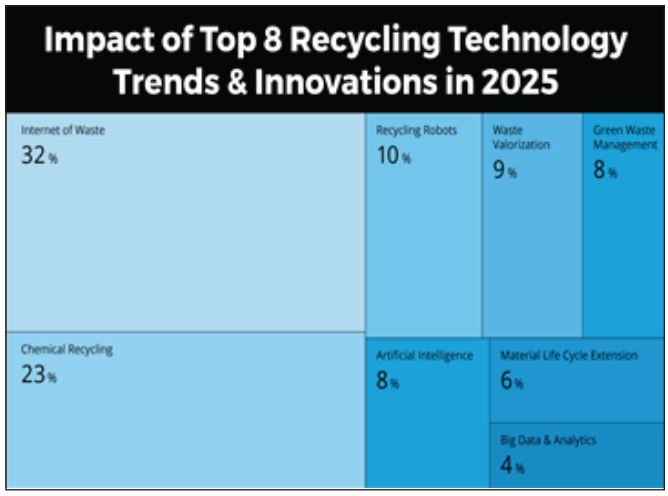
Increased investment

Governments and private entities are expected to increase investments in recycling infrastructure and technologies, improving the efficiency and capacity of recycling operations.

Circular economy initiatives

The shift towards a circular economy, where waste is minimized, and materials are continuously reused, will drive demand for recycled plastics. Companies are increasingly adopting sustainable practices and integrating recycled materials into their products.

Technological Innovations

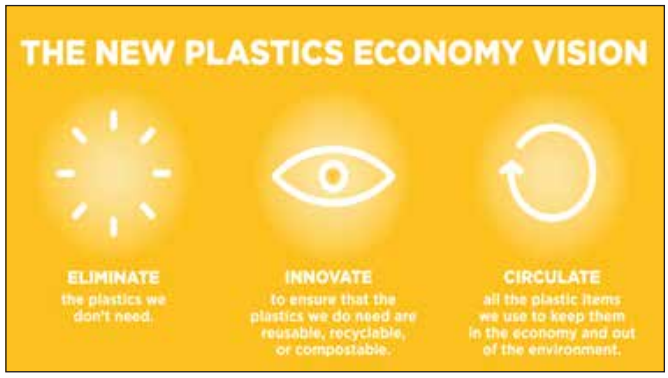


Ongoing research and development in recycling technologies will enhance the quality and cost-effectiveness of recycled plastics. Innovations such as advanced sorting technologies, improved chemical recycling processes, and biodegradable plastics will further support market growth. A few technological advancements in the recent times includes

- **Pyrolysis :** A thermal process that breaks down plastic into hydrocarbons, allowing for the recycling of previously non-recyclable plastics
- **Solvent dissolution :** A method that extracts polymers from plastic waste, allowing for the recycling of complex materials like electronic waste
- **AI and blockchain :** Digital technologies that can improve the efficiency and transparency of chemical recycling processes
- **Biomass and carbon capture and utilization (CCU):** Using plastics produced from biomass and CCU processes

CONCLUSION

There is no 'silver bullet' solution to significantly reduce waste disposal and GHG emissions (ie) the release of gases into atmosphere that trap heat & contribute to climate change often. A key action to remediate the current lack of high-quality waste needed to drive circularity is by fostering 'design for recycling' that would limit complex product designs with hard to separate mixed materials. A few initiatives are :



- Upstream and downstream solutions should also be deployed together to increase effectiveness. This includes reuse that reduces single use applications, mechanical and chemical recycling, and plastics produced from biomass and carbon capture and utilization (CCU) process.
- Significantly increasing the collection, sorting, and use of high-quality circular feedstock can reduce the dependence on fossil feedstocks and considerably lower the GHG emissions of the plastics system in the long term.
- While measures to enable circularity are critical, plastic recycling methods urgently need updates, as well. Many EU companies are taking initiatives to increase the use of complementary forms of recycling, while investing and driving innovations in both mechanical and chemical recycling technologies.

Significant global initiatives for plastics recycling in 2025 include:

- Global Plastics Treaty : Legally binding agreement that aims to reduce plastic production, promote reuse, and develop a financing mechanism to end plastic pollution
- New Plastics Economy Global Commitment : Collaboration between the UN Environment Programme (UNEP) and other organizations to address plastic waste and pollution

- UNEP Plastics Initiative : Four key goals to address plastic pollution, including reducing the size of the problem, designing for circularity, and ensuring circularity in practice
- IAEA Flagship Initiative : Uses nuclear science and technology to treat existing plastics and identify, trace, and monitor plastics in the ocean.

Other initiatives include:

- Advocating for a legally binding global treaty on plastic pollution
- Reducing the use of single-use plastics
- Promoting reuse and repair
- Supporting a just transition for the informal waste sector
- Designing products to be reusable, recyclable, and compostable
- Managing plastic waste that cannot be reused or recycled

Last but not the least

We need to work more closely with policymakers to urgently establish the policy and legislation necessary to stimulate the development of markets and incentivise investments and innovations that support a circular plastics and net zero system.

More concretely, we'll need support in developing a waste management system fit for a net-zero and circular economy – such as mandatory targets for reuse or recycled content – to effectively increase the demand for circular business offerings.

MAGPET™
Your Best Bet for PET

metapet
Thinking eco-logically

METAPET SMART BINS
Promoting Circular Economy & Sustainability

A smart tool to collect Post Consumer Waste (PCW) PET Bottles

METAPET is the recycling arm of Magpet Polymers Pvt Ltd, a leading PET manufacturer in East and North Eastern India. We are ISO and SMETA 4 Pillar certified and committed to upholding the highest standards in business practices.

At METAPET, we are dedicated to Thinking Ecologically, embedding sustainability at the heart of our strategy. Our Smart Bins represent a significant step forward in promoting responsible waste disposal and environmental stewardship.

#1
Innovative Design and Functionality

Our 6-foot Smart Bins, designed like bottles, enhance aesthetics, promotes waste segregation, discourage misuse, and maximise storage for bottles and containers, transcending education and language barriers

#2
Versatile and Efficient

These IoT-enabled, self-powered bins, installable indoors or outdoors, monitor fill levels, ensure timely waste collection, and optimise logistics to minimise CO2 emissions, underlining our focus on **'Think Global, Act Local.'**

#3
Circular Economy Commitment

Collected PET bottles are recycled at METAPET's Food-Grade B2B PET Recycling Plant, transforming them into valuable resources, promoting reuse, and reducing environmental impact within the circular economy.

#4
Scalable and Cost-Effective

Our affordable, scalable solution addresses India's unique waste disposal challenges, promoting practical and effective responsible waste management practices.

#5
CSR and Community Engagement

Our Smart Bin model integrates waste pickers under a social inclusion framework, promoting income augmentation and micro-entrepreneurship, thereby achieving multiple SDG goals.

#6
Partnership for Branding

Join us as a Green Ambassador! Partner with us for branding opportunities on our Smart Bins and support cleanliness, hygiene, and environmental conservation. Promote a cleaner, greener future together.

SCAN TO BECOME A **GREEN AMBASSADOR**

Contact Us:
For partnerships and further information,
email us at **kol@magnumgroup.in** or scan the QR code
to become a **Green Ambassador** and watch our explainer video.

Taking care of our planet is crucial because it's our one and only home.

INDUSTRY

High-Tech Durable Greenhouse Roofing Solution Using Trucircle™ Polyethylene For Saudi Food Production Initiative

SABIC has joined forces with iyris (formerly RedSea), a sustainable AgriClimate Tech business and Napco National, a vertically integrated Saudi manufacturer of flexible film and packaging products, to create a high-tech durable greenhouse roofing solution using certified circular polyethylene from SABIC's TRUCIRCLE™ portfolio. The greenhouse roof has been used in the National Food Production Initiative (NFPI), together with other leading champions from the public and private sector in the Kingdom of Saudi Arabia, designed to improve the sustainability of Saudi Arabia's agriculture and food security in the region.

In this collaboration, linear low-density polyethylene (LLDPE) resin is used in the roofing of large agricultural greenhouses. The polymer material is manufactured with certified circular feedstock from mixed post-consumer used plastics and forms part of the company's TRUCIRCLE™ portfolio and services for circular solutions.

The mixed-used plastic is converted into pyrolysis oil in an advanced recycling process, which is then used in the production of new polymer resins, such as LLDPE formulations, with the same purity and quality as traditional virgin plastics at SABIC's plant in Jubail, KSA. Napco National uses the certified circular LLDPE to manufacture a durable greenhouse roofing film.

Outstanding property profile

The film made by Napco National using SABIC's certified circular PE has a thickness of 200 µm. It features good tensile strength and elongation and has successfully passed relevant Elmendorf tear as well as dart impact testing. The SABIC polymer also delivers high clarity and UV stability. The incorporated, award-winning SecondSky™ technology of iyris adds excellent thermal behavior by blocking near-infrared heat without compromising the transmission of photosynthetically active radiation (PAR).

SABIC is the first material supplier in the region to provide certified circular polymers from local production with ISCC PLUS certified feedstock from advanced recycling. As customers are increasingly becoming more conscientious of their environmental footprint, this TRUCIRCLE offering based on local capacities meets with a growing demand for more sustainable and responsible materials.

Source:-SABIC

"Cutting-edge Solution for recycling multi-layer packaging: Unveiling a myth-busting Technology."

Multilayer packaging (MLP) is good for mankind as it preserves and protects the content. MLP is the mainstay of the FMCG industry, combining functionalities of dissimilar materials, such as excellent barrier against water, vapor and gases like oxygen, carbon dioxide, along with good mechanical and ability to withstand low-temperature environments. Thereby, increasing the shelf life of the product considerably and potentially helps in significantly reducing the carbon footprint throughout the food supply chain.

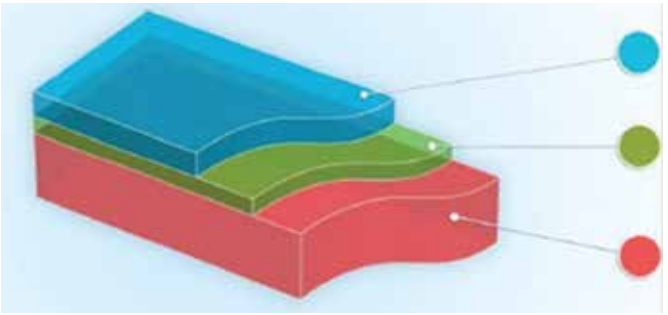
However, due to lack of efficient collection and processing or safe disposal system, MLP poses several challenges. In India, the system of primary waste collection is practically non-existent. Door-to-door collection of wastes from household, shops and establishments is insignificant and unorganized. As a result, most of the waste MLP is difficult to collect and dispose in a proper manner to reduce adverse impact on environmental and public health. Moreover, it is widely believed by various stakeholders that the MLP waste being generated is "non-recyclable" because the polymers involved in different layers have different rheology points.

As of today however, the technology does exist to recycle MLP that renders Multi-layer packaging recyclable in spite of the fact that multilayered polymers have different functionalities and together act to provide the durability that MLP's offer. The "myth-buster" technology has the capacity to convert MLP waste into granules which are fit to be used for making a variety of products ranging from furniture road dividers, bottle caps, trays, crates, stools, benches and much more across a large range of industrial, domestic & other applications.

1. Multilayer Packaging: An introduction

Multilayer packaging is a composite material consists of more than one layer of different materials (polymers, aluminum foil etc.), where the components are layered in a variety of ways to create flexible structures. Figure 1 shows a typical three-layer structure of a multilayer film architecture.

Figure 1: Three layer structure of a multi-layer flexible packaging film structure.



Each layer of a flexible multi-layer packaging has a specific role and responsibility within the application, for example:-

Outer layer: This layer provides a printing surface, and is usually made of BOPP or PET.

Barrier layer: This layer prevents oxygen and moisture from infiltrating the packaging, which is essential for preserving the freshness of packed food. EVOH, Nylon, METPET, METBOPP and Aluminum-foil offers superior barrier performance in flexible packaging.

Sealing layer: Polymers with a low melting point are typically used as the sealant layer because they readily melt and fuse together when heat is applied, creating a strong bond between different layers of the packaging material. Polyethylene is the most common inner sealing film layer in flexible packaging.

2. Multi-layer Packaging: Recycling Hurdles

a. As already discussed above, multi-layer packaging is a composite material consists of more than one layer of different materials having different rheology points and chemical composition. During recycling, different polymers or sometimes incompatible polymers (e.g., PE and PET) do not blend well, reducing the quality of recycled products.

b. Polymers used in multi-layer packaging have unique processing characteristics, like melt flow rate, thermal stability and processing temperaure. These differences necessitate specific recycling processes and conditions, making it

difficult to develop a "one-size-fits-all" ideal approach.

c. The lack of detection systems for multi-layer films. Current recycling facilities often rely on manual sorting or obsolete technologies that cannot differentiate small-sized contaminants such as dirt and stones, scrap metal, glass, papers, non-ferrous metals and polymer contaminants.

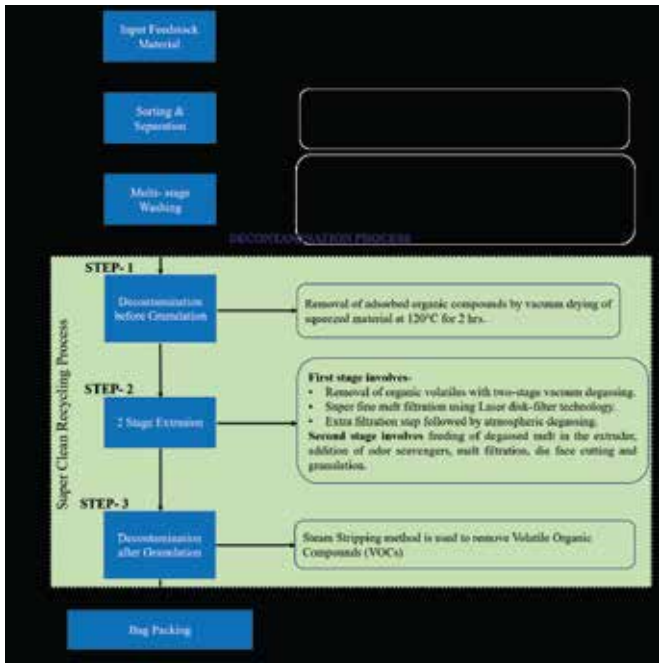
d. The current waste management infrastructure lacks specialized collection systems for multi-layer films, leading to their frequent disposal in landfills or incineration.

3. Multi-layer packaging: The Recycling Technology

The post-consumer multi-layer flexible packaging bales are sourced from the recognized MRFs. Since, incoming bales may be contaminated with foreign particles/ materials that need to be removed before processing, therefore, multi-layer flexible packaging materials are passed through trommel, vibrating screen and eddy current separator to remove dirt, glass, papers, stones, ferrous and non-ferrous materials. The packaging materials are then washed with water and moved through a vibrator shaker to remove the excess water. In the next step, the packaging materials are passed through AI sorters (UV-Visible light, near-infrared (NIR), X-ray, fluorescence, laser, hyper-spectral and metal detectors) to remove non-polymer contamination. The next step involves wet grinding of the packaging material followed by a hot caustic pre-washing at 60°C for a duration of 4–10 min. This is followed by a high speed hot washing step at approx. 60°C, where the material remains for about 6–12 min. after being squeezed.

The squeezed material then passes through two stage extrusion and vacuum degassing for better removal of volatiles and non-targeted polymers. The first stage involves melt filtration using a laser filter of 200µm, followed by atmospheric degassing of the polymer melt. Whereas, the second stage involves feeding of degassed polymer melt into the extruder, adding odor remover additives followed by very fine filtration using mesh disc filters of 150µm. After that, the polymer melt exits the extruder through the die holes, pellets are cut by rotating blades and are solidified by the process water flowing across the die face inside the cutting.

Figure 2: Flowchart, showing the complete recycling process of the MLP.



Technology offers many advantages, including:-

a. Sorting and separation process: Trommel, Vibrator shaker. Magnetic separator, Eddy-current separator.

b. AI-based auto-sorting technology: UV-Visible light, near-infrared (NIR), X-ray, fluorescence, laser, hyper-spectral and metal detectors.

c. Multi-stage washing: Dry wash, Augur washing, centrifugation, hot washing with alkali, cold wash, High speed hot washing and cold washing.

d. Two- stage extrusion decontamination process: Vacuum drying, Double-stage vacuum degassing, and continuous polymer filtration using laser-disk filter technology etc.

4. End Products

It is recommended to use post-consumer recycled (PCR)-MLP granules in certain proportions into wide range of applications (Figure 3), for example:-

a. Decorative - PCR to Virgin shall be of ratio up to 60:40.

b. Functional components like Furniture, Road Dividers, Bottle caps, Trays, Crates, etc. shall be up to 40: 60

c. High-strength applications like core plugs, Floor tiles, etc. shall be 25:75

In addition to the above, the recycled granulates can be mixed and used in applications like Pipe extrusion for agriculture, Sheet Extrusions for ACP panels & Roto-Molding for Tanks in the regulated mix.

Figure 3: Different applications of PCR-MLP granules

SABIC has recently displayed a wide range of advanced materials, creative concepts and commercial applications in EVs and energy storage.

The company spotlights solutions well suited for electric vehicle batteries, chargers, inverters, busbars and converters.

SABIC is emphasizing its sustainable polymers and specialty thermoplastics, which can help address critical fire safety concerns and expand the environmental benefits of EVs.

SABIC, a global leader in the chemicals industry, is spotlighting advanced material technologies and creative solutions for energy storage, particularly electric vehicle (EV) battery components and charging infrastructure, here at The Battery Show North America (Booth 4807). The company is displaying concepts and commercial applications that illustrate the value of its polymers and specialty thermoplastics for increasing design flexibility, improving safety and performance, streamlining manufacturing and enhancing sustainability.

Multi-material EV battery pack enclosure: This novel enclosure, an alternative to an all-aluminum design, reduces weight by 20 percent. Its cover panel uses a thermoplastic / organosheet sandwich structure; its tray is made completely from thermoplastic; and its underbody panel is metal. Flame-retardant (FR) STAMAX™ long glass fiber polypropylene (LGF-PP) is used for the thermoplastic components.

Thermoformable insulation film in EV battery packs: This film is based on chemically resistant NORYL™ NHP8000VT3 resin, which meets the UL94 V0 standard at 0.25 mm and achieves the highest comparative tracking index level (CTI-PLC0). These properties enable the insulation film to be used in higher-voltage (600V) EV batteries to help prevent ignition and resist breakdown. Sustainable versions of the film are available.

DC-DC hybrid converter: Another multi-material example is this demonstrator, which features a plastic-metal hybrid. The lightweight plastic housing is made with ULTEM™ resin, while a stamped sheet metal insert provides thermal management of the printed circuit board. This approach may reduce manufacturing costs by up to 30 percent compared to an all-aluminum version. Most ULTEM resin grades can be requested as ISCC+ certified renewable versions.

Polypropylene (PP) replaces polyamide (PA) bringing more safety and value: Replacing FR PA with intumescent FR PP in thermal runaway barriers, module housing, busbars, and other EV battery components could reduce weight and costs while equaling or surpassing PA's fire safety performance. Samples at the booth show the potential of intumescent FR PP STAMAX resin to reduce cold side temperatures by ~100°C vs. FR PA.

Cylindrical cell frames for EV battery protection: Made with LNP copolymers, these thin-wall cell frames deliver UL94 V0 compliance at 1.5 mm. Compared to polyamide (PA) frames, they offer improved dimensional stability thanks to lower moisture uptake and lower warpage. Also, they meet low-temperature ductility requirements with impact resistance down to -40°C. For sustainability, grades can be requested as ISCC+ certified renewable versions.

Busbar insulation covers: Prototype EV busbars on display use SABIC's FR PP resin and VALOX™ FR PBT resin for their insulation covers. These materials deliver outstanding fire safety (with PBT available to meet higher service temperature requirements) and superior arcing control and can be dyed orange for visibility and safety. The resins are formulated without intentionally adding per- and poly-

fluoroalkyl substances (PFAS) or halogen. Processing options include injection molding and extrusion. Compared to a traditional FR PA solution, use of SABIC's PP resin can potentially offer up to 20 percent in cost savings and 10 percent in weight savings, while SABIC's PBT resin can deliver reduced moisture absorption and improved dimensional stability.

Nichicon capacitors for EV AC-DC traction inverters: In the first commercial application of ultra-thin ELCRES™ HTV150A dielectric film, Nichicon has developed high-temperature, high-voltage, commercial-quality capacitors for EV inverter modules. The film is the first in the industry to deliver stable performance at operating temperatures of -40°C to 150°C and frequencies up to 100 kHz.

Charge Amps Dawn EV charger: The housing of the Charge Amps Dawn EV charger contains in the range of 50 percent certified renewable LEXAN™ polycarbonate from SABIC's TRUCIRCLE™ portfolio, supporting the EV charger provider's commitment to develop the circular bio-economy and help mitigate climate change issues

Source Sabic

SABIC® offers certified circular PP polypropylene made from advanced recycled ocean bound plastic (OBP). This 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 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%.

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.

The sustainable B!POD containers molded in OBP based SABIC PP has beenfully rolled out across the European Union, in Switzerland and the United Kingdom by mid-2024, with Asian countries to follow in 2025.

Source:-Sabic

A research group at Indian Institute of Science, Bangalore has made a breakthrough to recycle CFRP composites

Carbon fiber reinforced polymers consist of carbon fibers embedded in a polymer matrix. Epoxy resin, a thermoset, is a very common choice for the polymer matrix. IISc scientist led by Prof. Suryasarathi Bose and Prof Subodh Kumar has developed a bio based aqueous solution that can break down the resin and recalim teh carbon fiber fabric. The recycled epoxy and carbon fiber were found to maintain structural integrity and can be used in new composites or blended with other polymers to create new products

The epoxy can also be put ot use as a hardener to design other materials

This technique will simplify the recycling process

and help the composite industry achieve a circular economy

Professor Kotohiro Nomura and his team at Tokyo Metropolitan University has developed a method for the depolymerization of PET (polyethylene terephthalate) using alcohols and an inexpensive, readily available iron trichloride catalyst. This method can be applied to the selective chemical recycling of both textile and plastic waste mixtures.

Polyesters, which consist of repeated "ester bonds" formed by the reaction of carboxylic acid and alcohol, are commonly used in plastic bottles and clothing. If these ester bonds could be completely broken, polyester could be reverted to its raw materials. Conventional methods, however, necessitate high temperatures and large amounts of acidic or basic substances.

Therefore, a simple, cost-effective, and environmentally friendly method is highly sought after. Additionally, there is a global demand for the development of selective depolymerization of polyester from plastic waste, especially from textile waste, which is a mixture of polyester and cotton.

The research team has now developed a method for acid- and base-free depolymerization of PET bottles using ethanol and either $FeCl_3$ or $FeBr_3$, yielding diethyl terephthalate (DET) and ethylene glycol (EG) with high selectivity (98–99%). Iron trichloride ($FeCl_3$), which is inexpensive and widely available, demonstrated superior catalytic performance at 160–180°C, comparable to their previous results using titanium catalysts.

Notably, this method enabled the exclusive and selective depolymerization of PET from textile waste, which comprises PET and a mixture of PET and cotton, yielding DET and EG while quantitatively recovering cotton waste. The catalyst also facilitated the selective depolymerization of PET from plastic waste, including polyethylene.

The development of a straightforward method for the exclusive and selective depolymerization of PET is particularly desired for the chemical recycling of textile waste.

Source: Deccan Herald, IISc

Plastic Exhibition At a Glance

Printpack 2025

1st - 5th February, 2025
India Expo Centre & Mart
Greater Noida
Organizer :
Indian Printing Packaging & Allied Machinery Manufacturers Association

MD & M West 2025

4th - 6th February, 2025
Anaheim, USA
Anaheim Convention Center, Anaheim, CA

Warsaw Plast Expo 2025

4th - 6th February, 2025
Varsava, Poland

Plast Champions 2025

6th - 9th February, 2025
Bombay Exhibition Centre, Mumbai
Organizer :
Dynesty Exhibitors Pvt. Ltd.

International Plastic Industry IPF 2025

12th - 15th February, 2025
Inrternational Convention City, Bashundhara (ICCB)
Dhaka, Bangladesh

Plast Alger 2025

24th - 26th February, 2025
Palalsdes Expositions of Alger-SAFEX
Algiers

ICE Europe 2025

11th - 13th March, 2025
Munich, Germany

Propack Africa 2025

11th - 14th March, 2025
Johannesburg Expo Centre
South Afiica

Korea International Plastics & Rubber Show KOPLAS 2025 Products & Packaging.

11th - 14th March, 2025
Goyang, Kintex1, Korea

TPTXPO 2025

18th - 20th March, 2025
Rosemont, Illinois, USA

Plastics & Rubber Vietnam 2025

18th - 20th March, 2025
Hanoi, Vietnam

Plastprintpack Nigeria 2025 10th International Fair of Plastics, Printing

25th - 27th March, 2025
Lagos, Nigeria

Plastics Recycling Show Europe 2025

1st - 2nd April, 2025
Rai Amsterdam, Holland

ChinaPlas 2025

15th - 18th April, 2025
Shanghai, China

Plastteknik Nordic 2025

7th - 8th May, 2025
Malmomassan, Malmo
Sweden

RePlast Eurasia Istanbul 2025

8th - 10th May, 2025
Intanbul, Turkey

Plastic Exhibition At a Glance

Saudi Plastics & Petrochem 2025

12th - 15th May, 2025
Convention & Exhibition
Organizer :
Riyadh Exhibitions Company Ltd.

Plastic & Rubber Thailand 2025

14th - 17th May, 2025
Thailand
Organizer :
Bangkok International Trade & Exhibition Centre (BITEC) Bangkok

Plastpal 2025

20th - 23th May, 2025
Kielce, Poland

Greenplast 2025

27th - 30th May, 2025
Milan, Italy

12th International Exhibition of Plastics, Machine, Moulds & Recycling

31st May - 2nd June, 2025
Exhihition Centre
Metropolitan Expo
Athens, Greece

Hanoi Plas 2025 13th International Exhibition of Plastics & Rubber Industry

4th -7th June, 2025
Hanoi International Centre for Exhibition, Hanoi, Vietnam

Plastic Expo 2025

7th - 8th June, 2025
The Kram Exhibition Centre, Tunis-Tunisia
Organizer :
Society of International Fairs of Tunis Exhibition Centre and International Trade Centre

Interplas Thailand 2025

18-21 June, 2025
Thailand,
Bangkok International Trade & Exhibition Centre (BITEC) Bangkok
Organizer :
Rx Tradeex

Plastexpo 2025

23rd - 26th June, 2025
Mohammed XI Exhibition Centre, El Jadida, Morocco

K-2025

8th - 15th October, 2025
Dusseldorf, Germany

5th International Exhibition of Plastics, Printing & Packaging

24th - 27th November, 2025
Erbil, Iraq

Paperex 2025

3rd - 6th Decembr, 2025
Yashobhoomi, Dwarka International Convention & Expo
Organizer :
Hyve India Pvt. Ltd.

Plastex 2026

11th - 14th January 2026
Egypt International Exhibition Centre
Organizer :
DMG events

14th Die & Mould India International Exhibition 2026

21st - 24th April, 2026
Bombay Exhibition Centre
Mumbai
Organizer :
Tool and Gauge Manufacturers Association of India (TAGMA)

Plast 2026

1st May - 30th June, 2026
Milanofiori Business Centre
Italy
Centre, Greater Noida, N.Delhi
Organizer :
Promaplast srl

Hiplex 2026

7th - 10 August 2026
Hitex Exhibition Centre
Hyderabad
Organizer :
Telangana and Andhra Plastics Manufacturers Association

Plastivision 2027

21st - 25th January, 2027
Bombay Exhibition Centre
Metro Station, Goregaon
Mumbai, India
Organizer :
AIPMA

IPLAS 2027

11th - 14th June, 2027
Chennai Trade Centre
Chennai
Organizer :
The Tamilnadu Plastic Manufacturers Association

Plastfocus 2027

9th - 13th December, 2027
New Delhi
Organizer :
Triune Exhibitors Pvt. Ltd.

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HELP DESK

For the benefit of its members, the Indian Plastics Federation (IPF) has decided to organise a helpdesk dedicated to issues related to taxation, extended producer responsibility (EPR), and micro, small, and medium enterprises (MSME). This initiative aims to provide IPF members with free consultation and guidance to address their specific problems in these areas.

The helpdesk will offer personalised assistance, helping members navigate the complexities of tax regulations, EPR compliance, and MSME-related concerns. By offering expert advice, the help desk seeks to empower members with the knowledge and resources necessary to optimise their business operations and ensure regulatory compliance.

IPF members are encouraged to send their queries via email to the Secretariat at office at office@ipfindia.org. This streamlined process will ensure that each query is addressed promptly and accurately, providing members with the support they need to resolve their issues efficiently. This initiative reflects IPF's commitment to supporting its members and fostering a robust, compliant, and thriving plastics industry in India.

INDIAN PLASTICS FEDERATION

TAXATION HELPDESK

Dear Members,

Please note that Taxation helpdesk is available for members at the IPF office on the fourth Saturday of every month from 1:00 p.m. to 3:00 p.m. with prior appointment.

Free consultation and guidance will be provided by CA Suruchi Agrawal

Please send your queries to us at the following email IDs for consultation or assistance.

CA Suruchi Agrawal : ag.suruchi05@gmail.com

With a cc to office@ipfindia.org

(Disclaimer :- Any further services taken is at the sole discretion of the member and IPF has no role in the same)

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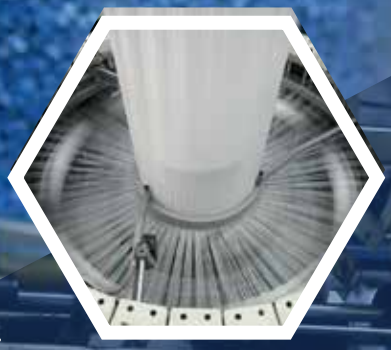

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