



CII-ITC Centre of Excellence  
for Sustainable Development



Confederation of Indian Industry  
125 Years - Since 1895

# A Circular Plastics Economy Strategy for India

## A WCEFonline Side Event

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## List of Abbreviations

CE	-	Circular Economy
CESD	-	Centre of Excellence for Sustainable Development
CII	-	Confederation of Indian Industry
EPR	-	Extended Producer Responsibility
UPC	-	Un-plastic Collective

## Introduction

If plastic production and use grow as currently planned, by 2030, greenhouse gas emissions resulting from their manufacture and consumption could reach 1.34 gigatons per year—equivalent to the emissions released by more than 295 new 500-megawatt coal-fired power plants. By 2050, the cumulation of these greenhouse gas emissions from plastic could reach over 56 gigatons: 10–13 percent of the entire remaining carbon budget.

It is not just the imperative of managing the impacts of plastic waste in the world's oceans but also the climate-related emissions from plastic production and use, that compel us to progress quickly.

Projections suggest that if the business-as-usual scenario continues, annual flows to the ocean could triple by 2040 corresponding to roughly 50 kg of plastic for each metre of the world's coastlines.

It is not the lack of technological solutions that prevents us from addressing this crisis, but inadequate regulatory frameworks, business models and funding mechanisms that are holding back most progress.

The Pew Report from earlier this year, refers to the 'data poor' landscape in the plastics terrain: there are attempts to bridge gaps in the data, identify hotspots, prioritize interventions as also prioritise effective instruments, including regulatory, financial or informative measures, for their implementation. Sections of the private sector have risen to the occasion by developing new polymers and applications and by launching global initiatives focused on plastics. Other kinds of organizations have developed initiatives which they are working individually with countries on to reduce plastic consumption via pacts and targets.

## Confederation of Indian Industry's work on plastics

CII works on plastics in three ways: on the regulatory and policy front, science-based data generation and through the Un-plastic Collective. CII works extensively with businesses and the government to provide inputs on regulatory and policy issues pertaining to management of plastics. It is generating scientific data on different aspects of plastics for India, including a nation-wide inventory of the six basic polymer resins.

The Un-plastic Collective (UPC) is co-founded by the Confederation of Indian Industry (CII), United Nations Environment Programme (UNEP) and WWF-India with the aim of minimizing the externalities of plastics, collectively. The initiative provides a voluntary, multi-stakeholder platform linking advisory, research and business aspects of the use of plastics and management of its waste.

One of UPC's first activities was to hold a series of four consultative workshops in four regions of the country: East (Guwahati), North (Delhi), South (Hyderabad) and West (Mumbai). These were held in September and October, 2019 to gather perceptions, knowledge and consolidate information about the use of plastics and generation, management of waste by different stakeholders.

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The discussions with recyclers, NGOs, waste managers, local governments, were summarized, analysed and formed the basis of the strategy upon which, we hope, future action can be based for agents in each part of the plastics value chain.

## Inputs on the Circular Plastics Economy Strategy for India

The discussion opened with the following points being made in the context of the Circular Economy Strategy for Plastics presented by the Confederation of Indian Industry (CII).

1. Creating a demand for circular economy is the main issue – a destination for the recycled material must be available, and therefore aspects pertaining to demand should be well developed.
2. A good way to incentivize and raise ambition towards more action is for private action to lead, and public/government action to follow.
3. Waste minimization via circular strategies such as reduce, reuse, *besides* recycling should be stressed.
4. The opportunity to raise ambition (by the private sector) by developing, deploying and introducing viable and scalable technology is immense. A similar opportunity exists for encouraging eco-design and reduced packaging in food products across the material/product life cycle. Extended Producer Responsibility (EPR) can be used to finance some of these schemes.
5. There is potential to influence and engage more with the informal sector especially, to promote segregation.
6. The current pandemic is generating, and will continue to generate much more plastic waste than normal. People's food packaging choices at this time and dependence on e-commerce is also raising the consumption of plastic. Industry providing packaging should explore ways to do this differently.
7. Design should not only be for end-of-life, but for the future.
8. Bans have to be carefully thought through to prevent unintended consequences, but yet control the flow of plastics into the system.
9. Communicate and educate the public clearly on the 'why' of any step/action, along with the 'what' and 'who'.
10. Involve discussion on the biological cycle of the circular economy, not just the technical.

## Discussions

### Sustainable public procurement as a vehicle to drive a circular economy for plastic

On the use of tools such as sustainable public policy in different countries, its enormous potential to transform markets by creating demand for sustainable goods, and improving resource efficiency, has not been explored sufficiently. It would help to think of this tool as a strategic one, rather than transactional: overall, an excellent way to introduce new preferences into an economy in general, and which could, equally well, apply to plastics waste. Fair, realistic and transparent targets could create the kind of markets needed.

Performance, rather than prescriptive specifications, would appear to have worked best. The former has the advantage of allowing new ideas and thinking, enabling innovative solutions to enter the fray.

### Creating a demand for recycled products: the use of targets/incentives for new technologies, using policy instruments, private sector/business viewing this as an opportunity.

Recounting their experience, WRAP noted that the UK Plastic Pact was launched in response to pressure from government, NGOs and consumers on plastic. Although government regulation was in the pipeline then (2017), it was thought that private innovation need not wait for support or pressure from policy. The core of the Plastics Pact lies in four time-bound targets for businesses to sign up to and collectively work on with WRAP. These targets have been translated into different pacts in different areas of the world, with slight variations depending upon the location's context in a framing akin to that of public procurement, but in a private setting. The fourth target pertaining to recycled content in packaging in particular, led to a signal change in the following ways:

1. a change in mindset among the big retailers and brands with the public declaration/commitment translating into a deep involvement by the company, down its ranks, to ensure that the packaging entering markets is acceptable to them when it turns around and returns for reuse.
2. a greater transition since 2017, than in the entire decade before it, since target-setting in a particular sector of industry resulted in a number of businesses, including their supply chains and their customers, involved in the move towards the target. Commitments from the food and drinks sector were a major step forward.
3. setting the landscape for the smallest of changes, such as taking the pigment out of polymers, and, adhesives out of components.
4. designing for end-of-life as well as for life in a massive shift for businesses who then imbibed and internalised the change.
5. unlocking investment appetite for infrastructure, as a long-term strategic decision. Private investments by large waste management companies (over 100 million pounds of private equity into over 300,000 tonnes of plastics recycling capacity, in the UK experience) led from created demand.

In Australia, the Australian Packaging Covenant has been in place for a few years. In response, brand owners have created innovations in polymers, but have also approached raw material suppliers such as BASF with specific requirements of plastic: currently, the level of investment enquiry level is huge because of time-bound targets requiring plastics to be recyclable, reusable, compostable and so on.

### Participants' questions

Responses to participants' questions about upcycling as a means to address bulk plastic waste issues; co-processing, in the light of EPR; research platforms, technology development, finance and collaboration aspects, are collated and presented below.

With reference to upcycling as a means to address plastic waste, it was noted that principles of CE require replacement of virgin material with recycled material, ideally, at the highest

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level possible (for example, bottle-to-bottle, rather than downcycling to trays or fibre). This would require thinking back a few steps, supported by innovations in sorting and processing, to specify clearly what businesses need to do to supply recyclable material, although meeting that high standard is not easy.

Creating the end market for recycled plastic is often the weakest link: plastic keeps flowing into the market so it can be a challenge to ensure that all of it is designed to retain economic value for the end markets, typically in packaging products, the automotive sector or the construction sector where it is needed. Even though the recycling business is fairly simple (requirements are good feedstock and strong, consistent markets), experience suggests that the more important, make-or-break, requirement is a strong and consistent end market. In the end, whether plastics are upcycled or converted into other long-life products, the focus on markets needs to be sharpened.

The difference between the concepts of design for end-of-life and design for the future were explained as being rooted in *where* the packaging is destined to go at the end of its useful life (as visualized/designed by the brand). It should be clear that materials which don't fulfil any purpose post-consumer, ending up in the ocean or landfill, should not be introduced into the market at all.

Evidence-based decision trees backed by science are available to help decide what process packaging is designed for: chemical cycling, conventional recycling, organics recycling, anaerobic digestion and so on. In the end, design should be for the future, and for the end-of-life of that item.

The Plastics Pact has created a call for projects that links business innovation directly to delivering the Pact's targets, so that research is led by industry: this unlocks innovation in sorting, in decolouring plastics, for example, to keep them going around the value chain at a high level, and allowing high levels of recycled content incorporated into packaging. Plastics are highly amenable to a circular economy for two important reasons: most countries produce and consume a lot of it domestically and, a plastic bottle anywhere on the earth has the same composition. This makes it easy to share learnings/innovations from any of the Pacts, cut costs and move ahead faster. Much progress has been made in countries such as Australia, the United States, Malaysia, South Africa: collaboration is important and reinventing the wheel unnecessary.

Standards are important in maintaining the integrity of the system: there is recognition worldwide of the need to create a value for plastics at the end of their life. Standardization will help avoid making the mistakes that other countries have made over time: India is embarking on a journey that others may already have been on for a while. The consultative mode is the best way to go.

There are discussions in many countries and businesses about a global treaty and harmonized policies for plastics, which could make the prospect of collaboration in terms of finance and technology interesting.

One speaker raised a question about the need for developing a framework for the informal economy: a cooperative model similar to that of the Amul Cooperative structure could be developed for plastic waste, which would create jobs and create a market. There are working



examples in Nairobi and some other places, albeit at a small scale; such a model would need to be thought through, with the right rules and regulations in place, to avoid inequities and waste-pickers getting exploited.

The possibility of developing such models through CII's members engaged in community-based work could be explored.

## Closing points

Closing points on pathways by which we can transform the way in which plastic is looked at today, to something whose value is realised and retained and whose externalities are reduced adopting circular economy principles.

1. Importance of aligning policy with targets to create the sweet spot, and progress on to a circular economy for plastics.
  2. Ensuring that funds from EPR fees go back to incentivize efficient separation, collection of plastic waste, whether by formal or informal means: segregation, separation at source, and reducing contamination (particularly by food waste) should be where most attention is focused, so as to keep material at its highest value. Sometimes hypothecated funding doesn't find its way back to the purpose it was designed for (education aimed at maintaining movement of material) and ends up in consolidated revenues.
  3. Start local, engage community and explain the 'why' of things: from experience, it is important to be able to show people that if the organic fraction is separated properly at source, the remainder, clean residual waste has an increased value. Here, if the public understands why something is necessary, it will be easier to lead private action and also public policy. This is more significant because a deeper understanding of the impact of human actions on ecosystems, now and in the future, enables individuals to take sustainability forward: industry leading on the question of responsibility would be a new narrative to take up in these very difficult times.
  4. Start at city level, even with one dump and come up with a strategy involving the informal economy, that is out-of-the-box, and move towards the sector, as a whole. Pick a sector causing a huge impact, focus on that, show that it works, and then take next steps.
  5. Link with global developments such as the New Plastic Economy commitments. There are reports to help with aspects such as how to finance circular economy and engage with the finance sector.
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The Confederation of Indian Industry (CII) works to create and sustain an environment conducive to the development of India, partnering Industry, Government, and civil society through working closely with Government on policy issues, interfacing with thought leaders, and enhancing efficiency, competitiveness and business opportunities for industry.

For 125 years, CII has been working on shaping India's development journey and, this year, more than ever before, it will continue to proactively transform Indian industry's engagement in national development. The premier business association has more than 9,100 members, from the private as well as public sectors, and an indirect membership of over 300,000 enterprises from around 288 national and regional sectoral industry bodies.

With 68 offices, including 9 Centres of Excellence in India, and 9 overseas offices in Australia, China, Egypt, Germany, Indonesia, Singapore, UAE, UK, and USA, as well as institutional partnerships with 394 counterpart organizations in 133 countries, CII serves as a reference point for Indian industry and the international business community.

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CII-ITC Centre of Excellence for Sustainable Development is a not-for-profit, industry-led institution that helps business become sustainable organisations. It is on a mission to catalyse innovative ideas and solutions, in India, and globally, to enable business, and its stakeholders, in sustainable value creation. It's knowledge, action and recognition activities enable companies to be future ready, improve footprints profiles, and advocate policymakers and legislators to improve standards of sustainable business through domestic and global policy interventions.

CESD leverages its role of all-inclusive ecosystem player, partnering industry, government, and civil society. It has been a pioneer of environment management systems, biodiversity mapping, sustainability reporting, integrated reporting, and social & natural capital valuation in India, thus upgrading business in India to sustainable competitiveness.

With two locations in India, CESD operates across the country and has also been active in parts of South and South East Asia, Middle East, and Africa. It has held institutional partnerships and memberships of the United Nations Global Compact, Global Reporting Initiative, International Integrated Reporting Council, Carbon Disclosure Project, development agencies of Canada, the USA, the UK, and Germany.

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