



# Accelerating Circularity through Integrated Recycling Infrastructure in India

### THEMATIC TRACK SUMMARY

Venue: Maple

Date: 23<sup>rd</sup> February 2023

Time: 2:00 PM - 3:30 PM (IST)

**Suggested Citation** 

World Sustainable Development Summit (2023), Accelerating Circularity through Integrated Recycling Infrastructure in India, (Rapporteur: Kartikey Sharma), New Delhi: The Energy and Resources Institute.

#### Actionable Messages

**Message I**: Innovation technologies facilitating incentives for consumers to recycle their waste can be a successful business proposition in India.

**Message 2**: The recognition, formalization, and equitable compensation of informal players within the sector must be part of the larger policy discourse.

**Message 3**: Circularity as a principle can significantly help India efficiently steer its green growth efforts in the right direction. Going forward, the policy evolution needs to happen with circularity as the central theme in the discourse.

**Message 4**: Capacity building in recycling across the value chain stream is extremely lacking and is in need for a large-scale policy mobilization.

#### Narrative

The thematic track titled, "Accelerating Circularity through Integrated Recycling Infrastructure in India" was conducted as part of the World Sustainable Development Summit (WSDS) - the annual flagship initiative of The Energy and Resources Institute (TERI). The aim of the session was to explore and understand the role of circular economy and how it can support economic development and environmental conservation.

The session started with the welcome remarks by Dr. Suneel Pandey, Director and Senior Fellow, Centre for Waste Management, TERI, who stated that waste as a resource can only be mobilized if there are right sets of capacity building initiatives and tools for its processing coupled with a conducive policy environment. He also stressed upon the fact that in urban spaces, where areas are small and waste generation is high, there is a large-scale opportunity for its utilization across different sectors. Next, Dr. Atul Narayan Vaidya, Director, CSIR-National Environmental Engineering Research Institute (CSIR-NEERI) gave the special remarks and spoke about the importance of capacity building for actors within the value chain, and how its integration with existing recycling centres is critical for its national adoption. He also stated that different recycling centres should have different kinds of capabilities built into them, so that various kinds of recycling outputs can be generated. Next, Dr. Heinz Schandl, Senior Principal Scientist, Commonwealth Scientific and Industrial Research Organization (CSIRO), elaborated that only 8% of waste is recycled, while the capability of recycling sits at 40%. Thus, in order to achieve higher levels of waste management capabilities, we need to fundamentally restructure the entire waste industry to capitalize on the innovations that are currently underway within the segment. Further, Mr. Amit Verma, Head, Circular Economy Cell, NITI Aayog, delivered the thematic address and stated that the government is strategically focusing its sustainability efforts on circular economy aspects, such as vehicle scrapping policy, which will not only help repurpose critical materials used in a car back into the value chain, but will also help develop India's domestic capacity on steel. He added that circularity as a principle can significantly help India efficiently steer its green growth efforts in the right direction. Going forward, the policy evolution needs to happen with circularity as the central theme in the discourse. Next, the keynote address was delivered by Mr. Mahesh Patil, Chairman, Goa State Pollution Control Board, who discussed the role of communities and urban local bodies in waste segregation and the importance of a consumer's mindset regarding the issue of waste management. He also stated that segregation of waste at the source is crucial and will continue to be the focus of the government's awareness campaigns.

After all the eminent dignitaries gave their addresses, the panel discussion ensued. The session was moderated by **Dr. Rachna Arora, Team Leader, European Union-Resource Efficiency Initiative (EU-REI), India**. Dr Arora spoke about the imperative nature of investments being undertaken by different state governments within the ambit of circular economy, focusing on the initiative of EU-REI in the state of Rajasthan. **Mr. Amit Lahoti, Senior Commercial Director & General Manager – Asia, Ball Beverage Packaging** was the first speaker in the panel and he stated that since aluminium as a metal is infinitely recyclable, in terms of policy, there must be a focus on aluminium by regulatory bodies given the large-scale share the metal has across commercial products. He also stated the need for integrated infrastructure investment in circular economy and how it can benefit the reverse logistics industry. The next speaker was **Mr. Nitin Gupta, Vice President, Capgemini-INVENT India**, who spoke about the benefits of technological infusion and innovation. Mr Gupta stated that incentive structures that nudge consumers towards recycling has proven to be a successful business model in the Global South where the socio-economic profiles of consumers is similar to that of Indian consumers. Mr Gupta also stressed upon the notion that the digital upgradation of the reverse logistics infrastructure can significantly improve the business utility of the recycling industry in India.

Mr. Abhinav Ramaria, Head, Programs and Operations, Aspire Labs was the next speaker and discussed the need for the policy discourse to focus on the recognition, formalization, and equitable compensation for the informal players. During his talk, he actively campaigned for the industry to focus on building theme-based resource recovery parks (RRPs) and waste recycling plants (WRPs) to enable large-scale recycling. Mr Yogesh Bedi, Chief, Urban Mining & Steel Recycling Businesses, Tata Steel was the next speaker and shared insights on white goods and the gig economy. He stated that the gig economy's infusion within the reverse logistics sector can improve synergy across different actors within the business landscape. Further, on the large-scale consumer usage of white goods in India, Mr Bedi remarked, there is a need to encapsulate white good products within the existing waste policies, something that is, at present, severely lacking in the policy landscape.

The next speaker was Mr. R P Sharma, General Secretary, Recycling and Environment Industries Association of India (REIA). He asserted that the lack of understanding within the waste sector has hindered the segment's ability to inventorize the waste that is generated, efficiently. He further explained that the awareness around waste segregation hasn't improved over the last few years, and it is in need of strategic intervention. The final speaker was Mr. Jeevesh Kumar, Founder & CEO, Greenscape. Mr Kumar posited the notion that since the informal segment has been continually pushed towards doing the work that they are not well equipped to deal with, it is one of the critical reasons behind the large-scale inefficiency within the sector. He also voiced his concern on the fact that since mechanized instruments and tools can make a big difference in the entire recycling process, their adoption for the workers must be strategically incentivized by the government.

## Making Words Count @WSDS 2023

| "   | Different recycling centres should have different kinds of capabilities built into them, so that varied kinds of recycling outputs can be generated.   |
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|     |  |
|     | Dr. Atul Vaidya  |
|     | Director, CSIR-National Environmental Engineering Research Institute   |
| "   | Only 8% of waste is recycled, while the capability of recycling sits at 40%. Fundamental restructuring of the segment is needed to achieve this potential.   |
|     | Dr. Heinz Schandl  |
|     | Senior Science Leader, Commonwealth Scientific and Industrial Research Organisation (CSIRO)  |
| 66  | The focus on circular economy is being seriously pondered over by the policymakers at the highest level. The   |
| ••• | government has already identified 11 high priority sectors with respect to waste management and circular economy that it will look to restructure.   |
|     | Mr. Amit Verma   |
|     | Head, Circular Economy, NITI Aayog   |
| "   | Segregation of the waste at source is crucial and will continue to be the central focus of the government's awareness campaigns.   |
|     | Mr. Mahesh Patil   |
|     | Chairman, Goa State Pollution Control Board  |
| "   | More policies on aluminium need to be galvanized by regulatory bodies given the large-scale share the metal has across commercial products.  |
|     |  |
|     | Mr. Amit Lahoti<br>Senier Commercial Director & Consul Manager Asia, Ball Bourses Backgring  |
|     | Senior Commercial Director & General Manager-Asia, Ball Beverage Packaging<br>Digitizing the reverse logistics infrastructure is crucial in India and can significantly improve the business utility |
| "   | of the recycling industry in the country.  |
|     | Mr. Nitin Gupta  |
|     | VP & Head, Sustainability Advisory, Capgemini Invent India   |
| "   | Informal players, such as waste-pickers and small-scale processors, play an important role in waste collection   |
|     | and processing. Their recognition, formalization, and equitable compensation need to be part of the sector   |
|     | policy discourse.  |
|     | Mr. Abhinav Ramaria  |
|     | Head, Programs and Operations, Aspire Labs   |
|     | Gig economy infusion within the reverse logistics sector can improve synergy across different actors within  |
| 66  | the business landscape.  |
|     | Mr. Yogesh Bedi,   |
|     | Chief Urban Mining & Steel Recycling Businesses, Tata Steel  |
| "   | The lack of understanding in the waste sector has hindered our ability to inventorize the waste that is  |
|     | generated efficiently.   |
|     | Mr. R P Sharma   |
|     | Mr. K P Snarma<br>General Secretary, Recycling and Environment Industries Association of India (REIA)  |
|     | Concentration of mechanized instruments and tools makes a difference in the entire recycling process. Thus,  |
| 66  | their adoption for the workers should be strategically incentivized.   |
|     | Mr. Jeevesh Kumar  |
|     | Founder & CEO, Greenscape  |
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