



'Recycling Targets Mean Little Without Tools to Track and Verify'

India's recycling sector is growing rapidly, but these goals must be backed by data; otherwise, we are navigating blind, explains Shashi Kumar Singh, President of AIRIA

ndia's recycling ecosystem, despite its large scale, faces a major challenge due to a lack of reliable data. This issue mainly comes from the highly unorganized nature of the informal sector, which handles most of the waste collection and processing. The absence of a formal, integrated system to track the movement of materials from collectors to recyclers creates a significant data gap.

The waste collection industry remains largely unorganized, dominated by the informal players who operate outside formal systems. These informal actors often lack the infrastructure or incentive to record the type or quantity of waste they collect. While locally efficient, this network is disconnected from centralized data systems, making it difficult to trace the journey of many materials—especially non-standard items like rubber products-through the recycling process. As a result, comprehensive data on recycled waste and material flow is severely lacking.

To bridge this gap, coordinated action from both industry and government is essential. Corporates should be mandated to use digital platforms to track and report scrap generation and recycling, with data submitted to a central portal. Large companies can lead this shift, given their resources. For the informal sector, the government must create an inclusive ecosystem that encourages documentation. Incentives or subsidies can motivate small collectors to log their collections via simple apps or designated centers. The system must be accessible to those with limited education. By enabling data entry at the grassroots level, a completer and more transparent picture of waste management can emerge-supporting better policy, accountability, and sustainabil-

Building trust is essential to promote data sharing, especially among informal waste collectors who may be wary of formal systems. Incentives like subsidies and benefits can motivate participation. Collectors should be rewarded for contributing data, while government and industry associations work to formalize the sector through training, improved working conditions, and recognition of their role in the recycling chain. Companies that provide scrap and data should receive certificates usable for export benefits or sustainability reporting, turning data into a business asset.

Industry associations play a vital role in bridging the gaps between the government and companies. They can recommend best practices, help develop standardized data reporting frameworks, and encourage widespread adoption.

Strong policies are the foundation of an effective recycling ecosystem. The government should mandate that all companies, especially large manufacturers, report scrap generation and recycling activity through a centralized digital platform. Policies must integrate both formal and informal sectors, possibly through official registration of informal collectors and benefits like health insurance or subsidized tools. The Extended Producer Responsibility (EPR) framework should be reinforced-not just with recycling targets, but with robust systems to track and verify recycling from collection to completion.

A clear industry overview enables progress tracking, gap identification, and responsible waste management. As sustainability gains global importance, a traceable recycling system aligns India with international standards, unlocking trade and partnership opportunities. It supports a circular economy by enabling product design for recyclability and greater use of recycled materials, reducing reliance on virgin

Ultimately, a data-driven approach builds a resilient, sustainable, and globally competitive recycling ecosystem.

(Mr Singh, is the President of All India Rubber Industries Association (AIRIA).