

Sustainable Bonds and Circular Projects: Measuring the Allocation Gap in India

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Abstract

India's sustainable debt market has grown at a pace few emerging economies have matched, yet the growth has been concentrated in a narrow band of asset types. This paper asks a question the aggregate figures obscure: how much labelled bond capital in India actually reaches circular projects – recycling, material recovery, reuse, remanufacturing and industrial symbiosis – as opposed to renewable generation and clean transport. Using secondary data from Climate Bonds Initiative, the Reserve Bank of India, the Securities and Exchange Board of India, the Department of Economic Affairs, the Central Pollution Control Board and municipal offer documents for the period 2021 to early 2026, the paper compiles issuance by issuer class and classifies documented use-of-proceeds against a circularity screen. Three findings stand out. First, the market is a sovereign market: the central government accounted for roughly 58 per cent of green bond volume between January 2024 and May 2025, while municipal corporations, which own most circular infrastructure, accounted for about 0.6 per cent. Second, of the four green municipal bonds issued to date, worth ₹694 crore, only ₹150 crore finances a genuinely closed-loop asset. Third, the sovereign green bond programme allocated 78 per cent of its first-year proceeds to metro and regional rail, with waste and materials drawing a marginal share, and it has done so while realising a greenium of only two to three basis points against a global norm of seven to eight. The paper attributes the allocation gap to five structural causes: the silence of the draft climate finance taxonomy on circularity, a ticket-size mismatch between listed bonds and circular assets, weak municipal counterparty credit, unhedged offtake and feedstock risk, and impact reporting templates built around avoided emissions rather than diverted material. It closes with six policy measures, including explicit taxonomy recognition, a stated waste-and-materials floor in the sovereign framework, pooled municipal issuance and a link between Extended Producer Responsibility obligations and certified circular bonds

Index Terms

Sustainable Bonds, Green Bonds, Circular Economy, India, Use of Proceeds, Municipal Finance, Climate Taxonomy