

A Review on Green Supply Chain Collaboration with Circular Economy Practices for Sustainable Development in Manufacturing Industry

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ABSTRACT

The transition toward sustainable development in the manufacturing industry increasingly depends on integrating circular economy practices, enabled by green supply chain collaboration. However, despite growing attention to circular economy implementation, research on it relates to green supply chain collaboration remains limited. This study investigates circular economy practices with a particular focus on the determinants of supplier, customer, and internal collaboration within manufacturing organizations. A structured review was conducted on articles published between 2022 and 2025 in the Web of Science database, yielding 48 studies through abstract screening and full-text review. The findings reveal a clear upward trend in research interest, with publications doubling from 9 in 2022 to a peak of 18 in 2024. Notably, the most frequently examined indicators include supplier awareness, customer awareness, and cross-functional cooperation for supplier, customer, and internal collaboration in respectively. Other factors, such as environmental management certifications and solutions, also contribute to effective circular economy implementation. Based on these insights, future research is encouraged to explore collaborative dynamics in small and medium-sized enterprises (SMEs) and emerging economies, where resource constraints and institutional differences present unique challenges. Additionally, the role of digital technologies in enhancing transparency, trust, and coordination among supply chain actors warrants further investigation. In conclusion, this study underscores the strategic importance of fostering collaboration across the supply chain to accelerate circular economy adoption and build more sustainable and resilient manufacturing systems.

JEL Codes:

Keywords: *customer awareness; cross-functional cooperation; digital technologies; environmental management certifications; green supply chain collaboration; supplier awareness.*