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Adopting Circular Economy Principles in Municipal Waste Management: A Pathway to Sustainability

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Abstract: As countries face increased pressure to address environmental issues and resource constraints, the need to implement sustainable waste management strategies grows. This research study investigates the concept of circular economy principles in the context of municipal waste management as a tool for achieving sustainability goals. Municipalities can reduce environmental impacts, conserve resources, and promote economic development by switching from traditional linear waste disposal prototypes to circular approaches prioritizing waste minimization, reuse, recycling, and resource recovery. Drawing on case studies and best practices worldwide, this study investigates the potential benefits, obstacles, and opportunities of incorporating circular economy principles into waste management methods. It also talks about the role of regulatory frameworks, technology advances, and stakeholder participation in driving the transformation.

Keywords: sustainable, waste, management, circular economy

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