IJARSCT



International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Volume 2, Issue 3, December 2022

A Comprehensive Study of Sustainable Practices for E-Waste Management and Promotion of Circular Economy

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Abstract: The rapid advancement of technology has led to an exponential increase in electronic waste (e-waste) worldwide, posing significant environmental and health challenges. This study explores sustainable methods that support a circular economy and efficiently manage electronic trash. This research highlights the significance of implementing eco-friendly practices, recycling methods, and circular economic models to reduce e-waste's adverse environmental impact through an in-depth analysis of present strategies, policies, and technical advancements. The benefits of adopting a circular strategy to e-waste treatment are also highlighted in the paper, including the social, economic, and environmental ones.

Keywords: E-Waste, Circular Economy, Sustainable Practices, Recycling, Extended Producer Responsibility, Technological Innovations, Policy Framework, Environmental Impact, Social Benefits

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