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Electronic Waste Management: Challenges, Strategies, and Sustainable Solution

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Abstract: The rapid growth of electronic devices has led to a significant increase in electronic waste (e-waste) globally. This paper examines the current state of e-waste management, the difficulties in collecting, recycling, and disposing of it, as well as the strategies for sustainable management. The study highlights contemporary methods such as urban mining, material recovery, and policy frameworks supporting circular economy approaches. E-waste contains hazardous materials like lead, mercury, and cadmium, which pose serious environmental and health risks if improperly managed.

Keywords: E-waste, recycling, sustainable management, hazardous waste, electronic devices, circular economy

