

ABSTRACT

The BTS tower (Base Transceiver Station) telecommunications industry in Indonesia continues to grow in line with the increasing adoption of technology in digital telecommunication services by mobile operators partnering with PT. Tower Bersama Group. The rapid technological advancement in the digital era has led to increased use of electronic devices, resulting in a surge of electronic waste (e-waste). PT. Tower Bersama Group, as one of the leading telecommunications companies in Indonesia, faces significant challenges in managing the e-waste generated. Effective e-waste management practices have become an integral part of supporting the implementation of the circular economy, which aims to reduce environmental impact, extend product life cycles, and maximize the reuse of materials.

This study aims to analyze the effectiveness of e-waste management practices at PT. Tower Bersama Group using a circular economy approach. The research focuses on identifying e-waste management strategies and exploring the role of technological innovation in supporting recycling and the reuse of electronic materials.

The research method used is a Mixed Method (qualitative and quantitative) with a case study approach. Data was collected through in-depth interviews with internal company representatives, field observations, and document analysis. The results show that PT. Tower Bersama Group has implemented various e-waste management strategies, ranging from internal recycling programs, collaboration with waste management partners, to customer and community education regarding electronic waste management. However, several challenges were identified in its implementation, such as a lack of supporting infrastructure and employee awareness of the importance of the circular economy.

The findings of this study are expected to contribute to the development of e-waste management policies in the telecommunications sector and serve as a reference for other companies in adopting circular economy principles to enhance their operational sustainability.

Keywords: E-Waste, Circular Economy and Electronic Waste Management, PT. Tower Bersama Group.