

Chapter 10

Extended Producer Responsibility (EPR) and E–Waste Management: A Roadmap for Entrepreneurs

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ABSTRACT

Electronic trash (e-waste) creation has increased exponentially as a result of the widespread use of electronic devices and the quick rate of technical development, posing a serious environmental concern. Extended producer responsibility (EPR) has become a crucial tactic for addressing the negative social and environmental effects of e-waste. This chapter provides entrepreneurs with a detailed roadmap for navigating the challenges of EPR adoption in e-waste management. For entrepreneurs, the application of extended producer responsibility in the management of e-waste poses both a difficulty and an opportunity. By embracing the EPR precepts and following the recommended roadmap, entrepreneurs may significantly minimize the environmental impact of e-waste, promote resource conservation, and create a more sustainable future.

1. INTRODUCTION

Ecosystems, human health, and resource sustainability are seriously threatened by the incorrect management and disposal of e-waste. Extended producer responsibility (EPR) is a political strategy that places the onus of responsible e-waste disposal on manufacturers and producers rather than on consumers and local governments (Khatriwal, Kraeuchi, & Widmer, 2009). This article offers a succinct summary

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of the essential elements of EPR and proposes a roadmap that gives entrepreneurs the knowledge and techniques they need to put good e-waste management practices into reality.

EPR requires producers to take responsibility for the whole lifespan of their products, including disposal. The management of e-waste is a crucial topic that has attracted a lot of attention recently. E-waste creation has increased dramatically as a result of the expanding usage of electronic gadgets and the quickening rate of technical innovation. E-waste improperly disposed of has the potential to seriously harm the environment and human health. In this situation, EPR has shown to be a useful tool for managing e-waste by directing it to approved recyclers and dismantlers for safe handling and disposal (Arya & Kumar, 2020). This article provides a comprehensive guide that gives insights into the concept of EPR and its implementation in e-waste management. The article gives company owners a road map for implementing EPR ideas into their daily operations in order to embrace sustainable business practices. It covers a range of EPR-related topics, including as its history, the legal system, and difficulties with implementation. The article offers examples of effective EPR implementation in many nations, making it a useful tool for businesspeople, legislators, and scholars.

EPR may help enterprises in a number of ways in addition to the advantages already discussed. Entrepreneurs can use it to comply with environmental laws and lessen their environmental impact. Entrepreneurs may improve their brand reputation and image among customers who are becoming more environmentally sensitive by using sustainable business practices (Khan, Hussain & Sampene, 2023). EPR can also open up new economic avenues by encouraging the development of cutting-edge recycling technology and establishing new markets for recovered goods. EPR may help brands by facilitating the development of a circular economy, creating additional money, increasing your customer base, promoting sustainability or environmental friendliness, and lowering the amount of garbage that ends up in landfills (Marks, Miller & Vassanadumrongdee, 2023).

2. EXTENDED PRODUCER RESPONSIBILITY (EPR)

Extended Producer Responsibility (EPR) is a political strategy intended to encourage the responsible handling and disposal of goods and the trash they generate. It transfers control of a product's lifetime, including its end-of-life disposal, from the consumer or municipality to the manufacturer and producer of that product (Mayanti & Helo, 2023). E-waste management, or e-waste, is the process of applying EPR concepts to electronic trash, which includes discarded electronic equipment and gadgets (Kaur, Kaur & Kaur, 2023). The key components of EPR are as elaborated in the following sub-sections.

2.1. Legal Framework and Regulations

Entrepreneurs need to be aware of their jurisdictions' e-waste management legal requirements and regulatory frameworks. Avoiding fines and promoting sustainable activities depend on adherence to these requirements. The framework mandates that producers, manufacturers, and brand owners recover the plastic trash produced as a result of their products under extended producer responsibility (Gupta & Dash, 2023). The garbage producers are required to reduce the production of plastic trash by source segregation and to turn it over to local organizations. The manufacturer, importer, or brand owner must participate in EPR framework implementation initiatives other than data collecting (Pani & Pathak, 2021).

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