

Enhancing Reverse Logistics for Plastic Waste: Insights from Polish Consumers

Lukasz Wiechetek

Faculty of Economics, Maria Curie-Skłodowska University, Poland
lukasz.wiechetek@mail.umcs.pl

Magdalena Panasiuk-Kwiatek

Faculty of Economics, Maria Curie-Skłodowska University, Poland
magdalena.panasiuk-kwiatek@mail.umcs.pl

Katarzyna Budzyńska

Faculty of Economics, Maria Curie-Skłodowska University, Poland
katarzyna.budzynska@mail.umcs.pl

Ewelina Berlińska

Faculty of Economics, Maria Curie-Skłodowska University, Poland
ewelina.berlinska@mail.umcs.pl

Jarosław Banaś

Faculty of Economics, Maria Curie-Skłodowska University, Poland
jaroslaw.banas@mail.umcs.pl

Marek Mędrek

Faculty of Economics, Maria Curie-Skłodowska University, Poland
marek.medrek@mail.umcs.pl

Zbigniew Pastuszak

Faculty of Economics, Maria Curie-Skłodowska University, Poland
zbigniew.pastuszak@mail.umcs.pl

Abstract

Effective reverse logistics management for plastic waste is vital for environmental protection and sustainable business practices. With growing environmental awareness, consumers expect organizations to implement efficient systems for collection, recycling, and repurposing. Understanding consumer perspectives can enhance participation and optimize logistics processes.

This study examines consumer roles in plastic waste reverse logistics, highlighting their impact on environmental, economic, and social sustainability. In 2024, an online survey (n=1200) gathered opinions on regulations, production, recycling, and education. The findings provide insights into consumer attitudes toward Poland's plastic waste management system, identifying key challenges and opportunities.

The results underscore the need to align regulatory frameworks, operational systems, and public expectations to foster sustainable practices. Addressing inefficiencies, enhancing education, and implementing consumer-friendly changes that can help policymakers improve waste management systems.

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Keywords: plastic waste, reverse logistics, consumer perspective, ecological education, environmental awareness.