

ABSTRACT

The development of the textile industry in Bandung has contributed positively to the economy but has also led to the accumulation of textile waste from garment production. If not properly managed, this waste can cause environmental pollution. According to data, textile waste is one of the largest types of waste that is difficult to decompose and significantly contributes to the buildup of waste in landfills. This case study focuses on several garment factories on Tamim Street, Bandung. The textile waste generated by these factories needs to be addressed in terms of environmental management, highlighting the urgency of implementing more sustainable production practices. This study aims to identify solutions for textile waste management and analyze production practices that result in textile waste in the garment factories on Tamim Street, using the Life Cycle Sustainability Assessment (LCSA) method and upcycling design techniques to manage production practices and transform textile waste into more sustainable outcomes. Through waste analysis and sorting, this research designs sustainable fashion products that enhance the aesthetic and functional value of textile waste. Data collection methods include observation, interviews, literature studies, and exploration. Data analysis employs SWOT analysis and the LCSA method, with a focus on SDG Goal 11.6, which aims to reduce the negative environmental impact, and the application of fashion thinking for the design process stages. The research outcomes create sustainable solutions for garments in production practices, reduce the impact of waste generated, and support the development of a sustainable fashion industry in Bandung.

Keywords: Textile Waste, Sustainable Fashion, Life Cycle Sustainability Assessment (LCSA), Garment Factory, Bandung.