

Examining Pre-Consumer Textile Waste Recycling, Barriers to Implementation, and Participant Demographics: A Review of Literature

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Abstract : The global textile industry produces pollutants in the form of liquid discharge, solid waste, and emissions into the natural environment. Textile waste resulting from garment production and other manufacturing processes makes a significant contribution to the amount of waste landfilled globally. While the majority of curbside and other convenient recycling methods cater to post-consumer paper and plastics, pre-consumer textile waste is often discarded with trash and is commonly classified as 'other' in municipal solid waste breakdowns. On a larger scale, many clothing manufacturers and other companies utilizing textiles have not yet identified or began using the most sustainable methods for discarding their post-industrial, pre-consumer waste. To lessen the amount of waste sent to landfills, there are post-industrial, pre-consumer textile waste recycling methods that can be used to give textiles a new life. This process requires that textile and garment manufacturers redirect their waste to companies that use industrial machinery to shred or fiberize these materials in preparation for their second life. The goal of this literature review is to identify the recycling and reuse challenges faced by producers within the clothing and textile industry that prevent these companies from utilizing the described recycling methods, causing them to opt for landfill. The literature analyzed in this review reflects manufacturer sentiments toward waste disposal and recycling. The results of this review indicate that the cost of logistics is the determining factor when it comes to companies recycling their pre-consumer textile waste and that the most applicable and successful textile waste recycling methods require a company separate from the manufacturer to account for waste production, provide receptacles for waste, arrange waste transport, and identify a secondary use for the material at a price-point below that of traditional waste disposal service.

Keywords : leadership demographics, post-industrial textile waste, pre-consumer textile waste, industrial shoddy

Conference Title : ICRCT 2020 : International Conference on Recycling of Clothing and Textiles

Conference Location : Amsterdam, Netherlands

Conference Dates : November 05-06, 2020