

HARNESSING SOLID WASTE TO ENERGY: A TECHNO-COMMERCIALY FEASIBLE SOLUTION FOR EFFECTIVE SOLID WASTE MANAGEMENT IN INDIA

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ABSTRACT

Solid waste management (SWM) is a major problem for many urban local bodies (ULBs) in India, where urbanization, industrialization and economic growth have resulted in increased municipal solid waste (MSW) generation per person [1]. Solid Waste has been a menace and Solid Waste Management (SWM) is one of the inevitable problems in Indian Cities. Municipal Solid Waste (MSW) generation per capita in India ranges from approximately 0.12 kg per person per day in small towns to approximately 0.62 kg per person per day in cities half of which is biodegradable[2]. Studies in the past reveal that nearly 90 % of the Solid Waste is being disposed in open dumps and landfills without any treatment. The Present study was aimed to comprehend the quantity of Solid Waste generated in India and review the status of SWM. Further, the technologies and best practices to be adopted and replicated for minimizing the pollution due to Solid Waste are discussed along with detailed techno-commercial analyses of biomethanation which is a latest trend in treating biodegradable waste. The solid waste flux a new concept in analyzing the waste load per area of the land is analyzed and is found to be 43.69kg per square kilometer for India.

KEYWORDS: Solid Waste, Solid Waste Flux, Waste Generation, Biomethanation

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