

Municipal Solid Waste Energy Conversion in Developing Countries: Technologies, Best Practices, Challenges and Policy - 1st Edition

WtE best practices and perspectives in Africa

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Abstract

The adequate collection and disposal of municipal waste remains a challenge in most African town and cities. Both wastewater (i.e., sewage) and solid waste [i.e., municipal solid waste (MSW)] pose health and environmental risks as a direct consequence of inadequate collection and treatment practices. In industrialized countries, most MSW and sewage are collected, reused, recycled, and energy recovered before disposal. The situation is different in the developing countries, where the collection and adequate disposal is not yet a reality for the majority of their populations and municipal treatment facilities are poorly developed. While this book explores the management of municipal waste in the developing countries (Asia, South America, and Africa), this chapter addresses the situation in selected African countries and identifies practices and case studies where waste to energy has enabled the more effective management of waste. The overall focus is on MSW, but municipal waste to energy solutions using sewage and agricultural wastes are also discussed.