

TECHNOLOGY FACTSHEET WASTE PAPER RECYCLING¹

Introduction

Waste paper recycling is the process of turning waste paper into new paper products. The process involves waste paper collecting, sorting and mixing it with chemicals to break it down. The final process is chopping it up to make pulp

Technology Characteristics

Paper recycling is the recovery of waste paper products and reprocessing them into new products. The paper recycling process involves collection of waste paper, sorting it out into categories, pulping the waste paper, which feeds back into the paper making process. The rationale behind paper recycling is to recover the valuable raw materials and recycle it to create new paper.

Country Specific Applicability and Potential

In Kenya waste paper account for 12% of the municipal solid waste (Kasozi , 2009). In Nairobi, where approximately 80-90% of the municipal waste is landfilled are getting filled up fast. Waste paper recycling therefore presents an option to address the landfill site shortage. Waste paper also presents a source of cheaper raw material than virgin paper.

Status of technology in country

Waste paper recycling has been practised in Kenya since 1958. Currently there are three main paper recycling mills that produce a total of about 150,000 tons of paper annual (www.chandaria.com2012). This production is not enough to meet Kenya's demand resulting in importation of finished paper.

¹ This fact sheet has been extracted from TNA Report – Mitigation for Kenya. You can access the complete report from the TNA project website <http://tech-action.org/>

Benefits to economic/social and environmental development

Expansion of waste paper recycling in Kenya would result in creation of additional jobs in collection, separation and processing of recycled paper. The recycled paper would substitute imported paper and conserve foreign exchange earnings.

The recycled paper reduces the amount of waste that would go to landfills thus prolonging the life of landfill sites.

Climate change mitigation benefits

Recycling of waste paper avoids production of methane gas that would have resulted from anaerobic decomposition of waste paper thus contributing to climate change mitigation. In addition waste paper recycling significantly reduces energy use as the recovered pulp uses this energy than virgin pulp thus conserving energy

Financial requirements and costs

Paper recycling plants are major investments that require large capital outlays. However, as demand for paper in the country remains unsatisfied, the investment will be recovered in the long term.