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## **LIFE CYCLE ASSESSMENT OF WASTE MANAGEMENT AND RECYCLED PAPER SYSTEMS**

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### **Abstract**

Municipal solid waste management is a matter experienced by the entire world, mostly encountered in urban areas as a result of population growth and increased income per capita. This issue always posed threats to environmental quality and human health, and continues to be one of the major environmental problems people continues to face. In the last few decades, the systems analysis techniques have been applied to manage the municipal solid waste (MSW) streams through a range of integrative methodologies so as to fulfill the necessity to ensure sustainable development of MSW.

The new Waste Directive 2008/98/EC it focuses on the need for choosing appropriate technologies that aim at improving the protection of human health and environment, promoting reuse and recycling, enhancing waste prevention programs via biowaste separate collection. New strategies at European level to promote life cycle thinking in waste management policies were motivated by the scarcity of resources.

In this paper Life Cycle Assessment (LCA) was applied to analyze and evaluate, from an environmental point of view, different municipal solid waste management (MSWM) scenarios and tissue paper manufacturing processes (two scenarios) based on virgin and recovered fibers.

*Key words:* fibers, life cycle, recycling, waste, tissue papers

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