

# Biogas Production in Paper Mills: Existing Technologies and Modern Approaches

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## **ABSTRACT**

Pulp and paper mills have been categorized amongst one of the major energy intensive and highly polluting sectors. Energy cost accounts for more than 30% of total cost of paper production and on comparison with other industries this sector consumes twice the amount of fuels. The release of untreated or partially treated cellulose rich black liquor, having very high organic pollution load of waste chemicals by the small scale or agrobased paper mills, where chemical recovery is a major constraint, poses severe threat of water pollution and simultaneously causes loss of bio energy potential. In this context, the biomethanation process has been identified as a promising technological solution to the dual problems of high energy demand and environmental pollution. The present paper discusses the existing biomethanation technologies in some of the major paper mills and some improved approaches regarding enhancement of biogas production from the paper mill wastes.