

GARBAGE TO GOLD: BIOREFINERIES BASED ON P&P MILL RESIDUES

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ABSTRACT

Pulp and paper mills are enormous sources of wastes/residues, in general organic and/or mineral; solid, liquid or gaseous. This has been a kind of tradition in such mills, since early times. For this reason, people who manage them may get acquainted with these unfair and detrimental conditions to business and to the environment. The best approach to manage these wasted materials is "to talk to them" to understand the sources and to combat every loss or waste at the origin. At this moment, a broad economic evaluation must be carried out, following all stages of the route for each specific waste/loss: as raw material thrown away, the added costs to it in the production process and the costs of collection, management, treatment, disposal or definitive landfill. Been aware of the waste material value, managers may become stimulated to investigate the possibilities to prevent the discarded losses or to find new routes for them using science, technology, economics, goodwill, and common sense. Since the biorefinery concept was developed from the early 2000's to now, the potential for the utilization of these waste materials has gained strength. This speech has the objective to follow most of the wastes/losses generated in pulp and paper mills, and to offer feasible ideas and potentials to prevent "good materials" to become "losses or wastes": restraining the losses as much as possible, converting them into new raw materials to company processes (forestry/industry) or into new products to supply the external markets.