## INTERNATIONAL WORKSHOP ADVANCES IN CLEANER PRODUCTION

"INTEGRATING CLEANER PRODUCTION INTO SUSTAINABILITY STRATEGIES"

## Use of Waste Processing Sheet Laminated Bamboo Blended for Platemaking

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## **Abstract**

The clean production technologies are useful tools for environmental management of waste, minimizing the aspects generating negative impacts on the environment. The bamboo has properties relevant to the manufacture of products, enables the replacement of conventional wood in various applications and can all be used. The byproduct resulting from its processing as chips and sawdust, can be used for the production of particleboard. This work provides a research for developing sheets of bamboo blended using waste collected by exhaust coupled to a conventional four-sided planing machine used in woodworking responsible for the standardization of bamboo slats during manufacturing laminated bamboo. To prove the workability of the plate recomposed developed, tests were performed in a practical joinery using conventional operations: radial cutting circular saw, planer trowel, Thicknesser planer, circular sizing, drill, router, sander and still test aquarium, where observed hydrophobicity of the adhesives used. The results demonstrated the ability to be applied in construction, in home furnishings, packaging and furniture industries, as well as reducing the volume of solid waste disposed in the environment.

Keywords: Remains of bamboo, environmental management, cleaner production, recycling, solid waste.