



INTERNATIONAL WORKSHOP ADVANCES IN CLEANER PRODUCTION

"KEY ELEMENTS FOR A SUSTAINABLE WORLD: ENERGY, WATER AND CLIMATE CHANGE"

CO₂ Flow Accounting in a Commercial Bamboo Plantation Aiming the Paper Production

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Abstract

Given the significance of climate change for the sustainability of human society, the need for studies that address the storage of CO₂ is increasingly important. Thus, this study evaluates the potential for mitigation of global emissions of CO₂ in commercial plantations. In this case, the system chosen for study is a commercial plantation of bamboo for the paper production industry, located in northeastern Brazil. Besides the main activity of the plantation, additional scenarios have been adopted, heading a more complete evaluation of CO₂ released and stored in the lifetime of the bamboo plantation (25 years). Alternatives for reducing the CO₂ released in the use of plantation's resources were also studied.

Keywords: Commercial plantation, bamboo, CO₂ emission, CO₂ storage, paper production.
