

INTERNATIONAL WORKSHOP ADVANCES IN CLEANER PRODUCTION

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

Reduction In Waste Of Firewood And Raw Material Applying The Methodology Of Cleaner Production In The Sector Of Red Ceramic In Seridó Region

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Abstract

This work shows and discusses the outcome of opportunities for cleaner production in 05 Potteries located in Seridó - RN, precisely in the region of Carnauba dos Dantas, using the cleaner production methodology. Due to the amount of waste that occurs in the red ceramic industry, this study aims at map ping opportunities for cleaner production, generating improvement options for the identified opportunities to support the implementation of these options and show a reduction in the consumption of firewood on that region. The stages consisted of advice from a rapid diagnosis, awareness meeting, measurements, generation of options and action plan. Data logger, pyrometers, Digital Pliers and Dynamometer were used to the step of measurements in order to quantify losses and consumption and the behavior of the burning curve. The results show that all companies had potential for improvement, especially in the following aspects: the preparation of clay, the burning process, in electric power consumption and the large amount of rewor. It was concluded that the predicted total environmental benefit (reduction in consumption), due to the changes in the process was: 3.546 st of firewood; With good operating practices: 1340 st of firewood; improvement in the control of the process was: 216 st of firewood.

Keywords: red ceramic, cleaner production, Energetic Efficiency