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“CLEANER PRODUCTION TOWARDS A SUSTAINABLE TRANSITION”

Identification of Opportunities for Cleaner Production in Plastic Covers Alagoas Industry

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Abstract

In Brazil, in 2012, the industry of plastic processing comprised 11,690 companies and employed 348,000 direct workers. In this important sector, it's important understand the productive process and ally it to a purpose that hold a realistic view of sustainability. In this sense, the present work is a study of case that aims to assess the opportunities in improvement of productive process into a plastic industry located in the state of Alagoas – Brazil. This company is specialized in manufacturing of plastic caps. The data were collected through direct non-participant observation to the production line; together with unstructured interview with the operator of the process. The concepts of “cleaner production” and eco-efficiency” were used like base to construct the analysis. These concepts were employed in the present study because they promote the idea of generate mutual benefits to the both sides (industry and environment). The findings indicated that the investigated company potential to increase its operational efficiency and also reduce its costs. The production process had been evaluated and it was constructed some purposes to improve the operational efficiency, costs optimization and reduction of wastes. This study indicates that the evaluation developed in this work can be replicated to other companies with similar characteristics to the company in this study, even in different sectors. For future works this study indicates the analysis of the costs of waste reuse generated by this industry, especially the “galhas”; the comparison between investments in the redesign of machines used by this sector and the increase on productivity and operational efficiency of this industry; and the repair of defective products generated.

Keywords: *industrial ecology, cleaner production, production of plastic caps*