



"CLEANER PRODUCTION INITIATIVES AND CHALLENGES FOR A SUSTAINABLE WORLD"

Product End-of-Life, Remanufacturing and Reuse Market: Trends, Barriers and Challenges in a Case Study

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Abstract

Within the current environmental context, the focus of society and businesses is oriented to finding solutions to reduce environmental impacts which are also economically sustainable. Accordingly, remanufacturing deals with issues related to environmental impact reduction such as the economy of material, energy, capital, labor, and emissions used in the manufacture of products. However, remanufacturing deals also with variabilities and inefficiencies that are barriers to the business' economic sustainability. This paper presents perspectives of product end-of-life and describes the state of the remanufacturing industry and reuse market. To complement the existing literature, a case study was conducted in a remanufacturing telecommunication products industry in southern Brazil. It was found that the studied company does not collect end-of-life products - it receives only aftermarket products and products for repair. The company fears selling remanufactured products at lower prices for the reuse market may cannibalize the sale of new products. Furthermore, the remanufacturing processes were observed to involve several wastes, which confirms its status of "immature" industry.

Keywords: remanufacturing, reuse market, product end-of-life, sales cannibalization.