





Online Perspectives Journal: Human & Applied Social Proceedings of the 7th International Congress on Scientific Knowledge 6th Research & Development PROVIC/PIBIC v. 11, n° 32, Supplement, 2021

## Application of the circular economy in the industrial scrap management process: a case study in the Açu Port Complex

Arthur Messias Sodré Cunha1, Jully do Nascimento Germano1, Gustavo Tavares Machado2, Frank Pavan de Souza3

(1) PROVIC/ISECENSA Volunteer Scientific Initiation Student – Administration Course; (2) Advisor Researcher; (3) Collaborating Researcher - Higher Education Institutes of CENSA - ISECENSA, Rua Salvador Correa, 139, Centro, Campos dos Goytacazes, RJ, Brazil

The main proposal of the circular economy is to change the concept of "garbage" from Waste that was structured in this project and replaced by a continuous and cyclical vision of the production, in which resources are no longer just explored and discarded and are now reused in a new Cycle. The Circular Economy encourages new management practices, creating opportunities and value for organizations in harmony with the environment. This article aims to analyze the feasibility of implementing Circular Economy methods, with an emphasis on controlling scrap disposal in the Açu Port Complex (São João da Barra/RJ), bringing sustainable alternatives to Waste Management. In addition to evaluating its environmental and economic efficiency, it proposes to end the linear production process and reinsert waste into the production cycle to minimize environmental treatment and the extraction of raw materials. The investigation will start through specific exploratory research, bringing as a consequence, possible economic alternatives for the reuse of these materials. The research is also classified as descriptive and case study since a survey of real information on waste management in the Açu Port Complex will be carried out. It is hoped through this research to demonstrate how the circular economy can contribute to economic, social, and environmental development when used in an interdisciplinary way by productive activities.

**Keyword:** Sustainability. Waste Reuse. Scraps. Circular Economy. Reverse Logistic.

**Supported by: ISECENSA**