



"CLEANER PRODUCTION INITIATIVES AND CHALLENGES FOR A SUSTAINABLE WORLD"

Environmental Accounting of ABC Paulista Using the Emergy Synthesis

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Abstract

The great growth of the urban population generates a great change in the life style, land use, energy demand and consequent environmental pressure. In this way, studies related to environmental sustainability of urban systems and the availability of natural resources are of major importance. Emergy is considered to be a powerful tool to environmental accounting and measures both natural and human resources to generate products and services. The evaluation through emergy synthesis of cities, states, nations and its base resources provides large scale perspective to evaluation of environmental areas and can help selection of policies for public benefit. This preliminary study applies the emergy synthesis to evaluate the sustainability of the cities that compose the ABC Paulista, accounting the local free renewable resources that give support to the cities. It's also done an evaluation of the results based on the GDP's and the HDI's of each municipality.

Keywords: Emergy synthesis, environmental accounting, environmental sustainability, urban systems.