



"CLEANER PRODUCTION INITIATIVES AND CHALLENGES FOR A SUSTAINABLE WORLD"

Emergy Accounting in the Two Systems of Generating Electricity Using Waste

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Abstract

This article aims to assess by emergy accounting, two systems of electric power production. Comparing two different realities, one that uses a power generation system installed on a standalone mill in São Paulo and another in a Sewage Treatment Station (STS) located in Uppsala, Sweden. The systems were measured by indicators that indicate the environmental burden.

This methodology presents the results, synthetic and easy to understand that aid in the pursuit of sustainable development and environmentally friendly. Based on our analysis of the digestion system installed at the station ETE indicates disadvantages over the plant unattended.

This is due to higher utilization that makes the plant independent of renewable resources (R, N), thus Transformity better, lower environmental burden and reduced pressure on the environment.

Keywords: emergy, STS, independent power plant, waste, energy