



## INTERNATIONAL WORKSHOP ADVANCES IN CLEANER PRODUCTION

"KEY ELEMENTS FOR A SUSTAINABLE WORLD: ENERGY, WATER AND CLIMATE CHANGE"

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### **Accounting Contributions in Emergy for the National Solid Waste Policy**

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#### **Abstract**

The current Brazilian Bill for Solid Waste will impact 5564 Brazilian municipalities, which need to be mobilized to adopt policies and actions for waste treatment in accordance with the Act. The project may empower millions of businesses and individuals, because in case of damage involving solid waste responsibility for the implementation of corrective measures, they will be charged from the causer of the damage, jointly with its generator. Product life cycle, environmentally appropriate final destination, and flow of solid waste integrated management are objects of this Project Act. It presents the accounting in emergy as an alternative to consistently assess the impacts of solid waste on the biosphere, because its amplitude goes beyond the frontiers of economic and production systems (extraction, production, use and disposal), breaking into the environment of ecosystems. It also presents some experiences with this methodology as a tool to support integrated management of solid wastes, establishing performance indicators and assessment of environmental impacts. Mankind has walked to the degradation of the natural environment, and needs to decide whether "homo sapiens" will pollute the natural resources with enormous damage to the biosphere, or manage the waste in an integrated manner with the ecosystems in order to keep them sustainable. The accounting in emergy is an important step to assess the ability of Earth to sustain our species.

*Keywords: Solid waste, legislation, life cycle, emergy, indicators of sustainability.*

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