



3rd
INTERNATIONAL WORKSHOP
ADVANCES IN CLEANER PRODUCTION

“CLEANER PRODUCTION INITIATIVES AND CHALLENGES FOR A SUSTAINABLE WORLD”

Utilization of Energy in Municipal Solid Waste Landfill

G. F. da Silva ^a, C. M. V. B. de Almeida^b

a. Universidade Paulista, São Paulo, gfrimaio@gmail.com

b. Universidade Paulista, São Paulo, cmvbag@unip.br

Abstract

In developing countries the landfills stand out as a way for final disposition of the urban solid waste by showing the lower cost and the engineering techniques that aim the minimization of the impacts to the public and environmental health. In this sense, this study makes the energy synthesis of a landfill in the city of São Paulo. That has a project of environmental compensation and electric energy generation by burning biogas. The total energy of the system equals $1,22 \times 10^{20}$ sej. And the specific energy of the USW are equivalent to $8,36 \times 10^{11}$ sej/m³ and transformity of the electric energy that was produced is $4,67 \times 10^3$ sej/J.

Keywords: *energy, landfill, biogas, environmental*

“CLEANER PRODUCTION INITIATIVES AND CHALLENGES FOR A SUSTAINABLE WORLD”

São Paulo – Brazil – May 18th-20th - 2011