## ABSTRACT

Fossil fuels are the most common energy resource, now, however, its high dependence on economic development and its excessive use has become a problem, due to their scarcity and pollution produced by its use.

Above, has prompted the need to opt for options of renewable sources that satisfy the need for energy and, at the same time, similarly to ensure sustainable development.

The problem of environmental pollution caused by fossil fuels, is compounded by the problem of the uncontrolled production of solid urban waste, that grows that you due to the economy of consumption and technological developments creating the need to manage them, controlled way, as well as the subsequent to its production use.

In this regard, through the controlled landfill alternative mitigates the problem becoming the organic fraction of those wastes by anaerobic fermentation, a by-product (biogas), energy is usable, composed mainly of methane and carbon dioxide.

Because the calorific power of biogas is possible its use through combustion, depending on its catchment, burning it and transforming it into electrical power by means of internal combustion engines, replacing the traditional fuels.

Its production in a controlled landfill are gives as a secondary objective, since its main purpose is environmental and energy not.

Creating awareness in the population of a controlled management of urban waste, then consider an energy exploitation of biogas, as a source of a renewable resource.