

“USINAVERDE: Incineration of urban solid wastes, with a load composition similar to RDF, avoiding the formation of methane, making use of energy for its own consumption”

Project objectives

The project aims to use the incineration of urban solid wastes to reduce the amount disposed of in landfills and to avoid methane formation from their anaerobic decomposition. The system will be able to provide energy for the plant's own consumption as the generation system will be implemented.

Incineration: undesired CDM project

We consider the replication of this project to put at serious risk the implementation of effective recycling and social inclusion programs as strategies for poverty alleviation. Furthermore, the project clearly poses a threat to both human health and the local and global environment and cannot therefore be considered a contribution towards the desired goal of sustainable development.

Critics to incineration from Civil Society

Waste incineration has been subject to discussion and criticism throughout civil society. Brazilian social and environmental organizations do not support believe that urban waste incineration is a technology for sustainable development.

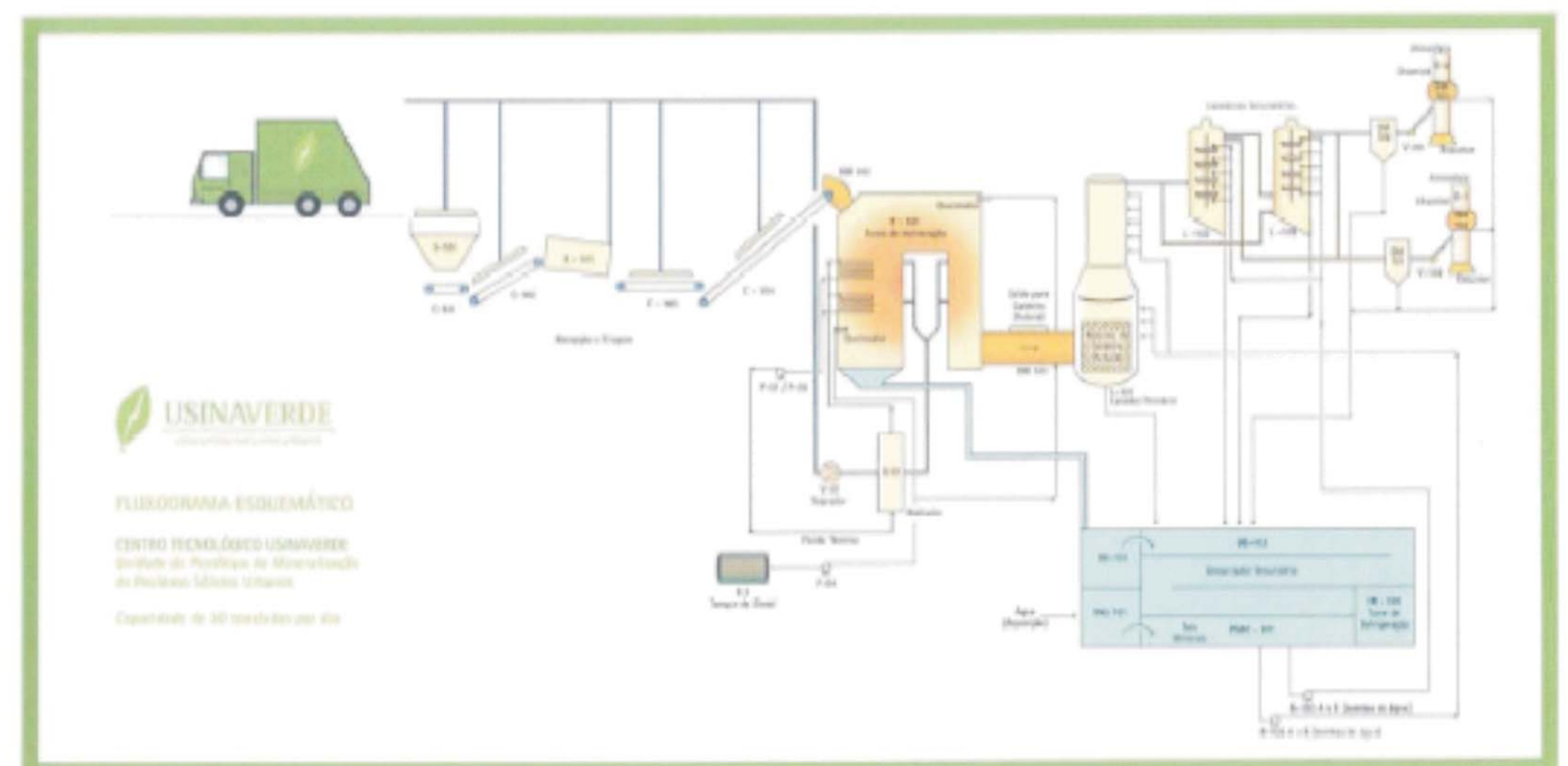
Incinerators are internationally recognized as one of the main sources of persistent organic pollutants such as dioxins, furans and PCBs, heavy metals and several other toxic chemicals.

The chimney analysis for dioxins and furans at USINAVERDE show values of 0,32 ng/Nm³, lower than the national parameters (0,50 ng/Nm³), but twice the values for the São Paulo state (0,14 ng/Nm³). Dioxins are simultaneously carcinogenic, endocrine disruptors, and subject to biomagnification. For pollutants such as dioxins any additional emissions are surely unacceptable.

Brazil had ratified the United Nations Stockholm Convention on Persistent Organic Pollutants (POPs) in May 2004, in which countries were obliged to reduce and work towards the elimination of emissions of those toxic pollutants damaging to the environment. The Stockholm Convention also stipulated that, when possible, new sources of unintentional POPs (dioxins, furans and PCBs) must be avoided.

GHG emissions reductions and project emissions

The emissions avoided by the project are the emissions that would be released by the wastes disposed of in the landfill. The project emissions are those resulting from the burning of LPG and of rubber and plastics found in the wastes.



Alternative: recycling and poverty alleviation

In developing countries recycling generate more employment opportunities per ton of waste treated when compared with incineration plants. Waste combustion equates to the burning of raw materials from which many families build their incomes.

Waste pickers (Catadores), as self-managed cooperatives, can earn an average of USD 260 per month. When one considers that Brazil is one of the worst countries in the world in terms of income distribution, it becomes clear that this kind of initiative should be strongly considered as a strategy for poverty reduction and alleviation within the country.

Social movements dedicated to the organization and promotion of this highly excluded parcel of society have seen the incineration of urban waste as a technology that promotes 're-exclusion' from society.

A closer look at the USINAVERDE recycling program reveals that only a small percentage (0.36% in wet weight, or 108kg/day) of the total waste material is actually recycled.

The figures for recyclable materials that are burned is considerably higher, totalling 33.09% in wet weight, or a 9.27 tons/day. An alternative scenario, involving both the recycling of these 9.27 tons/day, would increase the lifecycle of these materials thereby diminishing the need for further raw materials and reducing energy consumption, while at the same serving as a source of income generation and citizenship improvement for the families involved in the recycling process.