

## A Case Study at Lara's Landfill: Solid Waste Management and Energy Recovery

**Authors :** Kelly Danielly Da Silva Alcantara, Daniel Fernando Molina Junqueira, Graziella Colato Antonio

**Abstract :** The Law No. 12,305/10, established by the National Solid Waste Policy (PNRS), provides major changes in the management and managing scenario of solid waste in Brazil. The PNRS established since changes from population behavior as environmental and the consciousness and commitment of the companies with the waste produced. The objective of this project is to conduct a benchmarking study of the management models of Waste Management Municipal Solid (MSW) in national and international levels emphasizing especially in the European Union (Portugal, France and Germany), which are reference countries in energy development, sustainability and consequently recovery of waste generated. The management that encompasses all stages that are included in this sector will be analyzed by benchmarking, as the collection, transportation, processing/treatment and final disposal of waste. Considering the needs to produce clean energy in Brazil, this study will allow the determination to the best treatment of the waste in order to reduce the amount of waste and increase the lifetime of the landfill. Finally, it intends to identify the energy recovery potential through a study analysis of economic viability, energy and sustainable based on a holistic approach.

**Keywords :** benchmarking, energy recovery, landfill, municipal solid waste

**Conference Title :** ICSRD 2020 : International Conference on Scientific Research and Development

**Conference Location :** Chicago, United States

**Conference Dates :** December 12-13, 2020