

LCM's general appointments to design an electric vehicle to collect urban recyclable solid waste more ecofriendly

Marcio Lazzari
UTFPR (Federal University of Technology of Parana State, Brazil)

The programs of recyclable waste management have increased on the lasted years in Brazil. If one side there is the private enterprises, on the other there are people that live collecting urban recyclable solid waste using vehicles of human propulsion. In some towns in Parana State, it has aided local governments to promote recycling of some materials, from different sorts of papers, metals such aluminum to the plastics such PET (Polyethylene terephthalate). Towards this scenario, hydroelectric of ITAIPU had started with a private industry, the design and manufacture of an electric vehicle this sort of waste, into a context of ITAIPU Renewable Energy Programme. According to it, this paper contains some general appointments about main steps to the environmental assessment of this vehicle. Beyond of a briefly approach of the vehicles to collect waste used in Curitiba town, considers the context of the life cycle management of these vehicles. Intending to promote a decrease of environmental impacts during the life cycle, the life cycle assessment is applied as a tool for the design of an electric vehicle to collect solid waste more ecofriendly.