

WASTE GENERATION AND FUTURE CONSUMPTION CHALLENGES

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Abstract

Human consumption of the earth natural resources has reach to a top level where the Earth can no longer be able to regenerate these resources again. Freshwater, food, metals and many other natural materials are already suffering from a real reduction in their primary sources due to the uncontrol consumption of modern civilization. On the other hand, this consumption of materials is directly connected to the generation of different forms of waste streams that adding extra challenges to our environment and human life like climate change, water contamination and air pollution. Many landfills and dumpsites are already filled with wastes and there is no space for more wastes and therefore there is a need to find innovative methods to deal with landfilled or dumped wastes. In this talk, Dr. Yahya Jani will focus on why there is a need to extract waste materials from landfills and how mining materials from landfills can be used as secondary resources and how landfills and dumpsites can act as bank accounts for human future needs of natural materials.

Keywords: waste generation; municipal solid waste; sustainability; consumption; future resources