

Conversion of Organic Waste to Energy: A Review on Agro and Slaughtering Waste

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ABSTRACT

Management of waste streams from abattoirs and agricultural practices are major challenge in developing countries. Harnessing these wastes as resources for the production of biogas and bio-fertilizer could contribute to curbing the environmental menace and to addressing the problems of energy and food deficit. Biogas produced from the anaerobic digestion (AD) of residual biomass is nowadays a promising option for decreasing greenhouse gas (GHG) emissions. Energy recovery from organic industrial agro & food waste, by-products of cattle and poultry slaughtering facilities through anaerobic digestion (AD) process increase the energy recovery from the waste produced. AD is the process of biological conversion of degradable organic material into methane and digestate. Digestate which is technically not compost obtained from the anaerobic digestion consists of nutrients that can condition the soil for better plant growth. Different technologies of organic waste to energy conversion are discussed here. This review emphasizes the data obtained from different case studies and technologies in practice along with the idea of integrated energy recovery from agro, food and slaughtering waste at a time.

Keywords: Waste management, Slaughter, Agro & food waste, Digestate

