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MUNICIPAL SOLID WASTES AS ENERGY RESOURCE

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Abstract

Technological aspects of energy use of solid municipal wastes and possibilities of application of some technologies in Ukraine are analyzed. Partial sorting of wastes can use for energy production half of their energy potential that for Ukraine is estimated in an equivalent of natural gas in 1,5 billion m³. The share of food waste is close to 40%. It is advisable to process them into biogas and biomethane in mixtures with agricultural waste and energy plants. The production of electricity and heat from biogas requires the assistance of the states in the form of special tariffs. The use of biomethane, along with natural gas in a compressed and liquefied state in the transport energy sector is becoming widespread. Biogas complexes are used as balancing capacities of power grids. The most common technology for using the energy potential of solid waste is incineration. Waste incineration plant exhaust gas treatment systems have achieved a degree of perfection that allows them to be placed close to residential buildings. References 16, tables 2.

Key words: municipal solid wastes, food wastes, biomethane, combustion.

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