

Closed-cycle energy based on municipal solid waste in Belarus.

Pashynski V. A.

The possibilities and prospects of using municipal solid waste (MSW) for obtaining circular energy were considered, an energy assessment of the gross and technical potentials of municipal solid waste landfills of the Republic of Belarus was carried out. The commissioning of biogas energy complexes for the use of biogas obtained on the basis of anaerobic fermentation of MSW will make it possible to form a more reliable power supply system based on distributed local power sources located near energy consumers. Such sources increase the country's energy security, provide closed-loop energy, provide redundancy in a centralized energy supply system, and reduce greenhouse gas emissions.

Key words: energy resources, energy potential, maximum one-time emissions, pollutant, landfill gas, municipal solid waste, environment, landfill, potential assessment, biogas.