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COMPARISON OF COMBINED ETHANOL AND BIOGAS POLYGENERATION FACILITIES USING EXERGY ANALYSIS

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Abstract

In this paper, the background of bioethanol as an alternative fuel to conventional one is analyzed with the aim of examining the efficiency of biomass-to-fuel conversion by poly-generation taking into account the energy integration approach for a complete recovery of the process' exergy potential.

Based on literature data it is underlined that exergy analysis represents a primary tool to analyze the ethanol production process from an integrated point of view.

Key words: bioethanol, exergy analysis, poly-generation process

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