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**STRATEGIC DESIGN OF INTEGRATED SUPPLY CHAINS FOR
PRODUCTION AND DISTRIBUTION OF BIOETHANOL²**

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***Abstract:** Today, energy consumption is steadily rising, but global energy sources are in limited reserves of oil, gas and coal. Their extraction and exploitation is often associated with a number of negative environmental impacts by obtaining the conventional fuels needed for the heat and transport systems. Continuous alternative sources of energy, constantly renewable sources, low prices and ecologically clean are sought. Biofuels are alternative sources of petroleum fuels. The article presents a method for optimal design of resource-supply chains for production and distribution of bioethanol. The problem of optimal design and management of ROV is formulated as a task of mixed linear programming under the criterion of minimum capital and operating costs. The optimal scheme of the resource - insurance chain for the territory of the Republic of Bulgaria is presented*

***Keywords:** Bioethanol, fermentation, Supply chain,*

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