**Specifics in Modeling of Energy Efficient Production in Agribusiness**

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**Abstract**

A resource potential in agribusiness is a roundup indicator of resource availability. Its assessment and efficiently used resources govern a level of competitiveness of farm products among enterprises that have various operating practices. Power industry is a significant component of the resource potential. Greenhouses that operate in unfavourable natural and climatic conditions are an indicative example in this field. The study of practices that Russian agribusiness has will make it possible to identify strong component dependencies and challenges that businesspeople face when they introduce energy-saving solutions. Having reviewed corresponding sources, authors conclude that robust control aims at corrections to be made to the rule of uncertainty of conditions that govern the high energy/output ratio in greenhouse facilities. Based on the correlation/regression and index analysis they have established that the return rate in production of vegetables grown under cover depends on following three components: the specific gravity of costs for natural gas and other heat supply sources, the share of costs for electricity and capital-labour ratio. Findings imply that energy efficiency in national agribusiness was insufficient. Authors justify a need for a substantial increase in a use of alternate energy sources with mostly decentralized distribution.

**Key words:** agribusiness, energy efficiency, greenhouse industry, resource potential, energy supply, cost factor analysis.

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