
Production and export of liquefied gas: transformation of business models taking into account global trends in decarbonization and digitalization

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Abstract

The publication touches upon aspects of the digital transformation of business models for the operation of enterprises for the production and export of liquefied natural gas (LNG). The priority role of the LNG business in the future development of the oil and gas industry in the Russian Federation in the context of global megatrends in decarbonization of the economy and digitalization is substantiated. **Materials, methods and organization of the study.** The study was prepared through a critical analysis of information sources based on a comprehensive account of theoretical concepts and practical models of cognition of phenomena in the field of new «green» energy, including decarbonization and increasing the climate neutrality of the economy, as well as theoretical and methodological provisions on the digitalization of socio-economic relations, the development of the knowledge economy, the introduction of end-to-end technologies of the new industrial era of digitalization. The provisions of this publication are based on the Schumpeterian theory of innovation, aspects of the competition paradigm and competitive advantages of M. Porter, as well as elements of the concept of the fourth industrial revolution by K. Schwab and co-authors. The study used system-structural, dialectical, comparative and other methods and approaches. **Research results.** It is shown that the production and commercial efficiency of LNG enterprises will steadily increase subject to the implementation of digital transformations of the model of organizing production, management and other processes. Examples are given of promising end-to-end digital economy technologies for digital transformation of the LNG business. A system of priority areas for digital transformation of business models in enterprises engaged in the production and export of liquefied gas, including the transformation of the organizational model, corporate culture, production model, intracorporate entrepreneurship and financial model, is proposed, and the content of the corresponding transformations is substantiated. **Conclusions.** The necessity of the steady development of the digital competence of the subjects responsible for the strategic management of the enterprises of the LNG industry is stated in order to form the prerequisites for accelerating digital transformations.

Keywords: *business model, liquefied natural gas, production, export, digital transformation, end-to-end technologies of the digital economy, digital competence.*

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