
PROBLEMS OF ECONOMICS AND MANAGEMENT OF OIL AND GAS COMPLEX

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Information about the articles

SOME INFORMATION ABOUT OUTCOMES, PROBLEMS AND THE STATE'S ROLE WHILE IMPLEMENTING EASTERN GAS PROGRAM (p. 4)

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The Eastern Gas Program is an important state document, the strategy of the gas industry development of in the east of Russia, adopted in 2007 by the order of Ministry of Energy (previously Ministry of Industrial Energy) of Russia. The article describes a retrospective analysis of the main outcomes of the Eastern Gas Program as well as presents generalization of major systemic problems during its implementation that became obvious within the last seven years. Without excessive detailing by some separate projects, the article provides the holistic picture of processes that took place in the industry of the Eastern Siberia and the Far East as well as gives a better insight into the key challenges that will face the natural gas industry in the east of the country during the next period of the industry development.

The article presents the author's view of the main problems confronting the gas industry in the eastern part of Russia. However, the authors' direct involvement into the stated problems led not only to a versatile and professional presentation of the problems, set out in the article, but also allowed formulating some definite proposals for the authorized bodies of the state management that will stimulate further development of the gas industry in this strategic Russian region.

Key words: the Eastern Gas Program; the eastern part of Russia; results of implementation; retrospective analysis.

METHODOLOGY OF PREPARATION AND IMPLEMENTATION OF INVESTMENT PROJECTS RELATING TO PRODUCTION OF LOW-PRESSURE GAS FROM THE OILFIELDS OF THE NORTHERN PART OF TYUMEN REGION AND DEVELOPMENT OF SMALL NATURAL GAS FIELDS IN KHANTY-MANSI AUTONOMOUS TERRITORY (p. 11)

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The article analyzes some methodology of preparation and implementation of investment projects relating to extraction of low-pressure gas from the fields of the northern part of Tyumen region and development of small natural gas fields located in Khanty-Mansi autonomous territory. Analysis of the situation in connection with gas produced from small, unprofitable gas fields and fields that are in the final stage of their development is presented. Some problems that cause reduction of gas production profitability are assessed. Usage of not in-field but field prices and expenses on exploration activities in order to open some new fields in the region, expenditures on construction and natural gas production is proposed as a counterpart to evaluate the effectiveness of low-pressure gas production from the field. Some measures that envisage improvement of small gas fields' profitability and fields in their final stage of development are introduced.

Key words: methodology; investment project; small fields; profitability; low-pressure gas; price structure; tax policy.

SOME SPECIFIC FEATURES OF STATE REGULATION OF PERFORMANCE EFFICIENCY OF RUSSIAN OIL AND GAS INDUSTRY (p. 15)

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The key trends of oil and gas complex (OGC) development in Russia are considered, the analysis of regulatory maintenance of OGC performance at the present stage of development is carried out. The basic trends of OGC state regulation in accordance with the current challenges facing the industry are outlined. Some recommendations on improvement of state and, in particular, regulatory maintenance of oil and gas complex performance as well as related industries, ensuring sustainable development of all sectors of the economy, are presented.

Key words: state regulation; regulatory maintenance; taxes; oil and gas complex; raw materials; oil and gas production; processing and petrochemical industry.

SPECIAL ASPECTS OF OIL AND GAS BUSINESS EVALUATION AT DIFFERENT STAGES OF SUBSOIL ASSETS STUDY (p. 21)

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The article considers some special aspects of applying basic approaches to evaluation of an oil and gas company depending on stages and degree of geologic certainty of subsoil assets area with account of specific features of an oil-and-gas producing property complex. Possibility of each of these approaches application as well as their advantages and disadvantages are shown. Factors influencing the choice of the evaluation method are outlined. Some specific features of these approaches application are demonstrated by the example of subsoil assets sector. Given Expenses items required for determination of an object cost at different stages of work are submitted. Summary figures that result from the basic approaches application depending on the stage of work are presented. Comparison of business value change, depending on the level of study of subsoil assets sector while applying the approaches to evaluation of an oil and gas company, is performed.

Key words: stocks; resources; field; company evaluation; subsoil assets management.

EXPLORATORY WELLS DRILLING RISKS IN COMPLICATED GEOLOGICAL CONDITIONS (p. 26)

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Current development of Russian gas industry depends on the development of new hydrocarbon fields under complicated geological conditions (location depth is below than 5000 m, abnormally high formation pressures and temperatures). Specificity of well construction at such fields requires application of principally new technical and technological solutions aimed at improvement of extraction of gas and gas-condensate reserves. Implementation of projects' innovative approaches is always accompanied by some definite risks. Therefore, when projecting exploratory wells development it is necessary to plan risk factors which should be taken into consideration and predicted before the project starts. At present the complex method of risk analysis that allows achieving the most complete picture of possible results of the project's implementation is considered the most effective one.

Key words: exploratory wells; complicated geological conditions; monitoring of wells drilling risks; ecological risk of drilling; economic risk of drilling, technological risk of drilling.

SIMPLIFICATION OF ORGANIZATIONAL PATTERN OF A COMPANY MANAGEMENT IS ONE OF THE MOST IMPORTANT FACTORS OF PRODUCTS; SELF-COST REDUCTION (p. 30)

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Possibilities of updating organizational pattern of a company management (OSCM) are discussed. The author of the present article, after investigating some definite oil and gas producing companies, characterized by a plurality of supporting units, stressed awkwardness of OSCM, operating nowadays.

Calculations of economic efficiency of OSCM updating and main conclusions on the research work are presented.

Key words: organizational structure; oil and gas producing companies; updating; economic efficiency.

MANAGERIAL SYSTEM OF DEVELOPMENT AND INVESTMENTS OF A GAS COMPANY ("GAZPROM DOBYCHA ASTRAKHAN, Ltd." IS TAKEN AS AN EXAMPLE) (p. 34)

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Some new trends and prospects of the gas industry development and its backbone companies are discussed.

Some special managerial units responsible for a company's development are proposed for organization in the companies engaged in gas industry.

Some managerial scheme of a company development, defining the stages of development and investment management, units involved in the development process, their interaction and feedback, is developed.

The managerial scheme of a gas company's development and investments, formed by the author, besides the developed scheme (model) of a company's progress management and the algorithm of expertise and managerial solutions of an action implementation, includes a package of analytical and managerial methods, firstly suggested by the author for widespread use.

Key words: development; gas industry; evaluation; management; control system; set of indicators.

ORGANIZATIONAL-ECONOMIC MECHANISM OF PROJECTS IMPLEMENTATION RELATING TO BEFOREHAND DE-GASSING OF COAL MINES (p. 39)

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Coalmine methane in the mining industry is looked upon both as the problem of ensuring security and high efficiency of coal extraction, industrial use of methane in the energy sector and other sectors of the economy and as an environmental problem associated with methane emission into atmosphere. Due to use of modern high-speed coal combines, increase of mining operations depth, growth of excavation sites' gas content only integrated degassing allows mining operations with high technical and economic indices. Further improvement of degassing in conditions of load growth on stopping face is possible due to early extraction of methane from the coal seam. The article proposes some schemes of organizational-economic mechanism of implementation of an early degassing project, submits tables of distribution of money inflows and outflows of the project participants as well as offers some mechanism of the state stimulation of early degassing.

Key words: early degassing; unconventional sources of gas production; organizational-economic mechanism; effectiveness of participation in the project; indirect economic and social effects; tax incentives; degasification of coal mines; economic effect; methane recycling; state stimulation.

CONTROL OVER WELL DRILLING EFFICIENCY ON THE BASIS OF BALANCED SCORE CARD (BSC) (p. 47)

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The article touches the problem of formation of Balanced Score Card in one of the supply chain links of oil industry, i.e. in drilling companies. The article noted that drilling companies have not only sophisticated technology and organizational structure but also some complex scheme of interactions with other companies which are participants of the supply chain. It should be noted that efficiency increase of drilling operations without implementation of relevant activities in other links of the supply chain does not provide the desired results. This is justified by the fact that, on the one hand, drilling operations quality depends on drilling exploration efficiency, and, on the other hand, further hydrocarbon production efficiency is connected with the effectiveness of drilling exploration efficiency. In this regard, it was noted that strategic management of all of the supply chain links ensures quick adaptation of companies, which are participants of the chain, to market situation changes. The article also examines the processes that ensure drilling companies' advantageous position in the market as well as discloses the system's possibilities to identify problems and to find the way of their solution and adoption of measures to prevent them in future.

Key words: Balanced Score Card; efficiency of drilling works; strategic management.

OPTIMIZATION MODELING OF A COMPANY ACTIVITY FOR PLANNING DEVELOPMENT OF NEW GEOPHYSICAL EQUIPMENT (p. 53)

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Currently, Russian commodity producers have to compete not only among themselves but also with foreign manufacturers, many of which possess advanced technologies. It is proved that a Russian company won't simply survive in the world market without constant innovations in the development of geophysical equipment for oil industry. Some special role in innovations introduction effectiveness is played by the quality of economic activity planning. Objects of the innovation process planning become production volume, cost and time, required for a new product development. The most efficient method is optimal modeling with account of all parameters of a new product development, which is possible only in case of application of economic-mathematical modeling.

Key words: planning; innovations; new products; optimal model; efficiency of innovations; cost of development; labor intensiveness of development.