
PROBLEMS OF ECONOMICS AND MANAGEMENT OF OIL AND GAS COMPLEX

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OPPORTUNITIES OF PROSPECTING ACTIVITIES STIMULATION ON THE TERRITORY OF AN OIL- AND GAS-BEARING REGION (p. 4)

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The necessity of increasing prospecting activities volumes caused by the deterioration of the mineral resources base of Khanty-Mansi autonomous region – Uygra requires significant capital and exploitation costs. However, the existing system providing tax benefits for regional oil producing companies is not effective enough in terms of encouraging growth of geological exploration volumes. Efficient management formation of hydrocarbon resources amount envisages working out some economically efficient mechanism of their development, which includes provision of sufficient incentives at the preferences giving stage and improvement of current taxation system. The article considers alternative mechanisms of providing preferences for oil producing companies operating in Khanty-Mansi autonomous region in terms of corporate income tax. The suggested variants of preferential taxation are supposed to be more efficient with regard to their inducing function, aimed at increasing of geological exploration volumes, since the methodology of their calculation envisages comparison of the existing tax benefits value with fractional volumes of geological exploration costs. Moreover, the observed mechanisms can provide extra benefits for the regional budget.

Key words: corporate income tax; oil producing companies; geological exploration; encouragement; tax benefits; preferential taxation.

EVALUATION OF INVESTMENTS IN CONSTRUCTION OF SECONDARY REFINING PLANTS WITH ACCOUNT OF NELSON INDEX (p. 9)

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The paper proposes a specified formula of capital costs calculation, required for construction of secondary processing plants, with Nelson index application, which should be used for evaluation of enlarged investments in oil refinery production at the preliminary design stage of investment projects "from scratch".

A method for determining the magnitude of capital costs spent on construction of units of oil straight distillation, based on the choice of the reference combined "ELOU-AVT" unit, guided by parameters such as: progressiveness and original technical solutions, the value of the specific net-energy costs per ton of processed crude oil, the type of processed oil (sulfur content, paraffin, light fractions) is suggested.

The author of the present paper introduces some "index of (in) efficiency of capital expenditures," which can be used for the selection and validation of alternative investment projects of oil processing industry with the same benefits of the quantity, quality and range of its petroleum products. The notion of autonomous gross investments in the downstream processing of oil is specified, the formula of the calculation in order to assess their effectiveness is proposed.

Key words: capital expenditures on construction of oil secondary processing units; Nelson index; specific capital investments on construction of the facility of crude oil straight distillation; the reference combined primary distillation "ELOU-AVT" unit; power consumption of a refinery; specific net-energy costs per ton of processed oil; index of (in) efficiency of capital expenditures on construction of oil secondary processing facilities "from scratch"; discounted gross autonomous investments in oil downstream processing; originality and advanced technical solutions in oil refining industry; method of enlarged calculation of the capital expenditures on construction of units of oil secondary processing using Nelson index.

UNSOLVED PROBLEMS OF SERVICE REPAIR OF OIL AND GAS WELLS AT THE OILFIELDS OF WESTERN SIBERIA (p. 15)

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Declining oil production in the Western Siberia causes growth of wells' workover operations due to the "aging" of operating wells stock, formation pressure drop and growth of product water-flooding. In this particular case appearance of service companies, specializing in wells' workover operations, allowed improving quality of the works performed due to technologies updating and modern equipment usage. However, growth of the total number of companies that specialize in providing services in the workover field, in addition to a positive trend (implementation of advanced repair technologies) also has some negative aspects, such as growth of their own failures caused by low qualification of specialists, as well as depreciation of fixed assets of both the production companies and service companies. In such circumstances there appears the necessity of some methodology for assessing the quality of repair to allow assessment in quantitative equivalent, as the lack of qualified professionals in the field of supervising control when conducting wells' workover operations does not always guarantee the objectivity of the assessment. Besides, this requires analyzing the risk of accidents at hazardous production site in order to control industrial safety.

Key words: service; well; repair; supervisor; quality; risks; accidents; methodology for assessing; ecology.

PERFECTION OF PRICE FORMATION AND DEVELOPMENT OF COMPETITIVENESS AT THE HOME MARKET OF OIL AND OIL PRODUCTS (p. 19)

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The current state and prospects of development of home oil products market was analyzed. It is revealed that market-oriented pricing of oil products at the home market ensured development of the oil industry and the surplus balance of the internal market. Development of the legal framework of functioning of oil products home market in terms of antitrust regulation and stock trading resulted in establishing of some system of indicators of oil products home market as well as in sharp increasing of stock trading volumes, so, consequently, home market of oil products became more transparent and pricing – more fair and reliable. Further development of stock trading not only of oil products but also of oil at the home market, including possibility of procurement for state and municipal needs on the stock exchange as well as ensuring the unification of antimonopoly regulation and taxation in the oil industry is proposed as one of the measures of pricing perfection.

Key words: oil industry; pricing; home market of oil products; exchange trade of oil and oil products; export alternative.

MANAGEMENT OF ECONOMIC POLICY OF AN OIL AND GAS COMPANY (p. 25)

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Qualitative economic policy of oil and gas companies is characterized by the following features: interests balance, risk optimization, social orientation, cost-effectiveness, efficient and safe use of natural resources, sustainability of an enterprise work, achievement of goals with minimum cost, normal level of assets' capitalization, consistency with the economic policy of a higher level, synergy, system communication with a company's strategy and functional strategies, tactical and operational decisions, availability and feasibility.

Sequence of the economic policy of oil and gas companies includes the following: objective setting and its coordination with the superior policy; assessment of influence of relationship entities of subsoil use on an enterprise activities; determination of the type if implemented economic policy and diagnostics of its quality; analysis of economic-financial condition of a company; analysis of alternative policy options; selection of the base option out of alternative ones; formulation of original principals of economic policy; development of corporate and functional strategies, strategic, tactical and operational plans; efficiency assessment of the adopted managerial decisions and policy in general.

Key words: economic policy; fuel and energy; oil and gas companies; quality criteria; consistency of economic policy.

SOME PROBLEMS IN RELATION TO INTERNAL CROWDSOURCING USAGE WHEN PROVIDING EXPERTISE OF A COMPANY'S REGULATORY DOCUMENTS (p. 29)

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The article considers possibilities of crowdsourcing organization inside a company with the purpose of providing expertise of its regulatory documents. Crowdsourcing is a relatively new phenomenon in domestic companies' practice. At the same time, its potential is huge, but the instruments required for crowdsourcing activities organization haven't yet been developed.

To compensate the insufficiency of experience in this field of the activity the present paper makes an attempt to describe some aspects of crowdsourcing organization in the view of finalization of a company's internal regulatory documents. The principal feature of this type of crowdsourcing is that it allows conducting an expertise of the draft document (original version), introducing the required alterations and creating the new edition.

Key words: crowdsourcing; crowdsourcing project; internal crowdsourcing; document expertise; crowdsourcing of regulatory documents; organization of crowdsourcing projects.

MULTI-MODEL ESTIMATION OF LIFE CYCLE EVOLUTION WHEN EXTRACTING NON-RENEWABLE RESOURCES (p. 35)

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The paper presents some methodology of assessing the evolution of models life cycle by applying phenomenological bell-shaped Hubbert, Cauchy, Gauss, Makkey models with account of functions that provide their asymmetry in accordance with logistic laws of Verhulst, Ramsay and Gompertz. A criterion for comparing different models and some technique of models' determining that best describe each of the periods of production are introduced.

Application of this methodology is discussed on the examples of oil production in Wyoming state, Forties field, at a separate oil field of JSC "NK-Rosneft" as well as gas production in Romania and coal in Germany. The proposed approach allowed determining the moment of models change when assessing multi-modal evolution and significant improving the predicted accuracy of production of non-renewable resources. The described methodology can also be recommended for the evolution of life-cycle models of various industries.

Key words: production; oil; gas; production life-cycle; model; evolution; genetic algorithm.

ASSESSMENT OF OIL COMPANIES LEVEL OF ACTIVITY AND POTENTIAL POSSIBILITIES ON THE BASIS OF MODELING (p. 44)

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The paper discusses some methodological aspects of statistical evaluation of factors that affect oil production change in the context of the major oil companies in the country. The system of models, the method of standardization and post-regression index analysis served the basis for analyzing the operational factors influence on oil production. The evaluation of the of the oil companies' potential possibilities is given on the basis of the developed models; some increase of factors usage efficiency by means of the methods of standardization and post-regression analysis is revealed. The simulation results by panel data allowed obtaining reliable estimates of the models and confirmed the regularities of regression modeling.

Key words: oil; potential of oil companies; multiple regression models developed on the basis of data of some separate years; modeling by applying "companies-years" method; panel data models; econometric modeling; method of standardization; method of post-regression index analysis.

ALGORITHM OF UNIVERSAL MECHANISM FORMATION OF FIELD CUSTOMS INSPECTION OF IMPORT OPERATIONS IN CONDITIONS OF NATURAL SCARCITY OF CUSTOMS BODIES (p. 48)

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Russian economy integration into international economic space with Russia's accession to the World Trade Organization (WTO) significantly increases the customs control role after goods' release into circulation at the unified customs space of the Customs Union in the whole. At present customs control over goods' movement at the internal borders of Russia with Belarus and Kazakhstan is abolished, thus completing formation of unified customs territory of the Customs Union. This decision, on the one hand, removes unnecessary administrative barriers to imports and allows minimizing customs procedures, being in force now, for goods' free movement to the destination point, on the other hand, it creates risk of abuse in conditions of unified customs border of the Customs Union as there is no possibility of doubling of customs control functions while goods movement to the point of destination at the unified customs

territory of the Customs Union. Simplification of customs formalities while goods movement through the customs border of the Customs Union and reduction of time for carrying out customs operations in conditions of the limited number human, material and financial resources of customs bodies require strengthening measures for development and perfection of customs control after the release in the form of field customs inspection.

Key words: field customs inspection of import operations; inef

fective customs inspection; criminal foreign-trade cargo traffic of imported goods; limited staff of officers; conscientious participant of foreign-trade activity; area of businesses law-abiding; system of continuous comprehensive customs control; administrative barriers; positive sector; transparent green corridor; preventive effect; integrated approach; universal mechanism of joint comprehensive inspection of import operations of customs and tax bodies; repressive measures of the state.