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# PROBLEMS OF ECONOMICS AND MANAGEMENT OF OIL AND GAS COMPLEX

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## Contents

### Strategy

Mastepanov A.M.

Adjustment of the Energy strategy: some top priority objectives  
(Continuation of the article published in the Journal No 9, 2013) ..... 5

### Economics

Idigova L.M., Bashirova A.M-S., Dudaev R.R.

Assessment of resource potential required for regional economy  
modernization ..... 13

Salcheva S.S.

Problems and prospects of development of oil processing industry ..... 16

### Organization and management

Simonova I.F., Popadko M.V.

Innovative development of domestic gas industry in contemporary  
conditions and problems of professional training of its scientific and  
production personnel ..... 21

Eremina I.Yu., Alexeevicheva Yu.V.

Formation mechanism of assessment of personnel professional level in  
"Scientific-research institute of oil and oil products transportation, ltd." ..... 27

Simonova I.F., Gerasimova I.V.

Assessment of significance of motivation factors and labor satisfaction  
degree in a contemporary company ..... 32

### Economic-mathematical modeling

Glushkova A.S., Fayzullin R.V.

Some method predicting oil consumption volume inside a country .....36

### Non-traditional sources of hydrocarbon raw material

Zabolotsky S.A.

Effects of shale gas production and prospects of its processing ..... 39

Information on the articles ..... 46

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#### INFORMATION ON THE ARTICLES

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**ADJUSTMENT OF THE ENERGY STRATEGY: SOME  
TOP PRIORITY OBJECTIVES**  
(Continuation of the article published in the Journal No 9, 2013)  
(p. 5)

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One of the objectives of the Energy Strategy adjustment is accounting of new trends and, consequently, clarifying priorities of oil and gas complex development (OGC). It is emphasized that prospects of OGC development and competitiveness of its products at the world market will largely depend on creation of new, breakthrough technologies in Russia along the whole "chain" starting from exploration and finishing by hydrocarbons' consumption. First of all, it refers to technologies that provide efficient development of hydrocarbon resources in the Arctic shelf deposits, to oil and gas non-traditional sources and new energy resources (including usage of gas hydrates, matrix oil, tidal power, ocean thermal gradient, thermonuclear fusion, etc.) as well as fundamentally new technologies of

natural gas distant transportation and deep processing of hydrocarbon raw materials. External conditions of the Energy Strategy implementation are also considered in the article.

**Key words:** energy policy; innovative technologies; hydrocarbon resources of the Arctic shelf; oil and gas non-traditional sources; gas hydrates; matrix oil; competitive advantage; mineral resources reproduction; gas deep processing; oil deep processing; gas chemistry.

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**ASSESSMENT OF RESOURCE POTENTIAL REQUIRED  
FOR REGIONAL ECONOMY MODERNIZATION**

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(p. 13)

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Problems of natural resources availability, their amount, quality and composition, defining natural resource potential, being essential for distribution of productive forces in the region are thoroughly considered in the article. In the authors' view, regional modernization requires effective interaction of all kinds of resources, creation of mechanisms for their accumulation, reproduction of socio-economic, investment and innovation potential of the region as the main factors of competitiveness. Economic potential of the region, largely depending on its social and environmental components, reflects the level of development of the region productive forces, its ability to produce products, perform operations and provide services. Economic potential is composed by industrial, scientific-technical, educational and export potential as well as by inter-regional cooperation potential. Analysis of constraints characteristic for local systems development of the Chechen Republic allowed identifying the resource potential in order to determine and solve key priority problems of regional socio-economic system in the whole as well as to group it in accordance with the following characteristics: economic, social, institutional.

**Key words:** resource potential; regional economy; modernization; economics of the Chechen Republic.

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#### **PROBLEMS AND PROSPECTS OF DEVELOPMENT OF OIL PROCESSING INDUSTRY** (p. 16)

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Development of oil processing, being the most important sector of a country's economy, refers to strategic objectives of economic growth of the state. The article analyzes the current state of oil-processing industry development in Russia and the Republic of Komi. The performed analysis served the basis for revealing of fundamental differences in the development of oil processing industry in Russia and the United States.

The article generalizes and formulates some specific features of mini-refineries, being in operation in the Russian Federation nowadays, presents classification of quantitative and qualitative characteristics of oil processing, systematizes the

existing problems, trends and priorities for further development of domestic oil refining.

**Key words:** economics of oil deep processing; construction of mini-refineries; quantitative and qualitative characteristics of oil processing efficiency; oil products basket; oil processing ratio; output of light oil products; structure of technological processes of secondary oil refining; high-octane gasoline; clean diesel; "60—66", tax system; production capacity of existing facilities; export-oriented refineries.

UDK 658.3

#### **INNOVATIVE DEVELOPMENT OF DOMESTIC GAS INDUSTRY IN CONTEMPORARY CONDITIONS AND PROBLEMS OF PROFESSIONAL TRAINING OF ITS SCIENTIFIC AND PRODUCTION PERSONNEL** (p. 21)

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The article is devoted to effective knowledge formation for home gas industry, being the important part of its personnel management system, the basis of innovative transformations in contemporary conditions. At present the problem of lack of attention to personnel development deprives companies, operating in the industry, of successful growth benchmarks and leads to mistakes while decision-making in relation to possible technological innovations. This can result in appearance of a point-in-situation in which a company management system, recreating uncoordinated efforts of all kinds of transformations, taking place in gas industry companies, can find itself. The same situation can also arise in case of formal attitude to creation of effective innovative knowledge as well as in case of insufficient coordination of efforts of their practical applications. The article identifies the main sources of technological innovation appearance in companies, operating in gas industry as well as presents the factors determining the necessity of innovative transformations in gas industry. The authors of the article found out some sequence such as "knowledge — development and introduction of innovations — acquisition of technological superiority — ensuring of competitive advantages — development of innovative program and control strategy — success of a separate company, operating in gas industry — leading positions of gas industry in the economy in the whole" that explains contemporary stages of success achievement and substantiates the importance of knowledge and innovations in competitive struggle. The above-said information served the basis for the authors of the article for coming to a conclusion that innovative development of the companies, operating in gas industry, is manifested through the effectiveness of the received knowledge, i.e. through potential to analyze and design the results of the activities, to predict the prospects for improvements and to reach leading positions.

**Key words:** gas industry; innovative transformations; personnel development; educational resources; vocational training; scientific-research and design organization.

**FORMATION MECHANISM OF ASSESSMENT OF  
PERSONNEL PROFESSIONAL LEVEL IN  
"SCIENTIFIC-RESEARCH INSTITUTE OF OIL AND  
OIL PRODUCTS TRANSPORTATION, Ltd."  
(p. 27)**

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The article focuses on creation of some technique providing diagnosis of the level of personnel professional development being an integral part of human resource management system of any scientific-research organization of the industry and the key factor of its future progress. Today, neglecting of the diagnosis state of personnel development system deprives any organization of its strategic guidelines and brings the situation where personnel development system will implement uncoordinated efforts on professional training of a company's employees. The authors of the article studied the indicators, applied for assessment of the level of employees' professional training of some organization, operating in the industry. The indicators applied for assessing personnel development can be based on structural, resource, instrumental summing criteria, the content and conditions of practical application of which are proposed in the article. The research, performed in the present article, resulted in assuming the fact that regardless of the current level of a company's personnel development, specialists in practice get a real procedure of the correction factor calculation with account of the ranking scale and the importance of the assessment indicator that ensures comprehensive diagnosis. Presentation of real assessment of the most promising industry organizations became possible thanks to the performed research work. The above-mentioned information served the basis for the authors of the article to conclude that increase of professional development role in a modern company leads to the necessity of a deep and qualitative diagnosis of the problems existing in this branch of industry. At the moment, the leading foreign and domestic entities look like personalized systems of professional development.

**Key words:** R & D organization; personnel development; level of professional training; personnel training; diagnostics indicators.

UDK 331.101.32+331.101.38

**ASSESSMENT OF SIGNIFICANCE OF MOTIVATION  
FACTORS AND LABOR SATISFACTION DEGREE  
IN A CONTEMPORARY COMPANY  
(p. 32)**

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The article analyses and estimates the priority of motivation factors in one of contemporary oil and gas companies. It is important to understand that one and the same factor of motivation can be applied for satisfaction of a man's different needs. Study of the factors, which motivate and demotivate personnel's activity is required for constructing the correct and rational system of motivation and stimulation at an enterprise for guaranteeing high labor productivity, emotional climate perfection in an employees' team and employees loyalty increase. The data obtained served the basis for the authors of the present article to identify the prevailing and background (secondary) factors of motivation. Furthermore, the carried out analysis of labor satisfaction degree helped to reveal positive and negative moments of labor organization at an enterprise for their further correction.

**Key words:** motivation factors; labor satisfaction; motivation and stimulation system.

UDK 338.45

**SOME METHOD PREDICTING OIL CONSUMPTION  
VOLUME INSIDE A COUNTRY  
(p. 36)**

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The article considers some methods applied for prediction estimation development of a country's oil consumption with account of possible multicollinearity of the factors affecting the oil market. The article presents some estimation model that most precisely reflects the dependence of oil consumption on the factors under consideration.

**Key words:** oil consumption; multicollinearity.

UDK 662.67

**EFFECTS OF SHALE GAS PRODUCTION AND  
PROSPECTS OF ITS PROCESSING  
(p. 39)**

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The article considers shale gas markets of the USA and China and discusses the main trends of their development, among which evolution of hydrocarbons production and growth of competition in some regions of the world are defined as the leading ones. General threats and possibilities for Russia are shown.

**Key words:** shale gas; natural gas; production; shale revolution.