

# COMPANIES OF FUEL-ENERGY COMPLEX IN THE CONTEXT OF REGIONAL DEVELOPMENT: SOCIAL INNOVATION

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**Abstract:** *The main issues considered in this paper are: social innovation: the approach to increase financial participation of energy companies in the development of municipalities and regions; financial basis of social partnership between the enterprises of fuel and energy complex and regional authorities.*

**Keywords:** REGIONAL DEVELOPMENT, SOCIAL INNOVATION, COMPANIES OF FUEL-ENERGY COMPLEX, INFRASTRUCTURE, SOCIAL PARTNERSHIP

## 1. Introduction

Due to the specific structure of the Russian economy, the fuel and energy complex (FEC) is having a multidirectional impact on regional socio-economic system because it is basic regional infrastructure, and even in a crisis it remains the most important source of formation of a profitable part of budgets. It largely determines the possibility of implementation of social programs of regions and municipalities. The restructuring of the Russian economy and the negative processes in the external environment necessitate the use of social innovations, taking into account the existing potential of energy companies. They can include a change in the tax relations, as well as the development of social partnership in regions.

Companies of FEC are part of infrastructure development corridors (the territory where major investment projects are realized), which include both physical and innovation-investment infrastructure. Fuel-energy infrastructure provides the possibility of life on the territory (statics); transport infrastructure provides the connectivity of the territory (dynamics). Companies of FEC, receiving income from the resources of the territory, form the production frame of a territory. The combination of infrastructure development corridors, passing through the territory of the municipality and region, creates a framework for their development. Thus, the corridors of development have used resources of the territory. In this regard, it is necessary to increase financial participation of energy companies in the development of municipalities and regions.

A new approach to the taxation of income of employees may become the mechanism of participation of the extractive energy companies in the funding of strategic programs and development projects. The changes affect those individuals who have gross income for the tax period exceeding eight times the average wage by region. An additional amount of tax is distributed between the municipal and regional budget. The mass of municipal tax is proposed to determine using the Gini index. Regional mass of tax depends on the status of the region in the corridors of development, firmly fixed fact of implementation of projects in the region.

Such distribution may become the financial basis of social partnership of the enterprises of fuel and energy complex and regional authorities.

The *objective* of the theoretical research is to analyze possible mechanisms for the participation of companies of the fuel-energy complex in the regional development.

## 2. Prerequisites and means for solving the problem

The activities of companies in fuel-energy complex are carried out in the framework of regional socio-economic system.

Communications of companies in fuel-energy complex with other elements of regional socio-economic system, forms and conditions of such communications, which are depending on the competitiveness level of such enterprises, can be defined by theory of the market space, including the theory of spatial competition [1].

Actually, the reference points of this theory are:

- highlighting of complex factors of the productive forces localization in certain territories of the regional socio-economic system;
- possibility of obtaining the cumulative effect of the selected option territorial productive forces distribution.

Space (territory) localization of the activity of companies in fuel-energy complex is called the territory, where main production of the corporations and/or its subsidiaries, branches, divisions, provided the extraction, processing, transportation of fuel-energy resources, are located.

Companies in fuel-energy complex are important elements of sustainable development of regional socio-economic system, which have bipolar determinants of placement. They gravitate to the territories, possessing large reserves of natural resources; to urbanized territories, characterizing by a high level of transport, industrial, social, and financial infrastructures development [2,3,4].

Taking into account these determinants in the context of declining financing of the companies in fuel-energy complex the axis of regional development of economies and TRANS-regional interactions are formed.

Statistics demonstrate a high and growing over the last two years level of population poverty in the Russian Federation (table 1) during simultaneously increasing of Gini Index. This situation indicates the relative ineffectiveness of the current fiscal policy, which doesn't stimulate the development of small and medium enterprises and doesn't provide fulfillment of the social state obligations.

The unfavorable business environment and reducing real incomes are sufficient reason for review of fiscal policy in the direction of strengthening communication companies in extractive industry, in particular – in fuel-energy complex, with municipal and regional authorities in target to develop territories. This cause requires a review of the fiscal federalism mechanism, including fiscal relationships from the standpoint of increasing their own revenue part of local budgets.

Powerful industrial, economic and human potential of companies in fuel-energy complex plays a significant role in territorial development. However, it is worth attention to the social problems in the area. The reduction of budget financing of health,

education and culture should be combined with an increase of corporate social responsibility for condition and development of social infrastructure in the areas of their localization [5,6].

Table 1 – Population with incomes below living wage and lack of cash income in Russia

	Population with incomes below living wage		Lack of cash income	
	million people	percentage of total population	billions of rubles (before 1998 r. – trillions of rubles)	percentage of total volume of money incomes
1992	49.3	33.5	0.4	6.2
1993	46.1	31.3	4.3	5.4
1994	32.9	22.4	11.1	3.1
1995	36.5	24.8	34.9	3.9
1996	32.5	22.1	42.8	3.2
1997	30.5	20.8	46.2	2.8
1998	34.3	23.4	61.5	3.5
1999	41.6	28.4	141.3	4.9
2000	42.3	29.0	199.2	5.0
2001	40.0	27.5	238.6	4.5
2002	35.6	24.6	250.5	3.7
2003	29.3	20.3	235.3	2.6
2004	25.2	17.6	225.7	2.1
2005	25.4	17.8	288.7	2.1
2006	21.6	15.2	277.1	1.6
2007	18.8	13.3	272.1	1.3
2008	19.0	13.4	326.7	1.3
2009	18.4	13.0	354.8	1.2
2010	17.7	12.5	375.0	1.2
2011	17.9	12.7	424.1	1.2
2012	15.4	10.7	370.5	0.9
2013	15.5	10.8	417.9	0.9
2014	16.1	11.2	478.7	1.0

Source: composed by <http://www.gks.ru/> [7].

Corporate social responsibility is an effective tool for the participation of business organizations in the development of social infrastructure in the areas of their localization. This tool implies that public policies aimed at the motivation of firms, which are responsible of corporate social responsibility, should not be based on the effect of individual charity executives. The policy should base on scientifically idea that socially oriented corporations have the possibility of obtaining additional competitive advantages in the form of institutional annuities' various types. Such annuities allow corporations to effectively implement financial programs of social infrastructure in the areas of their localization [8,9].

We proceed from the fact that according to its economic nature corporate social responsibility is long-term investments in social infrastructure, which forms the institutional environment. In results of process investor has an opportunity to create new competitive advantages, which are the basis of institutional annuities' various types. In these conditions, the social infrastructure is becoming the main point of the institutional environment, the development of which directly influences on the competitive market development, the formation of business competitiveness and improve living standards.

### 3. Solution of the examined problem

Companies in fuel-energy complex are part of infrastructure development corridors. The level of development of each infrastructure element in the corridor influences on the width of the corridor defined by the least developed element. There are the following infrastructure elements in the corridor: the level of development of fuel-energy infrastructure; the level of development of transport infrastructure; the level of development of social infrastructure; the level of development of regulations and rules of material resources movement; the level of the

formation and development of human capital; the level of implementation of property functions; the level of development of the technology transfer order; the level of development of regulations and standards of innovation.

Territories entering in the development corridors, especially – located at their intersection or at the center of regional development have more favorable conditions for development due to project support of federal center. Companies in fuel-energy complex, which have access to non-regional resources and at the same time use the region resources, should invest part of their profits to the region (areas of their localization) development. Directions and targeted use of these funds are determined by the regional authorities within the framework of regional programs.

Personal income tax is a major source of increased revenue of the municipality budget. Companies in fuel-energy complex provide their employees remuneration that may significantly increase the average wage in the region. Differentiation of income, increasing in recent years, is a factor of instability growth in regions and municipalities.

Analysis of Gini Index results, which characterizes the population stratification by income at the regional level, has shown that almost all oil and gas producing regions are characterized by the maximum index value. At the same time the regions, providing the greatest contribution to the federal budget, are the least favorable according to the Gini Index. In such regions local budget are also deficient. Consequently, companies in fuel-energy complex are not the drivers of municipalities development in the areas of territory self-development.

Modification in tax relations consists in the rejection of the flat rate personal income tax. The mechanism of concept realization of the levying tax on windfall revenues of individuals – employees of companies in fuel-energy complex - may be the following:

The rate of the formation of the municipal tax mass ( $R_m$ ) is supposed to take equal to the difference between the meaning of Gini Index in region ( $G_s$ ) and the minimum meaning of Gini Index in regions of Russia ( $G_{min}$ ):

$$R_m = f(G) = G_s - G_{min} \quad (1).$$

The total tax mass of the windfall revenues of individuals - employees in central offices of companies in fuel-energy complex (regional mass tax on windfall revenues of individuals) is expected to transfer to the budgets of regions. The region share of transfer depends on the status of its territory in the development corridors and fixed by the fact of projects implementation in the region.

The task of the distribution of tax mass of the windfall revenues of individuals is solved in four stages by using dynamic programming. Model approbation (simulation) ensures the feasibility of mass distribution of the municipal tax using a supposed method.

The variability of economic effect presentation from the realization of municipal socio-economic processes is simply provided, for example, by standard sensitivity analysis of the business plan to changes in external factors.

Along with the improvement of fiscal federalism relations, focused on the formation of funds for the territories development, we can also offer the concept of corporate social responsibility.

In usual conditions business isn't directed to free society aid. It creates the conditions and opportunities to reduce its production and transaction costs in different types of rental relations. In this case financial and material investments in the social infrastructure development are the medium-term, and often long-term in comparison with the corporate life cycle. Therefore, only those organizations which at an economic point of view analyze the potential of its development in the medium and long term, have

the opportunity to engage in activities called corporate social responsibility.

Moreover, if the investment benefits in the social infrastructure for the state and society is obvious (the society gets new features of its development, the state reduces the pressure on the budget, shifting payments of part of its social functions in the business), the business implementation of corporate social responsibility programs is a matter of alternative expectations and opportunities.

The basic implementation principle of the proposed concept of using the potential companies in fuel-energy complex for territories development is a principle of systematic dialogue based on mutual respect of interests, values, attitudes and differences of key participants. The corporate program of the territory development in its socio-economic content should be an instrument of cooperation companies in fuel-energy complex with local authorities and regional government.

The funds allocated for the program implementation should be output from the tax base in the calculation of the income tax. Program of activities should be formed in communication with the regional and local authorities and it should contribute to solving urgent problems in the macro- and meso-levels.

Business activities, based on its social responsibility, implies its participation in various social programs, aimed at reducing the environmental, technological and other problems, associated with its production in certain territory. Note that large corporations in the fuel-energy complex participate in environmental activities.

Socially responsible business, participating in scientific, economic and social researches, creates the mechanisms and programs of human capital development as the basis for the economic potential growth of the territories.

Territorial dominants of social activity of Russian fuel-energy corporations establish quite difficult due to incomplete data on directions and volumes of financing in the areas of their corporate social responsibility programs. In order to get an overall picture, it was made a content analysis of sites of the largest fuel-energy corporations - PJSC "Gazprom" and JSC "Lukoil" [10,11]. «Gazprom» in the framework of corporate social responsibility implements three basic programs:

- "Gazprom to children";
- support for cultural projects;
- support for the sport.

The program "Gazprom to children" has undoubted importance for the regions and municipalities, because it directly contributes to the formation and development of human capital - important resource of the regional economy. Social and charity programs are positioned by PJSC "Gazprom" as an essential element of cooperation with the state and business environment. Its strategic charity programs and social investments are considered in the aspect of harmonization of the strategic corporation objectives and urgent municipalities social and economic problems.

"Lukoil", using its subsidiaries, is involved in solving the problems of the indigenous population in the territories of its localization. Corporation developed the Social Code.

Also, analysis of companies programs and reports was carried out and the results are the following: "Gazprom" [11], Rosatom [12], "Transnefteprodukt" [13], "Yakutskenergo" [14], "Transneft Siberia" [15], "Inter RAO UES" [16], and some other.

The programs allow generalizing corporation's experiences and proposing the concept of the impact of socially responsible corporations' behavior in the fuel-energy complex on regions and municipalities development.

#### 4. Results and discussion

Companies in fuel-energy complex are part of infrastructure development corridors, including both physical infrastructure elements and innovative-investment infrastructure.

Among the objects of physical infrastructure fuel-energy and transport infrastructure are highlighted. Fuel-energy infrastructure enables the ability of livelihoods in the territory, its static; transport infrastructure provides connectivity of territories, its dynamics. Corporate structures of fuel-energy complex, receiving income from the territory resources, creates production frame of territory. The set of infrastructure development corridors, crossing the municipality and region territories, creates development frame. Development Corridors created during the implementation of major investment and national projects, use territory resources.

Stimulating role of corporate structures in the sector consists in increasing of their financial presence in the municipalities and regions. This is possible due to the attachment of income to territorial development, including social infrastructure within the framework agreed with regional management programs.

The question of the producing companies' participation in the formation of revenues in municipal budgets to finance expenditures in excess of current needs (strategic development programs and investment projects) is also legitimate. It is supposed to direct part of the tax on personal income imposed on employees of companies in fuel-energy complex whose total income for the period prior to the tax payment exceeds the eightfold size of the average wage in the region to the municipal budget revenues. Such standard seems fair in relation to employees in industries profiting by the use of natural resource rents, and appropriate the national focus on the development of social policy.

In the regions and municipalities, where the corporate structures in the fuel-energy complex are based, great potential has the development of corporate social responsibility. Corporate social responsibility is institution aimed at the formation and realization of public goods in the development of social infrastructure. Institute, in which socially-oriented company in the medium and long term gains the possibility to reduce different types of transaction costs in the market and intra-firm relations, through the competitive advantages formation of using different types of institutional annuities resulting from the development of social infrastructure.

Companies in the fuel-energy complex have significant organizational and financial capacity and are able to direct it in the implementation of social development programs, corporations and territorial development programs. The potential for such development programs based on the fact that the interests of large corporations in the development of the municipality and / or the region connected with the use of the territory as a competitive business advantage. Today an effective corporate social strategy can be a major tool of competitive advantages creation of the company.

#### 5. Conclusion

In the socio-economic region development corporate structures in fuel-energy complex play a special role as economic agents, whose decisions about the choice of their activity localization on the basis of bipolar placement determinants (resources and urbanization) in the conditions of financial support decrease, creates the axis of regions economic development and trans-regional interaction.

Economic federalism is based on the recognition of the economic viability of regions in the Russian Federation and factual equality of regions within their suitable competences. The unfavorable business environment and reducing real incomes are sufficient base for review of fiscal policy in the direction of strengthening communications corporate structures in fuel-energy

complex with municipalities and regions for the territory development.

Companies in fuel-energy complex can be seen as part of infrastructure development corridors. Territories included in the development corridors, in the framework of project financing are supported by the federal government. Companies in fuel-energy complex, which have the project financing, at the same time using non-regional resources and capacities of the territory, therefore, should be involved in solving social and economic problems of the regions and municipalities.

A mechanism of producing companies participation in the formation of municipal budgets revenues to finance the strategic areas of development programs. It is proposed the concept of levying tax on windfall individuals – workers of companies in fuel-energy complex - based on the measurement of the difference between the meaning of Gini Index in region and the minimum meaning of Gini Index in regions of Russia.

Powerful industrial, economic and human resources potential of corporations in fuel-energy complex plays a significant role in territorial development, and should be used in the framework of corporate social responsibility for the availability, condition and development of social infrastructure in the areas of their localization.

Thus, the development of corporations in fuel-energy complex should be implemented as an integrated territorial and sectoral approach taking into account the interaction with the institutional environment of the regional socio-economic system, with the use of mechanisms to fairly redistribute the resulting FEC rents in order to improve the spatial uniformity of the socio-economic development of regions and municipalities.

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