
New Forms of Coal Industry Management

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Abstract:

The article studies progress and problems of development of coal industry in modern Russia and views regulatory basis and perspectives of use of new forms of coal industry management, which include public-private partnership and formation of territorial clusters.

Key Words: *forms of management, coal industry, public-private partnership, territorial cluster.*

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Introduction

Forms of coal industry management in the Russian Federation were changed with change of state and economic structure. Up to 1992, centralized management was used, while in 1994-2001 there was intense privatization of coal-mining and related enterprises (infrastructure). At present, cooperation of state and coal enterprises is based on the mechanism of public-private partnership, the foundations of which are set in the Long-term program of development of coal industry of Russia until 2030, adopted by the decree of the Government of the Russian Federation dated June 21, 2014 No. 1099-r [Long-term program of development, 2014].

As in the previous form of the program (adopted in 2012), perspectives of development of the Russian coal industry are connected to realization of the mechanism of public-private partnership (PPP). Thus, PPP is considered the main form of management of coal sphere of industry both at federal and regional levels [Parfentsev, 2012]. Public-private partnership is understood as coordination of long-term interests of state and business, combination of efforts of state and business, and division of responsibility and risks.

Materials and methods

Issues of development of potential of public-private partnership, including the sphere of territorial socio-economic development, are studies in works of Zhikharevich B., Khusnutdinov S., Shvetsov A., S. Tyaglov, Chumachkov D.V., V.G. Varnavskiy, M.B. Gerrard, L.I. Efimova, A.G. Zeldner, V.A. Malygin, V.N. Molchalnikov, A.V. Runov, A.A. Smakhtin, A.A. Komisarova, A.N. Dulin, etc.

Among foreign scientists, which contributed a lot into development of methodological foundations of study of relations of public-private partnership and their influence on the development of national economies, are A. Atkinson, J. Buchanan, J. Galbraith, J.M. Keynes, F. List. K. McConnell, W. Eucken, J. Stieglitz, G. Tullock, etc.

Peculiarities of public-private partnership in coal industry are studies in the works of S.V. Parfentsev, S.V. Smakhtina, M.A. Komisarova, A.N. Dulin, etc.

Main part

According to the program document, main interests of state should be connected to realization of long-term state energy policy and conform to the Concept of long-term socio-economic development of the Russian Federation until 2020.

According to the Program's authors, interests of business should be related to provision of economic effectiveness of operational activities and investment attractiveness of coal industries, with internal goals of company being maximization of profit and preservation of internal and external market.

State's responsibilities include: improvement of regulatory basis of production functioning, including its modernization, provision of control and favorable investment climate. The sphere of responsibility of business includes: initiation and realization of projects, related to modernization of production; provision of necessary level of industrial safety, labor safety, and performance of social responsibilities.

Analysis of the results of implementation of PPP's mechanism shows that state performs decisive influence on such spheres as [Tkacheva et al., 2015]:

- formation of markets, including issues of pricing policy;
- development and use of various forms of state support;
- formation of social and investment environment;
- development of science and education.

The state performs functions of development of long-term landmarks for development of related spheres, including electrical energetics, gas industry, and transport, and controls the issues of regional socio-economic development and rational fuel and energy balances. An important function of the state is implementation of anti-crisis measures – for example, subsidizing a part of interest rate for investment loans, refinancing of debt liabilities, and performance of the programs for support for coal mono-cities.

As a result of implementation of the mechanism of public-private partnership, as a form of coal industry management, positive results are received. The recent 10 years became a stage of stable development for coal industry, which coincided with recovery growth of the country's economy. During this period, the volume of Russian coal production grew by a fourth part and now exceeds the level of 350 million tons per year. The volume of investments into capital stock of coal enterprises grew by 4 times (in current prices), and new capacities for coal production are started each year with more than 20 million tons production.

Labor effectiveness in this sphere grows, and concentration of production is observed, with more than 70% of coal production provided by mines with average annual capacity of 1.6 and 3 million tons accordingly.

According to requirements of sales markets, and, first of all, of external market, the quality of manufactured coal production grows. Beginning from 2000, volumes of coal beneficiation grew by 1.5 times, including forge coal – by 2 times. During this period, 20 concentrating plants were started, of which 11 are for processing of forge coal. Most of new concentrating plants relate to new generation plants. As a result, the share of ballast component in final coal products reduced from 33.3 to 28.5 per cent.

Despite significant progress in coal sphere which was observed over last 10 years, the following problems of systemic character remain unsolved:

– reduction of internal demand for forge coal - beginning 1988 (the year of the highest consumption of forge coal in the internal Russian market), internal demand reduced by 1.6 times. Low cost of natural gas in the internal market does not allow coal production to compete with gas in the sphere of electric energetics and in housing and utilities sector;

– underdevelopment of infrastructure in new districts of coal production. Further development of new deposits (Elgin carbonous deposit, Ulugkhem carbonous basin) requires construction of infrastructural objects (bridges, villages, power stations);

– lack of motivation with users of deposits during exploration works;

– long process of restructuring of coal industry, significant volume of additional social load in the form of coal allowance, social benefits for the retired, and problems of miner mono-cities in existing coal basins.

The enumerated problems are not new for coal industry – however, they have not been solved at federal, departmental, and regional levels from 1994 till now.

The recent decade showed a range of new problems, solving of which is not ensured by existing system of sectorial management and requires new forms of sectorial and regional management. They include:

1. Dependence of coal sector on imported equipment and technologies, as a result of uncompetitiveness of products of Russian coal machine building. According to the data [1], the share of imported mining and conveyor equipment grows, and over 2010-2012, this share increased from 37 to 49.6% - at that, the share of imported shearer-loaders reached 75%, loading machines – 83.8%, technological cars – 87.4%.

2. On average, low profitability of coal sales, high level of interest rate, and short crediting period hinder investments into modernization and increase of works safety;

3. Increasing deficit of qualified labor personnel, reduction of prestige of mining professions due to difficult labor conditions and relatively low wages.

Apart from internal systemic problems, there is a range of external problems which hinder development of the sphere and require new forms of management.

One of them is excess of coal offer over demand in the global scale, which led to long-term reduction of prices in external coal markets. This tendency is supported by stagnation of economy in the Eurozone and consequences of shale revolution in the USA, which led to increase of export of American coal by 72 million tons over three last years. Thus, competition in traditional sales markets of Russian coal became very tough [Batashova & Zhukova, 2015].

In this situation, enterprises, which export the coal of Kuzbass, became especially vulnerable, as they are equally distant from ports of the western direction and from Eastern ports, with the share of railroad tariff up to 40-45%. If pricing tendencies in

the global markets of coal preserve, probability of bankruptcy of these companies is very high.

Solving the above problems requires new approaches which ensure full use of potential of coal production. The most expedient is realization of cluster approach in this sphere.

The notion and definition of cluster were first introduced in the works of Porter, in which cluster is determined as a “group of interconnected companies and institutes, concentrated within the limits of geographical territory and working in the same sphere” [Porter, 1998]. According to Porter, clusters cover not only interconnected enterprises but also organizations which are important from the point of view of provision of competitiveness. They can include suppliers of specialized equipment and developers of specialized products. Clusters often distribute their influence on sales channels (horizontal integration) and manufacturers of accompanying products, as well as organizations which perform scientific research and developments. Many clusters include governmental and other establishments: universities, R&D centers, and trade associations.

According to Porter, regions’ competitiveness largely depends on development of industrial clusters. Territorial proximity of market members stipulates exchange of ideas and experience. Study of development of successful economies emphasizes importance of development of innovational industrial clusters which are characterized by high level of integration, allowing private companies to better adapt to changing conditions of external environment. Cluster organization stimulates innovations and economic knowledge. According to Porter’s theory of clusters, clusters stimulate regional development as a result of:

- increase of efficiency;
- increase of innovational potential which ensures future increase of efficiency;
- stimulation of establishment of new enterprises, by means of which cluster expands and strengthens.

Development of clusters are stipulated by such factors as availability of natural resources or institutes, such as companies or universities, which, with time, stipulate appearance of new types of economic activities within cluster and help to attract investments from companies which are located beyond region’s limits.

In scientific works, devoted to various issues of clustering of coal industry [Pavlenko & Zakharov, 2013, Krasnyansky, 2011], and in new edition of long-term program of the sector development, clusters are viewed as creation of interconnected productions on the basis of coal deposits, aimed at full use of coal potential as mineral deposit.

Developers of the program deem it expedient to create coal-energetic and coal-technological clusters, oriented at production of electric power from coal, deep processing of coal for receipt of product with high value added, and use of production waste.

Coal sector is peculiar for the fact that enterprises are concentrated within the basin. In the regions of coal deposits, educational establishments, which train specialists for coal sector, develop together with coal enterprises – as well as R&D institutes, the number of which is catastrophically reduced beginning from 1991 [Smakhtina, 2013].

We consider it advisable to implement the classical cluster model in this sphere, which supposes not only production integration but formation of innovational environment [Batashova, 2013], including scientific organizations and educational establishments, as well as high integration with suppliers of specialized equipment, means of automatization and computerization of the sphere, and development of accompanying and new types of production.

Understanding the necessity for development of cluster approach in regional management of industrial sectors led to improvement of regulatory provision of clustering at federal and regional levels.

At present, it is possible to distinguish several laws and regulations which provide definition for industrial clusters and regulate the processes of their creation and functioning. They include [Concept of long-term socio-economic development ..., 2008, Strategy of innovational development..., 2011, Forecast of socio-economic development..., 2015, Federal law “Concerning industrial policy..., 2014]:

1. Concept of long-term socio-economic development of the Russian Federation until 2020. In this program document, innovational orientation of regional development is connected to formation of territorial-production clusters, oriented at high-tech production in top-priority sectors of economy, with concentration of such clusters in urbanized regions.

2. Strategy of innovational development of the Russian Federation until 2020, which introduced the possibility for additional financial help for subjects of the Russian Federation which stipulate the development of innovational sector of economy, including provision of subsidies for subjects of the Russian Federation for the purpose of development of innovational territorial clusters.

3. Forecast of socio-economic development of the Russian Federation for 2015 and planned period of 2016 – 2017. This document includes provision of state support for 25 pilot innovational territorial clusters and describes specific measures for their support, which include:

- Provision of subsidies for subjects of the Russian Federation for the purpose of realization of measures, envisaged by programs of development of innovational territorial clusters (volume of subsidies in 2014 constitutes RUB 2.5 billion, and in 2015 – 2016, RUB 10 billion will be provided);

- provision of support for realization of measures of programs of development of innovational territorial clusters within state programs of the Russian Federation (required total volume of financing of projects for development of innovational clusters with involvement of state programs' money, according to evaluation of the Ministry of Economic Development and Trade of Russia, constitutes around RUB 115 billion, including from assets of the federal budget – appr. RUB 60 billion, from budgets of the subjects of the Russian Federation – appr. RUB 9 billion, from non-budget sources – appr. RUB 47 billion);

- attraction of state institutes of development to realization of programs of development of innovational territorial clusters;

- stimulation of participation of large companies with state share, which realize programs of innovational development, in activities of innovational territorial clusters;

- support for subjects of small and medium innovational business on territories of innovational territorial clusters.

4. Federal Law “Concerning industrial policy in the Russian Federation”, in which:

- notion of cluster was first introduced as a totality of objects of activities in the sphere of industry, connected by relations in this sphere due to territorial proximity and functional dependence and located on the territory of the same subjects of the Russian Federation or on the territories of several subjects of the Russian Federation;

- rights of public authorities (which set requirements to industrial clusters, specialized organizations of industrial clusters for the purpose of application of stimulating measures to them) and subjects of the RF (which set additional requirements to industrial clusters and specialized organizations of industrial clusters for the purpose of stimulation of their activities by means of property and budgets of subjects of the RF) are delimited;

- necessity is set for creation of specialized organization which performs methodological, organizational, expert & analytical, and informational support for development of industrial cluster, as a condition for stimulation of activities (including financial) of the Government of the RF.

A range of laws regulate the processes of creation and development of clusters in regions – they include [Federal Law “Concerning industrial policy..., 2014, Order of the Government..., 2011, Methodological recommendations..., 2008]:

1. Order of the Government of the RF “Concerning adoption of the Strategy of socio-economic development of the Southern Federal District by 2020”;

2. Methodological recommendations for realization of cluster policy in subjects of the Russian Federation.

Issues of state financing of innovational territorial clusters in Russia are regulated by a list of decisions of the Government of the RF [Decision of the Government..., 2013, Order of the Ministry of Economic Development and Trade..., 2013], in which: rules of distribution and provision of the federal budget assets for develop-

ment of innovational territorial clusters in the subjects of the federation are described; forms of financed measures and level of co-financing of expenditures of subjects of the RF for these measures are set.

Thus, coal industry features objective preconditions for transition to cluster form of management which provides innovational development of the sphere.

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