

Strategic planning features of subsurface management in Kemerovo Oblast

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Abstract. The article discusses the strategic planning features of regional development based on the production and subsurface management in Kemerovo Oblast. The modern approach - SWOT analysis was applied to assess the regional development strategy. The estimation of regional development plan implementation was given for the foreseeable future.

1. Introduction

Research and practice of the raw material industry management indicate qualitative changes in enterprise development and operating conditions. Globalization and raw material sector boundaries change business processes beyond individual enterprises. Enterprises are becoming strategic regional networks with changing participants from different economy sectors. Effective strategic management becomes critically important for competitive enterprises. Under current circumstances, it is becoming more interdisciplinary, integrating concepts, models and economics and decision-making tools, marketing and finance, sociology and psychology. Strategy, management and business processes are closely interconnected and form each company integrity. The company's business model efficiency depends on these elements, concurrence, as well as correlation to each other.

2. Materials and Methods

Kemerovo region is a major ore mining region in the Russian Federation. The region consists 20 towns, 19 rural districts, 23 urban-type settlements, and 167 village councils. The largest towns are Novokuznetsk (population of 563.5 thousand) and Kemerovo (population of 521.2 thousand), and the towns of Prokopyevsk, Belovo, Leninsk-Kuznetsky, Kiselevsk, Mezhdurechensk with a population of over 100 thousand, respectively. Kemerovo region share in the total industrial output of the Russian Federation is about 2.5-3.0%. In particular, Kemerovo region share accounts for 58 percent of the coal mining and 76 per cent of coking coal in Russia. The region produces 12 percent of rolled ferrous metal products, 12 percent of steel, 7 percent of chemical fibers and yarns. Kemerovo Oblast with an area of 95.5 thousand sq. km is a great mineral and raw potential development area which is becoming one of the leading industrial regions of Russia [1]. It is the major mineral resource producer and consumer at the same time. The region mainly exports coal and natural raw materials rich in aluminum (urtites). Many other types of raw minerals are imported: from white-burning clay, glass-making sand, alloying additions for steel production to natural gas. There are virtually all types of mineral raw material objects: from liquid and gaseous



hydrocarbons to construction materials and mineral underground waters. Undoubtedly, coal and iron are primary minerals and ferrous metallurgy base of the region. Plenty of minerals are intensively being developed such as: coal, iron ore, construction materials, polymetals, gold, nepheline ore, underground drinking and mineral water.

As in any other regions, the regional mineral developers have a number of issues:

- fast growth of core product cost development. For instance, mining cost per a tonne of coal is increasing 20% annually;
- high transport expenses of producers, as primary consumers of coal and metallurgic production/output are at distance of 4-5 thousand km from Kemerovo Oblast;
- limited homegrown raw material base for ironworks;
- inadequacy of professional development system of the market demands.

To increase the regional development efficiency including the base material sector, 'Kemerovo Oblast: Strategy for social and economic development through 2025' document has been developed.

The strategy target is to increase the regional economy competitiveness and the welfare growth of the population. The main trends should be taken into account when developing the goals and their further implementation, i.e.:

- complex extracted raw materials processing and its effective implementation;
- regional consumer product consumption development; Kemerovo region manufacturers' entry into new markets;
- reducing infrastructure limitations in the development of the regional economy coal sector;
- economical recovery provision;
- personnel training system development, imbalance elimination in labor market development;
- innovative centers and product development [2].

These trends are of contradictory significance for the region. On the one hand, they create the possibility of market players capable of implementing large-scale investment projects and resistant to market price fluctuations. On the other hand, they reduce potential impact of the regional and municipal authorities on large companies. In particular, the region already suffers from the fact that major companies sell their products regionally manufactured at transfer prices and conduct transactions at market price through external trading companies. According to the regional administration estimates through the transfer pricing and tolling (foreign raw materials processing and further finished product export), the volume economy income tax payment is 3-4 bln. rub. per year for large companies. The regional development target implementation is its economy competitive recovery and population welfare growth. This in its turn, closely interrelates sub-targets solutions and makes it necessary to implement a number of major strategic projects, including stable growth provision in the economy core sector:

- economy sector raw material base development;
- basic sector product consumption increase within the country and entry to new markets;
- infrastructural limitations ease affecting the regional basic sector development and its economy enterprises;
- personnel training system development, imbalance elimination in labor market and settlement system development.

At the same time, the strategy identifies a number of risks that could change regional growth directions into long-term perspectives. They are:

- economic dependence risk on the regional public sector on world coal and metal commodity markets environment.
- resource base depletion risk
- environmental risks
- lack in technology and others.

Each region has its own features that are the key in the economy itself. In Kemerovo Oblast there are coal and steel industries, the share of these two sectors account for 70% of the total volume of shipped goods, and over 40% of the total volume of gross regional product. Kuzbass possesses the necessary objective prerequisites for further increasing production volumes and maintaining a leading position of the country's coal basin. There is 265 bil. coal within Kuzbass

area, which today reflects the most favorable conditions for the development and account 44.5% of similar CIS countries reserves. In Kuzbass, within these years, more than 6.5 bln. tons of coal were mined. On that basis and on conditions of the market economy restructuring, a more reasonable approach in determining coal mining volume has appeared and there are good reasons to believe that its favorable mining reserves will be enough for tens of centuries.

3. Results and Discussion

Kemerovo Oblast is the major developed regions in Siberia, which have a pronounced raw-material specialization. It is the leading economy sector. Its energy contribution to the GRP - 49.8%, which is much higher than the average for the SFD and the Russian Federation. In the national-wide and international division of labor the region is involved in the raw materials and output production of its primary processing.

Table 1. SWOT - analysis of Kemerovo Oblast development

S (strengths)	W (weaknesses)
1. 80% of the Russian Federation mines are concentrated in Kemerovo region; 66.4% of Russia's coal reserves, 57% of metal ores large stocks and mining. The main R & D centers in the coal and mining industry. 2. 14% of the Russian rolled products, 17% of steel, 80% of the mains and 100% of tram rails. 3. Region is focused on export. 4. The largest regional system of urban settlements in the Urals (22 cities, including 2 with a population of over 500 thousand., 5 with a population of from 100 to 250 thousand, 5 with a population from 50 to 100 thousand.).	1. Innovation and technological developments backlog compared to the best world practice. 2. Infrastructure limitations of the basic economy sectors. 3. Strong dependence on the export conditions in the world markets. 4. Depletion of available natural resources, significant investment needs for the resource base improvement. 5. Poorly developed urban environment (this discourages investment flows in the high-tech and management sectors).
O (opportunities)	T (threats)
1. Changing technology platform in the coal and mining industry of the Russian Federation, center displacement of technological and support services. New large-scale projects in Siberia and the Far East. 2. The growth of demand for coal (growth share in the country fuel balance) and the high demand for ferrous metals. 3. Increase of oil and gas cost is a prerequisite for coal and chemistry high profitability. 4. Major investment projects in the region.	1. Improvement of competition from the world's largest producers. 2. Decrease of the attractiveness of the primary industry employment, growth of personnel deficiency risks. 3. High risk of environmental condition deterioration due to the growth of coal mining and other mineral production. 4. Increase in transportation and raw materials delivery costs, outrunning the growth of prices of the basic sector products. 5. Complete homegrown engineering replacement by import.

4. Conclusion

The development strategy of Kemerovo region for the period of up to 2025 will be implemented in most areas. The main source of further social and economic development of Kemerovo Oblast should be economic efficiency improvement and its core activities based on its productivity growth. It is necessary for the region to manage more efficiently its unique natural and mineral resources, capital and labor potential. The current regional economy framework is most likely will be a long term perspective. The main source of growth in Kuzbass will remain the primary industry sectors (metallurgy, coal and chemical industries). There is a need to introduce new innovative projects in these sectors. This difficult task implementation is possible only via joint business, regional authorities and society efforts.

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