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## **Economic analysis of the modernization of production in the phosphorus enterprise "Kazphosphate" LLP**

Zhambyl region has many types of mineral resources, the development of which is carried out at different rates. A special place is occupied by the development of phosphorite deposits. As is known, the most studied deposits of phosphate raw materials are: Zhanatas, Chulaktau, Aksai, Koksus, and others, that is the region is the only producer of phosphorus concentrate, phosphorus flour, and fluorinated phosphates in the republic.

The phosphorus industry is represented by the following enterprises: Kazphosphate LLP, Khimprom-2030 LLP, KazAzot LLP and Reactive Phosphorus Salts JSC. Kazphosphate LLP is a vertically integrated company, which includes enterprises from the extraction of phosphorite ore, its processing and production of finished products.

The analysis of the economic indicators of the production activity of Kazphosphate LLP for the period 2016-2020 indicates that the listed indicators have a dynamics of slight improvement (Table 1). Thus, there is an increase in a number of indicators - this is an indicator of profit, profitability of production, return on funds, the coefficient of intensive use of equipment, the equipment load factor. However, in general, it is necessary to direct all efforts at the enterprise to improve the use of fixed production assets, since a high degree of physical wear of equipment, backwardness of technology hinders the stable functioning of the phosphorus industry.

Therefore, the search for the optimal production structure of fixed assets is the most important direction for improving their use.

In recent years, the volume of investments in Kazphosphate LLP has increased slightly, but it is only a third of the level of 2016. The coefficient of renewal of fixed assets is four times lower than the minimum required. Most operating enterprises are

forced to direct part of their profits to replenish working capital and repair equipment. The outstripping growth rates of prices and tariffs for products of natural monopolies, especially for gas and electricity, also have a negative impact. Unstable provision of the industry with basic raw materials, especially hydrocarbons (liquefied gas, natural gas, etc.), carbon-containing products (coke, coke fines, anthracite), as well as interruptions in the supply of sulfuric acid, does not contribute to the normal functioning of enterprises. The fifth negative factor is the insufficient capacity of the domestic market of phosphorus products.

Table 1 - The main economic indicators of Kazphosphate LLP for the period 2016-2020.

№	Name of the indicator	Designation, unit of measurement	Years				
			2016	2017	2018	2019	2020
1	Profit from sales	P, million tenge	18,7	24,6	33,4	52,56	73,6
2	Unit cost of production	C, thousands of tenge	22,2	22,3	23,0	22,9	22,8
3	Unit price	P, thousands of tenge	22,6	22,8	23,4	23,5	23,6
4	Profitability of production	P, (%)	7,6	7,2	7,3	9,4	9,6
5	The coefficient of extensive use of equipment	Cex	0,6	0,68	0,75	0,6	0,6
6	Equipment load factor	Elf	0,88	0,89	0,85	0,9	0,94
7	Equipment shift ratio	Esr	0,3	0,25	0,28	0,3	0,24
8	The coefficient of intensive use of equipment	Cinten	0,5	0,4	0,65	0,4	0,62
9	Coefficient of integral use of equipment	Cint	0,44	0,3	0,4	0,36	0,36

10	Fund returns	Fr	1,09	1,1	1,12	1,15	1,19
11	The stock capacity of the products.	SCP	0,92	0,91	0,89	0,87	0,83
Note - compiled according to the data of Kazphosphate LLP							

The analysis of investment processes of modernization of phosphorus production shows that the volume of investments in fixed assets increases from year to year. Thus, the analysis of the technological structure of investments in fixed assets in recent years shows an annual increase in the costs of construction and installation work and the purchase of equipment, tools (Table 2). However, it should be noted that investments in the purchase, repair of equipment, spare parts and materials by specific weight account for most of the total investment. For example, in 2019 and 2020, these costs amounted to 73.27% and 55.12%, respectively.

Table 2 - Structure of investments in fixed assets in Kazphosphate LLP for 2016-2020

Indicators	Years				
	2016	2017	2018	2019	2020
in million tenge					
Investments in fixed assets - total	143567,45	224533,54	278063,72	94001,34	386809,38
of these:					
equipment, tools, inventory	75708,11	135556,56	60111,09	68283,51	213201,5
as a percentage					
Investments in fixed assets – total	100	100	100	100	100
of these:					

equipment, tools, inventory	52,74	60,38	43,54	73,27	55,12
Note - compiled according to the data of Kazphosphate LLP					

Currently, many foreign investors are interested in investing in the domestic phosphorus industry. For example, MCC Eurochem is launching a project to develop phosphorus deposits in Kazakhstan, and also intends to build a large-scale production of complex fertilizers there. The project of the MCC "Eurochem" is aimed at the development of three phosphorus deposits of the Karatau basin, the construction of a Mining and processing plant and three plants on their basis. On the basis of the Sary-Tas plant, the company plans to build phosphate fertilizer plants with an estimated capacity of about 1 million tons per year and nitrogen fertilizers (0.8 million tons per year), as well as a complex for the production of complex fertilizers (0.5 million tons per year).

Modernization of production provides a comprehensive and highly efficient renewal of fixed assets. This capacious concept includes not only the renewal of manufactured products, but also profound transformations in the technique and technology of production, labor organization and management, in the entire system of social and economic relations at the enterprise.

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