

A stylized graphic consisting of several overlapping, flowing teal-colored lines that resemble a wave or a ribbon, positioned behind the text.

**SPECIAL ECONOMIC ZONE
PAVLODAR**

THE REPUBLIC OF KAZAKHSTAN
IN WORLD RATINGS:

- 1st PLACE** IN THE WORLD TO PROTECT MINORITY INVESTORS
- 9th PLACE** IN THE WORLD AROUND THE TERRITORY
- 28th place** IN THE GLOBAL RATING "DOING BUSINESS"
- 31th PLACE** AMONG COUNTRIES WITH HIGH LEVEL OF HUMAN CAPITAL DEVELOPMENT



ЛУЧШАЯ РЕСУРСНО-СЫРЬЕВАЯ БАЗА
2018 ГОДА ПО ВЕРСИИ

OFFICIAL MEMBER
WITH THE RIGHT TO VOICE



INFRASTRUCTURE

<p>ENERGY \$0,05 / kWh 105MW</p>	<p>TECHNICAL WATER \$0,08 / m³ 675m³/h</p>	<p>DRINKING WATER \$0,3 / m³ 220m³/h</p>
<p>ROADS 15km</p>	<p>RAILWAY HUB-SYSTEM</p>	<p>CANALISATION 15300m³/day</p>
<p>LAND PLOTS 1200ha</p>	<p>- FREE RENT UP TO 25 YEARS</p>	



INSIDE SEZ

0%

CORPORATE INCOME TAX

0%

VALUE ADDED TAX

0%

PROPERTY TAX

0%

LAND TAX

0%

CUSTOM DUTIES

OUTSIDE SEZ

20%

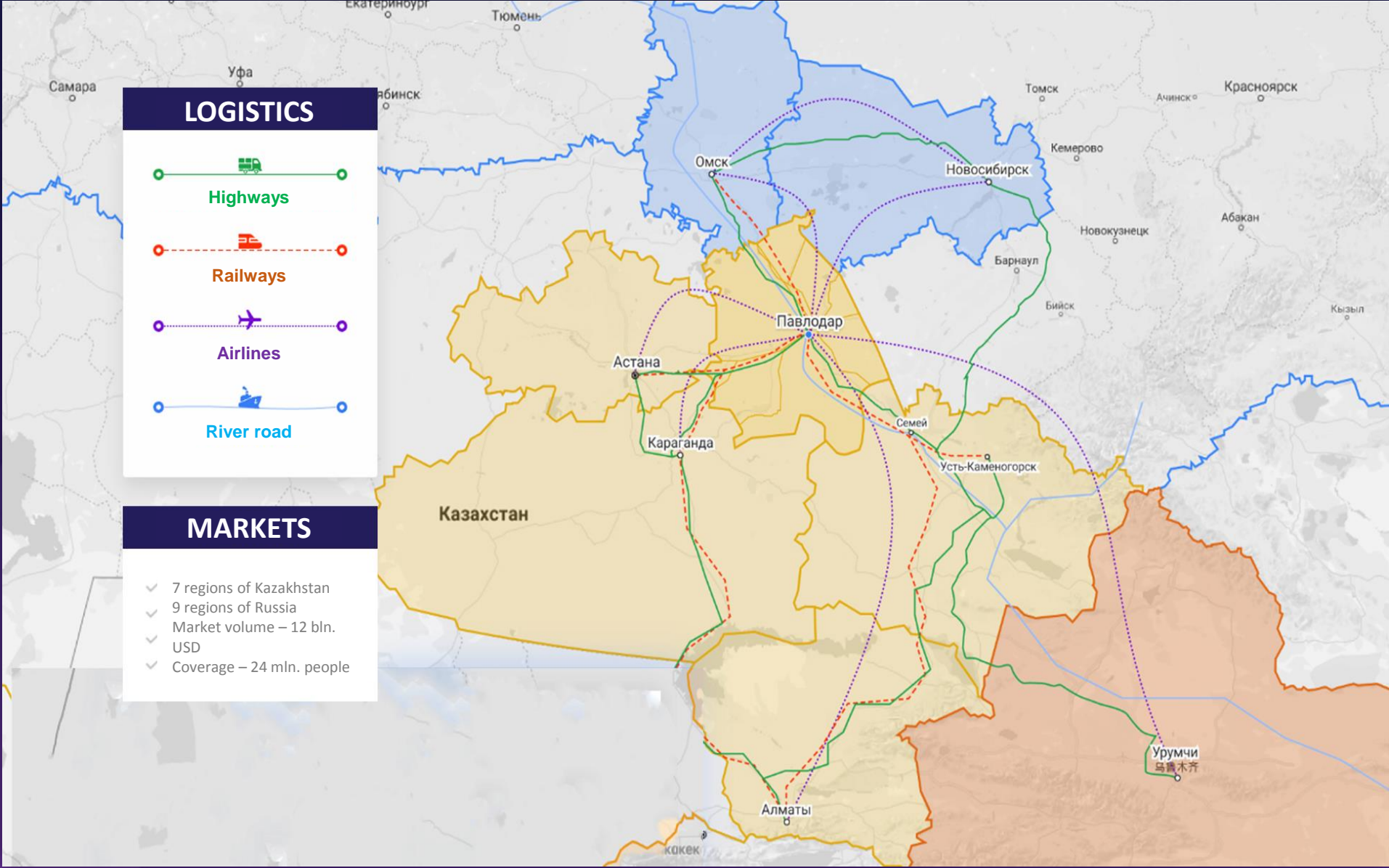
12%

1.5%

4¢/m²

BY CCT EAEU

SALES MARKETS AND LOGISTICS



AVAILABLE RAW MATERIALS AND RESOURCES



- Electricity
- Aluminum
- Caustic soda
- Sodium hypochlorite
- Ferroalloys
- Polypropylene
- Salt
- Quartz and quartzite
- Lead, zinc
- Calcium carbide
- Oil, Gas
- Lithium
- Cable conductor
- Polyethylene
- Dyes

- Coal, brown coal
- Liquid chlorine
- Hydrochloric acid
- Petroleum coke
- Gasoline, diesel
- Clay, sand
- Gold
- Copper, copper ore
- Titanium, magnesium
- Steel
- Nickel, cobalt
- Cement
- Caoutchouc, latex
- Oils and lubricants
- Rubber

ZONING OF THE TERRITORY OF SEZ «PAVLODAR»



1200 Га

IMPLEMENTED PROJECTS
IN- PROCESS PROJECTS
FREE LANDS



POTENTIAL BUSINESS NICHES FOR MANUFACTURING ON SEZ «PAVLODAR»



A stylized map of the Pavlodar region in Kazakhstan, rendered in a gradient of blue and purple. The map is positioned on the left side of the image. Inside the map, there is a logo consisting of a blue wave-like shape with the text "SPECIAL ECONOMIC ZONE PAVLODAR" written in white capital letters.

**SPECIAL ECONOMIC ZONE
PAVLODAR**

READY BUSINESS SOLUTIONS
CHEMICAL INDUSTRY

POLYOLEFIN PRODUCTION

Project description:

Construction of a plant for polyolefin production

Investment amount: stage 1 - \$ 1 billion, followed by an increase to \$ 4.7 billion

Capacity: production stage 1 - 70 thousand tons of polypropylene with an increase of up to 348 thousand tons, stage 1 - 56 thousand tons of polyethylene with an increase of up to 284 thousand tons.

Location: Pavlodar region (SEZ «Pavlodar»)

Implementation period: stage 1 - 5 years, including 1 year of construction

Target markets: Russia and China

Raw material base: coal deposits of Pavlodar region

Consumers: Potential customers of company's products are manufacturers of plastic products.

Market prerequisites:

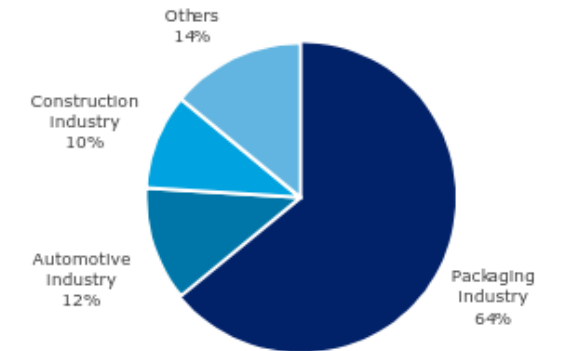
Export prospects - while increasing production volumes, Kazakhstan can increase the share of exports to China and the Russian Federation, which together import 5,439 thousand tons of polyethylene and 3,144 thousand tons of polypropylene, and enter the market of Western Europe.

Need for the chemical industry development - chemical industry in developed countries occupies a significant share in the country's GDP, being a strategic sector of the economy. In the structure of the export of chemical industry in Kazakhstan, raw materials and products of the lower redistribution prevail.

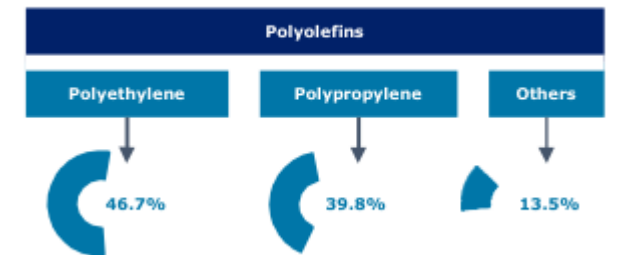
Competitiveness - raw material in the production of polyolefins is gas. However, it is possible to produce gas from coal by gasifying it and by using plasma reactor of coal (such technologies are widely used in the world). Given large reserves of coal in Pavlodar region and its low cost will significantly reduce production cost of polyolefins (in the cost structure, the cost of raw materials and supplies is 23%).

State support along entire production chain by providing investment preferences and the terms of the SEZ «Pavlodar»

Consumption of polyethylene by industries



World polyolefin market



Key investment indicators

Indicator	Results
Investment amount, US\$ thousands	4,710,772
Project NPV, US\$ thousands	194,220
IRR	11%
EBITDA margin	58-66%
Payback period, years	12.09
Discounted payback period, years	22.46

POLYETHER POLYOLS PRODUCTION

Project description:

Creation of a modern plant for production of polyether polyols

Amount of investment: stage 1 - \$ 936 million, with a subsequent increase to \$ 3.7 billion.

Capacity: polyol production stage 1 - 25 thousand tons with expansion up to 100 thousand tons per year

Location: Pavlodar region (SEZ «Pavlodar»)

Implementation period: 6 years, including 1.5 years of construction

Target markets: Russia, Uzbekistan, Kyrgyzstan

Raw material base: coal deposits of Pavlodar region

Consumers: potential customers of company's products are manufacturers of polyurethane foams, which supply their products to manufacturers of furniture, insulation materials, packaging, automobiles

Market prerequisites:

Lack of production and import dependence – The absence of a factory for the production of commodity polyether polyol is an excellent opportunity for the application of new technologies and the latest global equipments.

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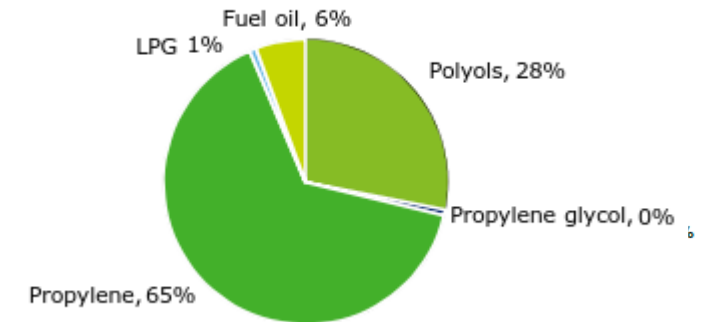
Export potential – target markets are Turkey, Central European countries, the Russian Federation and the CIS. Today in Turkey there is no production of polyether polyol, while the volume of demand in 2015 amounted to 128 thousand tons. The demand volumes in the countries of Central Europe and the CIS amounted to 213 thousand tons and 202 thousand tons, respectively. In 2015, production capacity in Russia amounted to 110 thousand tons, in the rest of the CIS and the Baltic states there are no production capacities.

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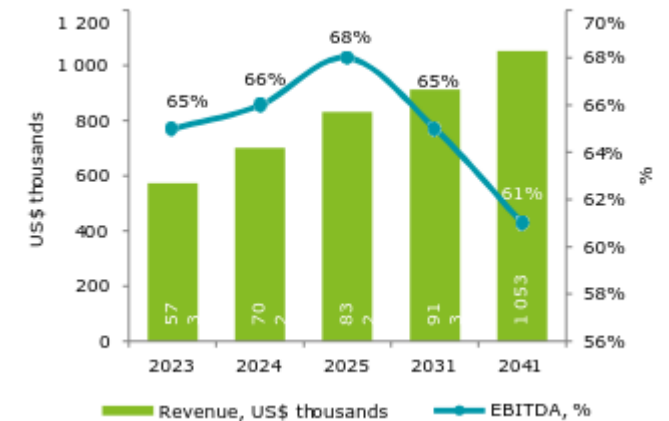
State support – the project complies with the Development Strategy of Samruk-Kazyna JSC for 2012-2022. Availability of support from the state through the provision of tax, customs and other preferences in SEZ, aimed at reducing the cost of production and early commissioning of production, ultimately help to improve profitability and reduce the return on investment.

Competitiveness - raw material in the production of polyether polyols is gas. However, it is possible to produce gas from coal by gasifying it and by using the plasma reactor of coal (such technologies are widely used in the world). Given the large reserves of coal in the Pavlodar region and its low cost, it will significantly reduce the production cost.

Revenue structure

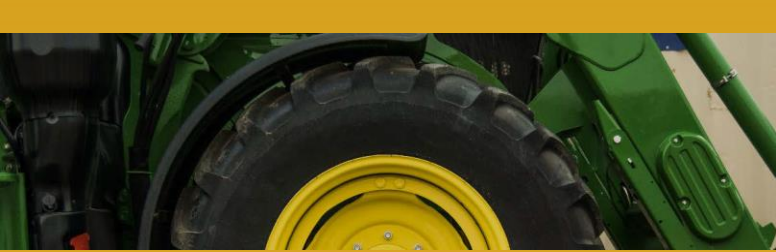


Revenue forecast



Key investment indicators

Indicator	Results
Investment amount, US\$ thousands	3,746,188
Project NPV, US\$ thousands	225,847
IRR	11%
EBITDA margin	61-68%
Payback period, years	12.04
Discounted payback period, years	21.68



PRODUCTION OF BUTADIENE AND SYNTHETIC RUBBER

Project description:

Creation of a modern plant for production of butadiene and synthetic rubber

Investment amount: 3 746 188 thousand US dollars

Capacity: butadiene and synthetic rubber production 100 thousand tons per year

Location: Pavlodar region (SEZ «Pavlodar»)

Implementation period: 24 years, including 5 years of construction

Target markets: Russia, Uzbekistan, Kyrgyzstan

Raw material base: coal deposits of Pavlodar region

Consumers: potential customers of company's products are manufacturers of polyurethane foams, which supply their products to manufacturers of furniture, insulation materials, packaging, automobiles

Market prerequisites:

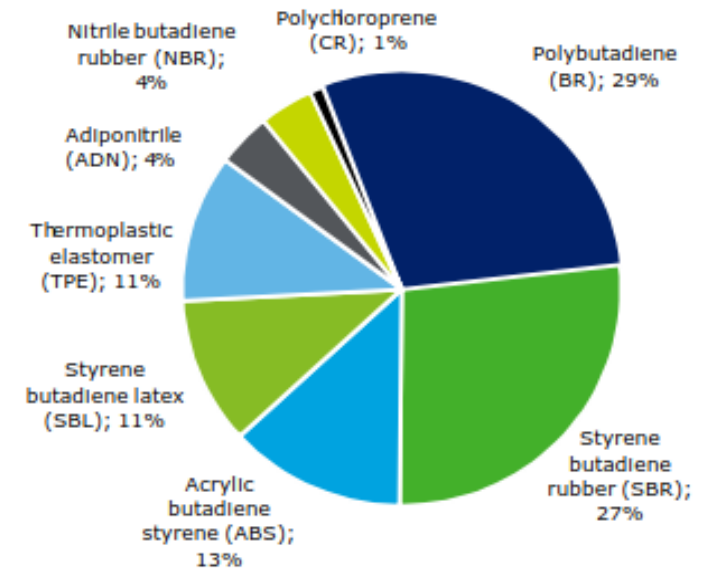
High import dependence – analysis of trade balance in chemical industry shows that domestic production facilities cannot meet the demand for chemical products and their derivatives.

High consumption – synthetic rubbers and rubber products are widely used in mechanical engineering, production of rubber products, ABS plastic, pipes, textiles, clothing, building materials, etc.

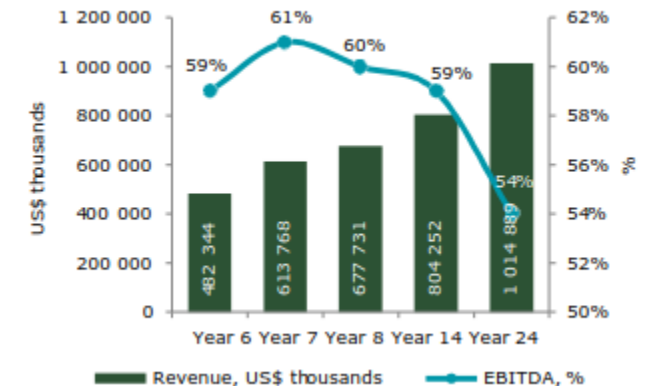
Efficient utilization of associated petroleum gas – in connection with the growth of oil production, the question of how to effectively utilize increasing volumes of associated gas through use in the domestic economy is relevant. The project implementation will introduce into practice an alternative method of efficient use of associated gas.

Competitiveness – raw material in production of butadiene and synthetic rubber is gas. However, it is possible to produce gas from coal by gasifying it by using the plasma reactor of coal (such technologies are widely used in the world). Given the large reserves of coal in the Pavlodar region and its low cost, it will significantly reduce the production cost.

Structure of global demand for butadiene processing products



Revenue forecast



Key investment indicators

Indicator	Results
Investment amount, US\$ thousands	1,487,699
Project NPV, US\$ thousands	1,312,037
IRR	22%
EBITDA margin	58%
Payback period, years	9.08
Discounted payback period, years	10.97

UREA PRODUCTION

Project description:

Construction of a plant for large-scale production of urea

Investment amount: stage 1 - \$ 482 million with an increase to \$ 1.9 billion over 24 years

Capacity: urea production stage 1 - 300 thousand tons with an expansion of up to 1200 thousand tons per year

Location: Pavlodar region (SEZ «Pavlodar»)

Implementation period: stage 1 - 6 years, including the year of construction

Target markets: Western Europe, Kazakhstan, Turkey, Iran, Russia, Northeast Asia

Raw material base: coal deposits of Pavlodar region

Use: in chemical and light industries, in processing chain as an intermediate for widely used products in the Republic of Kazakhstan (glue, resins, etc.).

Market prerequisites:

High demand – imported urea is used by agricultural enterprises as a nitrogen fertilizer. *Import dependence* – Import dependence 100% of carbamide consumed in the RK is imported (import volume in 2016 – 22 thousand tons).

Lack of basic chemical production, which is a deterrent for production of chemical products for further processing with high added value, development of petrochemistry, pharmaceuticals, agrochemistry and soil sciences, development of competencies and qualified domestic personnel in these industries.

Low production cost – achieved by having own cheap raw materials base. In the cost structure, the cost of raw materials and supplies is 60%.

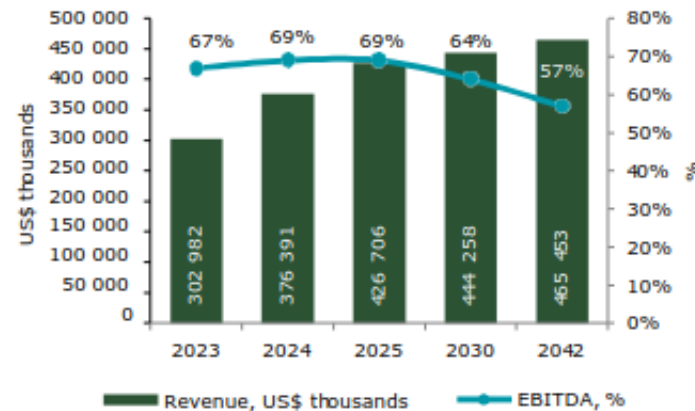
Export prospects – while increasing production volumes, Kazakhstan can increase the share of exports to Turkey, which is one of the main consumers of urea in the world market, where the volume of imports for consumption reached in 2016 2,261,393 tons.

Competitiveness - raw material in the production of urea is ammonia. In the region, there is the possibility of producing ammonia by coal gasification by using the plasma reactor of coal (such technologies are widely used in the world). Given the large reserves of coal in the Pavlodar region and its low cost, it will significantly reduce the production co.

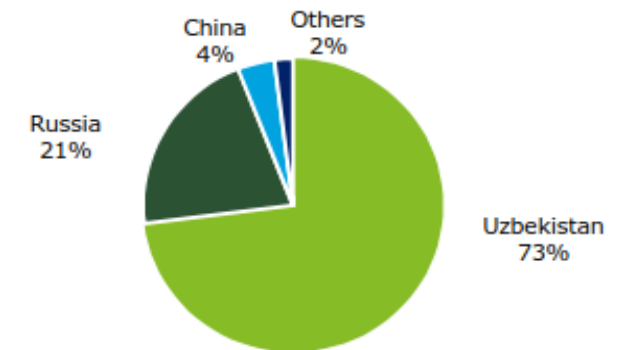
Key investment indicators

Indicator	Results
Investment amount, US\$ thousands	1,930,006
Project NPV, US\$ thousands	40,237
IRR	10%
EBITDA margin	64%
Payback period, years	12.00
Discounted payback period, years	23.00

Revenue forecast



Urea imports in Kazakhstan



PRODUCTION OF METHANOL AND AMMONIA

Project description:

Construction of a plant for large-scale production of methanol and ammonia

Investment amount: stage 1 - \$ 439 million with an increase to \$ 1.7 billion over 24 years

Capacity: methanol production stage 1 - 275 thousand tons with an expansion of up to 1,100 thousand tons per year; ammonia production stage 1 - 30 thousand tons. with expansion up to 120 thousand tons per year

Location: Pavlodar region (SEZ «Pavlodar»)

Implementation period: 24 years, including 2 years of construction

Target markets: Western Europe, Central Europe, Russia, Kazakhstan, Turkey, China

Raw material base: coal deposits of Pavlodar region

Consumers: Kazakhstan gas companies, peasant and farm enterprises

Market prerequisites:

High demand – methanol is used by gas industry enterprises to combat the formation of hydrates, as well as in agriculture for the production of nitrogen fertilizers. Annual consumption of methanol is at least 20 thousand tons.

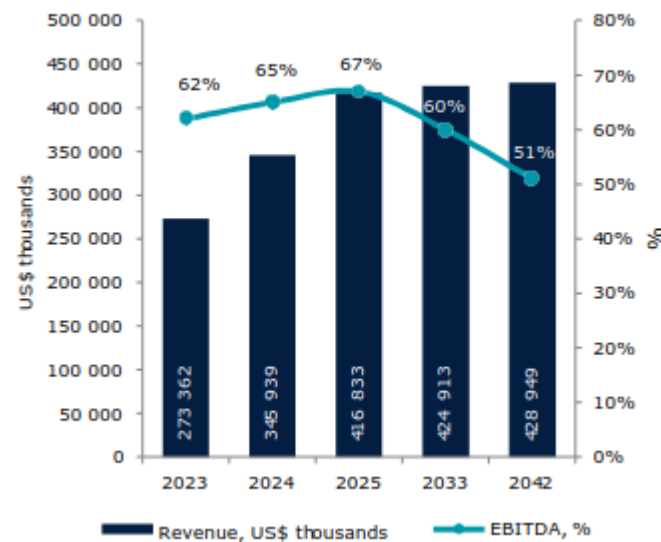
Import dependence – 100% of methanol is imported.

Low production costs - low production cost of products, achieved through its own cheap raw materials base. In the cost structure, the cost of raw materials and supplies is 72% for methanol and about 50% for ammonia.

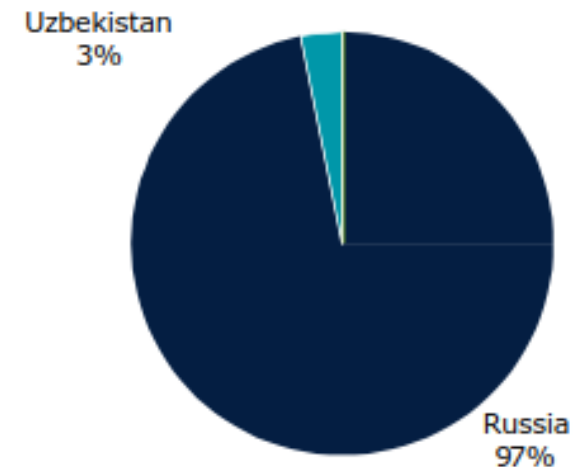
Export prospects - with increasing production volumes, Kazakhstan can export ethanol and ammonia to China, which is the main global consumer of methanol (with an annual import volume for consumption of 8,806,695 tons) and ammonia (total annual import is 470,072 tons).

Competitiveness - raw material in the production of methanol can be gas synthesized from coal (such technologies are widely used in the world). Given the large reserves of coal in the Pavlodar region and its low cost, it will significantly reduce the production cost.

Revenue forecast



Methanol exporters to Kazakhstan



Key investment indicators

Indicator	Results
Investment amount, US\$ thousands	1,757,079
Project NPV, US\$ thousands	27,485
IRR	10%
EBITDA margin	59%
Payback period, years	12
Discounted payback period, years	24

TIRE PRODUCTION

Project description:

Construction and modernization of the industrial complex, with the existing infrastructure for the production of tires for passenger cars

Investment amount: stage 1 - \$ 22.8 million with an increase to \$ 68.5 million over 24 years

Products: summer tires R14, R15 и R16 of budget segment

Location: Pavlodar region (SEZ «Pavlodar»)

Implementation period:

24 years, including 1 year of construction

Target markets: CIS countries

Suppliers: Foreign and local suppliers of raw materials

Consumers: dealers and population

Market prerequisites:

Import Substitution – in Kazakhstan, there are no existing tire production plants.

The presence of demand for the product - due to slow economic growth, in the last 5 years there has been a significant increase in demand for tires in the budget segment.

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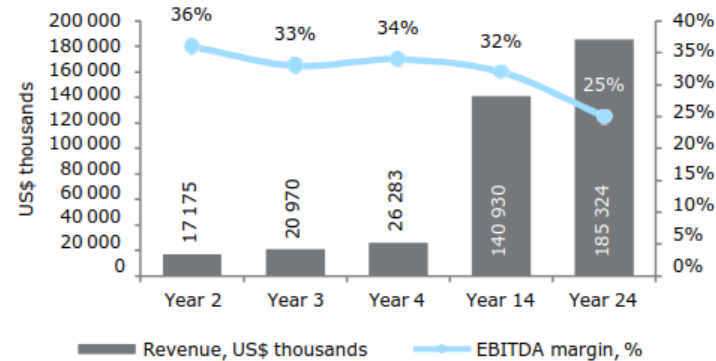
Export potential - in some neighboring countries (Azerbaijan, Kyrgyzstan, Tajikistan) there is no tire production, while in other CIS countries there is a stable demand for new tires and tires. Import rates in many neighboring CIS countries are zero.

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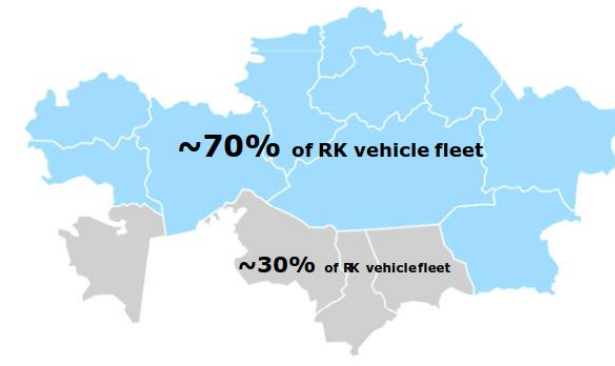
Key investment indicators

Indicator	Result
Investment amount, US\$ thousands	68,539
Project NPV, US\$ thousands	6,546
IRR, %	14.50%
EBITDA margin, %	25-37%
Payback period, years	10.1
Discounted payback period, years	18.7

Revenue forecast



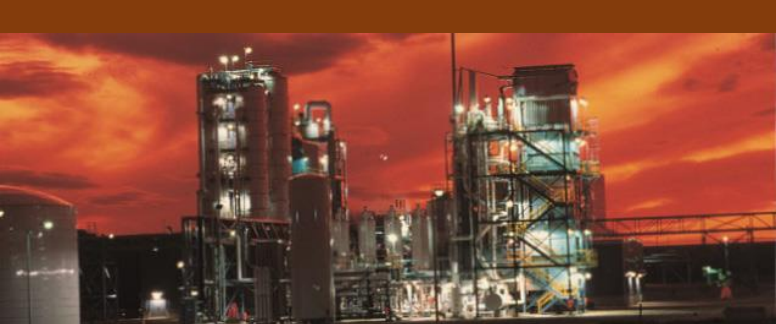
Target market



■ The climate that requires the use of winter tyres
■ The climate that does not require the use of winter tyres

Market ratio: summer and winter tyres

☀ 58% ● 42% ❄️



PRODUCTION OF HYDROGEN PEROXIDE

Project description:

Construction of a plant for production of hydrogen peroxide

Investment amount: \$ 85 mln.

Location: Pavlodar region (SEZ «Pavlodar»)

Target markets: Kazakhstan, Uzbekistan, Kyrgyzstan

Consumers: manufacturers of porous materials, disinfectants and bleaching agents. In industry, hydrogen peroxide also finds its use as a catalyst.

ADVANTAGES OF THE PAVLODAR REGION:

There is no production of hydrogen peroxide in Kazakhstan. At the same time, KazAtomProm JSC annually imports more than 12 thousand tons of this product for use in the process of mining and enriching uranium. Uzbekistan and Kyrgyzstan also import about 8-10 thousand tons for the needs of the textile industry.

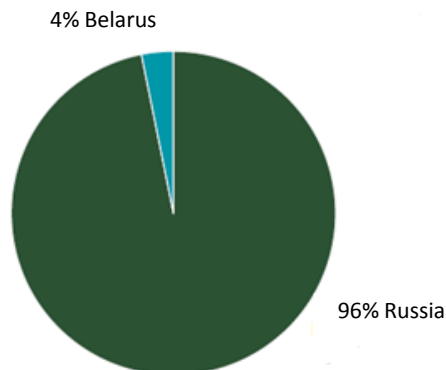
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Hydrogen is needed to produce hydrogen peroxide. French Air Liquide produces technical hydrogen in the territory of Pavlodar region and plans to expand production. The company is ready to cooperate.

■ ■ ■

Potential partner in the Republic of Kazakhstan : Kazperoksid LLP (a subsidiary of KazAtomprom JSC and Solvay (Belgium))

Export of hydrogen peroxide to Kazakhstan in 2018





PRODUCTION OF PHOSPHORUS TRICHLORIDE

Project description: Construction of a phosphorus trichloride plant
Investment amount: 12 489 thousand USD
Capacity: 10 thousand tons of phosphorus trichloride per year
Location: Pavlodar region (SEZ «Pavlodar»)
Implementation period: 18 months
Target markets: Domestic market Kazakhstan, CIS
Raw material base: chlorine (Caustic JSC, SEZ «Pavlodar»), yellow phosphate (Kazphosphate LLP)
Consumers: markets of Kazakhstan, CIS, Central Asia

Financial performance

Sales volume 2019-2026	18 448 thousand USD
Net profit per year	622 thousand USD
Net present value	5 374 thousand USD
Payback period	5 years
Break even point	7 166 thousand USD
Product profitability	11%

Market prerequisites:

- Phosphate fertilizers occupy the second place in the structure of consumption in mineral fertilizers.
- The largest consumers of phosphate fertilizers in the world are China, India, USA, Europe, Brazil.
-
- Phosphate fertilizers (92.7 thousand tons) account for 20% of the mineral production.
- The share of phosphate fertilizers accounts for 28% of the volume of mineral fertilizer application by agricultural enterprises of Kazakhstan.
-
- The development of chemical industry in Kazakhstan; the creation of new jobs; creation of new export-oriented industries with high added value.
- In general, in the case of the use of phosphorus trichloride in the production of glyphasates, the product will allow to meet the demand of the agricultural sector of Kazakhstan in mainly systemic herbicide, reducing import dependence in this matter.



PRODUCTION OF HUMATE SODIUM

Project description: Construction of a plant for production of sodium humate

Investment amount: 1 680 thousand USD

Capacity : production of 40 thousand tons of sodium humate per year

Location: Pavlodar region (SEZ «Pavlodar»)

Implementation period: 16 months

Target markets: Kazakhstan, CIS, Central Asia

Raw material base: Brown coal of Ekibastuz deposit and sapropel of nearby reservoirs

Consumers: markets of Kazakhstan, the CIS and Central Asia

Financial performance

The volume of sales 2019-2023	82 199 thousand USD
Net profit 2019-2023	56 171 thousand USD
Payback period	21 month
Average rate of return	171,63
Net present value	35 966 thousand USD
Profitability index	8,58
Internal rate of return	53,7

Market prerequisites:

- The project has a favorable climate: the presence of brown coal dumps in the region and neighboring areas, which can be quickly delivered to the project site; the possibility of rapid growth in production due to the coverage of a large market throughout Kazakhstan, entry into the market of Russia and foreign countries.

■ ■ ■

- Humic substances have high concentrations of organic substances and trace elements. They are absolutely harmless to the soil microsphere, to plants and to humans. Humic substances give living organisms the nutrients they need gradually, as they are consumed, thereby preserving the necessary supply of these elements for future generations. The composition of humic substances found from 40 to 60% carbon, 3-5% nitrogen, 30-40% oxygen, as well as hydrogen, sulfur, phosphorus, many metal cations, including the so-called trace elements.

■ ■ ■

- The sodium humate production company is competitive in Pavlodar region, since there is only one competitor in the industry and with rapid entry into the market, it can begin to expand into the markets of Russia and other CIS countries.





CLIPHOSATE PRODUCTION

Project description : Construction of glyphosate production plant

Investment amount: 12 688 thousand USD

Capacity: production of 5 thousand tons of glyphosate per year

Location: Pavlodar region (SEZ «Pavlodar»)

Implementation period: 12 months

Target markets: Kazakhstan, CIS, Central Asia, Middle East

Raw material base: chlorine-containing substances «Caustic» JSC, SEZ «Pavlodar»

Consumers: markets of Kazakhstan, the CIS and Central Asia, the Middle East

Financial performance

The volume of sales 2019-2029	271 365 thousand USD
Net profit 2019-2029	205,500 thousand USD
Payback period	less than 1 year
Internal Rate of Return	135%
Net present value	76 408 thousand USD
Net cash flow	92 217 thousand USD
Break even point	52 693 thousand USD

Market prerequisites:

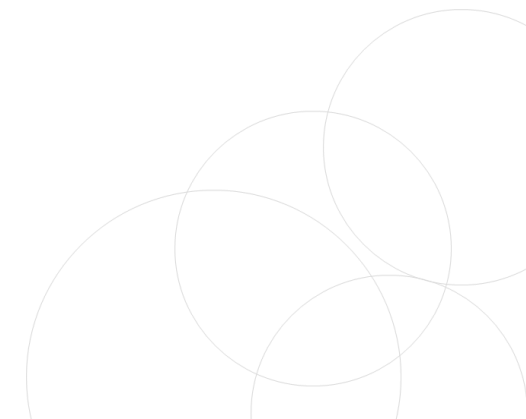
- Currently, 90% of glyphosate is imported mainly from China and Russia, and there is one small production in the Akmola region.

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- Russia aims to introduce maximum customs duties on European pesticides in order to distribute its own products and in response to Western sanctions..

- The Republic of Kazakhstan has significant potential for the use of glyphosate, since the area of distribution of quarantine objects and highly dangerous pests is very large (as of 2017, 10,667.4 thousand hectares.)

- Pavlodar region is a large industrial center of the Republic of Kazakhstan with a high concentration of energy facilities, metallurgy, engineering and transport. This leads to guaranteed production of the cheapest energy resources..





PRODUCTION OF ACTIVATED CARBON

Project description: Construction of a plant for production of activated carbon

Investment amount: 19 995 thousand USD

Capacity: production of 200 thousand tons of activated carbon per year

Location: Pavlodar region (SEZ «Pavlodar»)

Amount of investment: 12 months

Target markets: Kazakhstan, CIS, Central Asia, Middle East

Raw material base: near coal mining sites

Consumers: markets of Kazakhstan (MMC Altyн MM LLP)

Financial performance

Net profit	3 504 thousand USD
Net present value	1 554 thousand USD
Payback period	6 years
Break even point	4 215 thousand USD
Internal rate of return	9%

Market prerequisites:

- Kazakhstan is a net importer of activated carbon.
- Activated carbon is produced from a material available on the price grid: from brown coal, peat and agricultural waste, which leads to low production costs..
- Equipment for the production of activated carbon is easy, easy to use and, accordingly, inexpensive.
- Extensive sales market of activated carbon: in pharmaceutical production (tablets of activated carbon), the production of industrial or domestic filters (including filters for the purification of tap water), the production of tobacco products, etc.
- The production of activated carbon will be carried out directly at the coal mining sites, which will lead to low costs for R & D and technological preparation of production, access to skilled labor and high labor productivity.
- Activated carbon production is high capital productivity.



POLYVINYL CHLORIDE PRODUCTION

Project description:

Construction of PVC plant

Investment amount: 26 mln. USD

Location: Pavlodar region (SEZ «Pavlodar»)

Target markets: Kazakhstan, Uzbekistan, Kyrgyzstan

Consumers: manufacturers of consumer goods and packaging. Also used in construction, medicine, transport.

ADVANTAGES OF PAVLODAR REGION:

- For production of PVC, the necessary chlorine in excess is produced at SEZ «Pavlodar» enterprise «Kaustik» JSC
- The second raw material ETHYLENE is produced from natural gas. However, it is possible to produce gas from coal by gasifying it by using the plasma reactor of coal (such technologies are widely used in the world). Given the large reserves of coal in the Pavlodar region and its low cost, it will significantly reduce the production cost.
- Production can be placed on the territory of the SEZ «Pavlodar» and get customs and tax benefits for 25 years.

■ ■ ■

There is no PVC production in Kazakhstan. At the same time in the Republic of Kazakhstan there are about 30 enterprises for the production of finished products from PVC (pipes, fittings, building materials) that regularly consume PVC granules (from China, Russia)

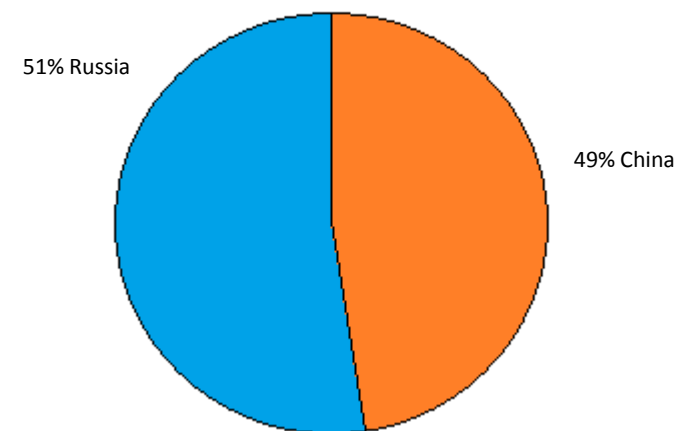
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Potential partner in the Republic of Kazakhstan: «Kaustik» JSC

PVC IMPORT in primary form to Kazakhstan for 2018

- From China for \$ 32 million
- From Russia for \$ 34 million

Export of PVC to Kazakhstan in 2018





PRODUCTION OF AMMONIUM NITRATE

Project description:

Construction of ammonium nitrate production plant

Investment amount: 199 788 thousand USD

Capacity: 200 thousand tons of ammonium nitrate

Location: Pavlodar region (SEZ «Pavlodar»)

Implementation period: 3 years

Project payback period: 10 years

Target markets: Kazakhstan, CIS countries

Consumers: Granulated ammonium nitrate is used on a large scale before sowing and for all types of fertilizing. On a smaller scale, it is used to make explosives.

ADVANTAGES OF PAVLODAR REGION :

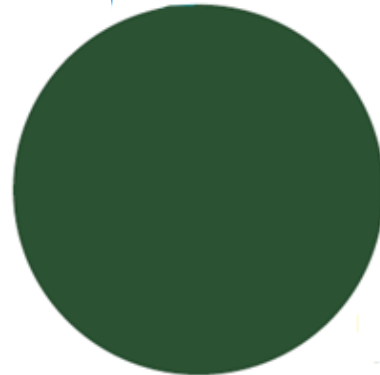
- Production can be placed on the territory of SEZ «Pavlodar» and get customs and tax benefits for 25 years.
- KazAzot JSC is ready to discuss the long-term supply of liquid ammonia for the project.

Potential partner in the Republic of Kazakhstan: EAST TRADING LLP

■ ■ ■

Export of ammonium nitrate to Kazakhstan in 2018

100% Russia





PRODUCTION OF AUTO-DISABLE SYRINGES

Project description: Construction of a plant for production of auto-disable syringes

Investment amount: 8 415 thousand USD

Capacity: 200 mln syringes per year

Location: Pavlodar region (SEZ «Pavlodar»)

Implementation period: 36 months

Target markets: Kazakhstan, CIS

Raw material base: Russia (polypropylene, polyethylene, medical paper and film, rubber stopper, needles, corrugated packaging)

Consumers: Kazakhstan and CIS market

Market prerequisites:

- The main idea, concept and strategy of an integrated project is the provision of integrated services in the market of medical products, taking into account service. The release of a quality disposable syringe that meets international standards.
- Today, in Kazakhstan only 6% of medicines are produced by the local pharmaceutical industry. Basically, the needs of the population in medicines are covered by the supply of medicines of foreign manufacturers.
- Technological equipment made from high-quality construction materials using the latest processing technologies meets the latest technological advances and technologies for the production of disposable syringes, characterized by high efficiency, cost effectiveness, operational reliability and environmental safety.

Финансовые показатели

Чистая приведенный доход	11 535 тыс. долл. США
Период окупаемости	4,3 года
Внутренняя норма рентабельности	32,3%





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MACHINERY AND METALLURGY

PRODUCTION OF AGRICULTURAL MACHINERY



Project description:

Construction of a plant for the production of agricultural machinery

Investment amount: 19 950–64 454 thousand USD

Products: combine harvesters, tractors

Location: Pavlodar region, SEZ «Pavlodar»

Implementation period: 24 years, including 2 years of construction

Target markets: CIS countries

Suppliers: local and foreign suppliers of equipment and components

Consumers: agricultural producers, peasant and farms

Market prerequisites:

Import substitution - the volume of imports of tractors and combines is more than 3 times higher than the production of this agricultural machinery in the country.

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The high level of wear of agricultural machinery in the country. According to official data, more than 93% of tractors and 71% of combine harvesters in Kazakhstan are subject to write-off.

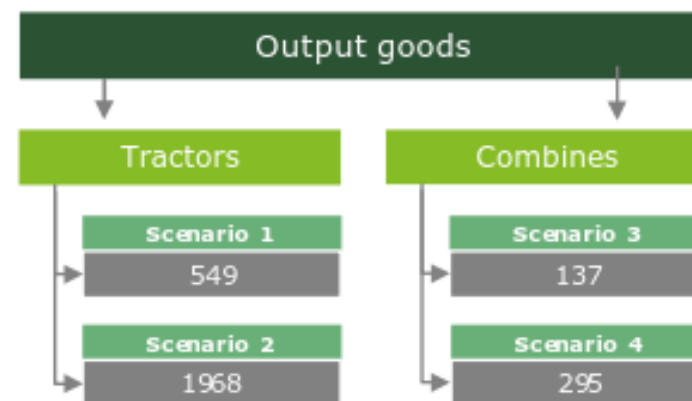
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Low cost of production. Construction of small-node machine-building plants with an initial 49% level of localization, followed by its increase to 90% by 2041, is beneficial in terms of cost and import substitution.

Key investment indicators

Indicator	Results	Indicator	Results
Scenario 1		Scenario 3	
Investment amount	20,871	Investment amount	19,950
Project NPV	11,988	Project NPV	2,064
IRR	26%	IRR	17%
EBITDA margin	8%-12%	EBITDA margin	9%-12%
Payback period, years	6.40	Payback period, years	8.00
Indicator	Results	Indicator	Results

Plant power, units



PRODUCTION OF POWER TRANSFORMERS

Project Description:

Expansion of production of Alageum Electric group of companies, which is the only manufacturer of power transformers of 110kV and 220kV voltage class in the Republic of Kazakhstan

Investment amount: 13 000 thousand USD

Products: power transformers of voltage class 110kV and 220kV

Location: Pavlodar region, SEZ «Pavlodar»

Implementation period: 24 years, including 3 years of construction

Target markets: Kazakhstan, CIS countries

Suppliers: local and foreign suppliers of raw materials

Consumers: network companies, especially distribution facilities

Market prerequisites:

Availability of basic materials - in Kazakhstan there are basic materials and part of the components necessary for the realization of the Project.

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Availability of demand - among the enterprises of the extractive industries and energy transfer transit companies.

Competitive advantage - affordable prices for products (as compared to imported analogues) and compliance with quality standards.

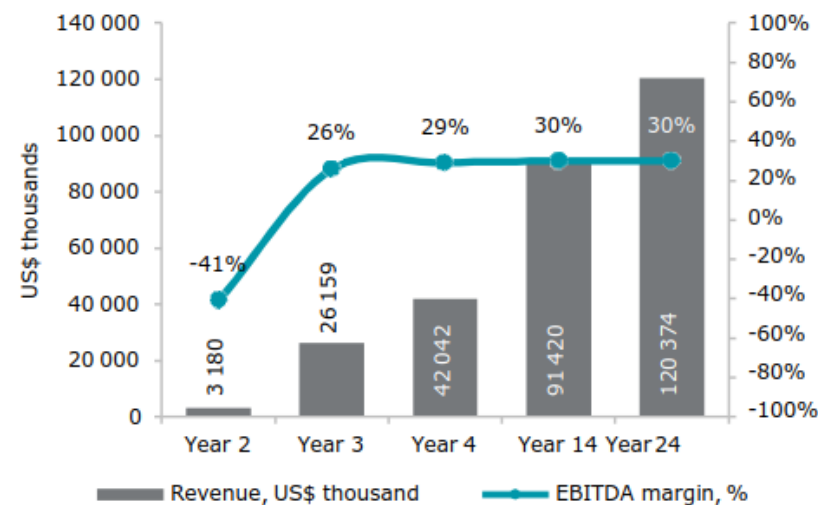
The growth of export potential - a low level of import duties in neighboring countries.

Key investment indicators

Indicators	Result
Investment amount, US\$ thousands*	13,000
Project NPV, US\$ thousands	9,053
IRR, %	20.2%
EBITDA margin, %	26-30%
Payback period, years	6.3
Discounted payback period, years	10.0

* 49.33% share acquisition

Project profitability



PRODUCTION OF LONGITUDINAL PIPES

Project Description:

Construction of a plant for the production of longitudinal steel pipes

Investment amount: 24 215 thousand USD

Products: longitudinal steel pipes of average diameter from 273 to 630 mm.

Location: Pavlodar region, SEZ «Pavlodar»

Implementation period: 24 years, including 1-2 years of construction

Target markets: Kazakhstan

Suppliers: local and Russian suppliers of raw materials

Consumers: own dealer network of metal traders and metal base network

Key investment indicators

Index	Results
Investment amount, US\$ thousands	24,215
Project NPV, US\$ thousands	20,292
IRR, %	25.9%
EBITDA margin, %	16%
Payback period, years	7.1
Discounted payback period, years	9.5

Market prerequisites:

Local demand - there is an empty niche for the production of steel pipes with a diameter of 273 to 630 mm.

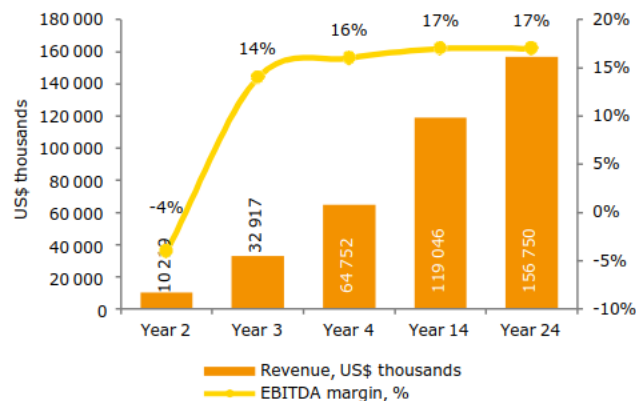
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Competition. Steel pipes fall into the category of commodities and the main competitive advantage is price. Given the low production costs associated with the process of production of longitudinal welded pipes, the price of manufactured products will be significantly lower than the average price of analogues.

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Import Substitution. A project is being created to replace imported products with domestically produced pipes.

Project profitability



The total potential steel pipe market * was ~ 94 billion tenge in 2016

Sector		Summary	Potential market volume in Kazakhstan (2016) (thousand km)	Potential market volume in Kazakhstan (2016) (billion tenge)
Housing and public utilities	Heating mains	Steel pipes are used in house construction and infrastructure projects. They are used in communication systems, overpasses, water and gas pipelines etc.	6.7	~87
	Water pipelines		14	
	Gas pipelines		16.2	
Total			36.9	~111

*Gas and oil trunk lines are not considered, since their diameter exceeds the diameter of the produced pipes



PRODUCTION OF COPPER PIPES

Project description:

Construction of a copper pipe plant

Investment amount: 59 345 thousand USD

Products: copper pipes with an outer diameter of 6-46 mm according to ASTM standard

Location: Pavlodar region, SEZ «Pavlodar»

Implementation period: 24 years, including 1 year of construction

Target markets: Kazakhstan, Russia, China, Belarus, Ukraine and Austria

Suppliers: local suppliers of raw materials, foreign suppliers of equipment

Consumers: companies operating in the areas of gas supply, heat supply and automotive industry

Market prerequisites:

Import substitution - in Kazakhstan there is no enterprise for the production of copper pipes. Domestic demand is fully covered by imports.

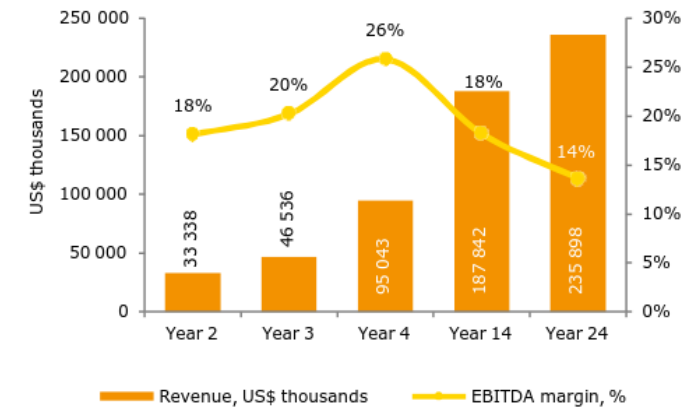
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Export potential. The favorable geographical location of the country and the presence of demand for copper pipes in China, Russia, Ukraine and Belarus open up opportunities for the sale of manufactured products.

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Stable growth in the production of raw materials. In 2016, 408 435 tons of refined, unprocessed and unalloyed copper were produced in Kazakhstan (+ 3.5% compared to 2015).

Revenue forecast



Plant location



- Special economic zone provides a special legal regime and preferences to its residents, such as, provision of land plots for the secondary land use (sublease) and infrastructure facilities for lease (sublease) to the persons engaged in ancillary services. Additionally, businesses in the special economy zone receive the exemption from taxes and custom payments until 2036.
- Kazakhstan's geographical location provides convenient access to markets in neighboring countries, which expands export potential for the produced products. The high demand for copper pipes in China, Russia, Ukraine, Belarus and Austria demonstrates opportunity to boost sales.

Key investment indicators

Indicator	Result
Investment amount, US\$ thousands	59,345
Project NPV, US\$ thousands	22,587
IRR, %	21.4%
EBITDA margin, %	19%
Payback period, years	6.4
Discounted payback period, years	9.6



MANUFACTURE OF ALUMINUM FOIL

Project Description:

Construction of a plant for the production of aluminum foil.

Investment amount: 22 462 thousand USD

Capacity: 10.8 thousand tons of aluminum foil per year

Location: Pavlodar region, SEZ «Pavlodar»

Implementation period: 24 years, including construction period

Target markets: Kazakhstan, CIS, Central Asia

Raw material base: primary aluminum ("Kazakhstan Electrolysis Plant" JSC)

Consumers: Kazakhstan market, CIS, Central Asia

Market prerequisites:

The target market for aluminum foil is the countries of the macroregion, with a volume of import capacity of 48.5 thousand tons (2019). According to forecasts, import capacity in the countries of the macroregion until 2024 will increase by 90%. In the structure of import of the macroregion, the main importers are China, whose share is 37.1%, Russia - 25.2%, Ukraine - 10.8%, Iran - 6.2%.

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The main competitors in the macroregion are the manufacturers of Russia and Armenia (3 foil-rolling plants of RUSAL OJSC) with a total capacity of 90 thousand tons, as well as Chinese manufacturers (various Chinalco divisions and others) with a total capacity of 300 thousand tons.



Financial performance	
Approximate operating expenses 2019-2029	440 230 thousand USD
Estimated earnings 2019-2029	522 000 thousand USD
Estimated cash flows 2019-2029	81 769 thousand USD
Internal Rate of Return	26,8%
Discounted payback period	5,3 лет
Net present value	15 786 thousand USD

Markets	Export			Export		
	Tons	th.USD	Price for 1 ton	Tons	th.USD	Price for 1 ton
EAEU	55 500	86 350	1556	34 400	85 200	2477
International trade	156 000	247 800	1588	26 000	118 000	4538
Total	211 500	334 150	1579	60 400	203 200	3364



MANUFACTURE OF ALUMINUM PROFILE

Project Description:

Construction of an aluminum profile production plant

Investment amount: 10 215 thousand USD

Location: Pavlodar region, SEZ «Pavlodar»

Implementation period: 2 years, including the year of construction

Target markets: Kazakhstan, EAEU countries

Suppliers: local and russian suppliers of raw materials

Consumers: construction companies

ADVANTAGES OF THE PAVLODAR REGION:

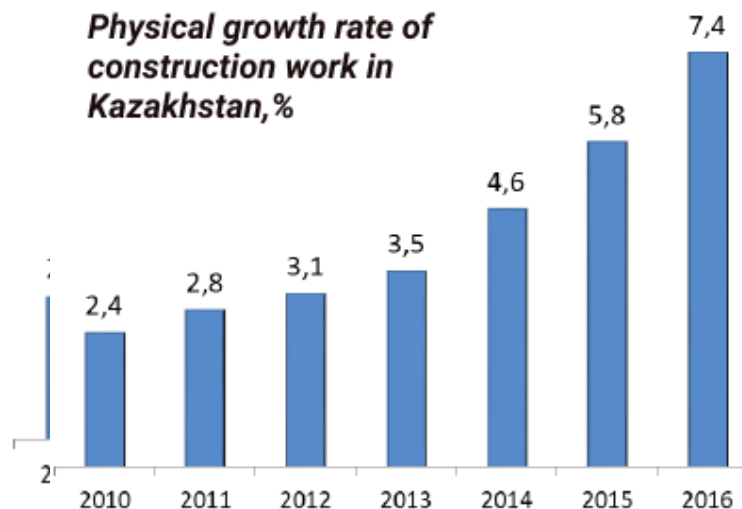
In 2007, production of unalloyed aluminum (ERG group) started in Pavlodar. The plant produces aluminum ingots and sells it worldwide. A small amount of untreated aluminum is processed in Kazakhstan (less than 10%). At the same time, the country imports finished aluminum products worth more than 200 million dollars. Including aluminum profiles in the amount of more than 80 million dollars a year. There are all the prerequisites for increasing the demand for aluminum profiles and facade systems. The government has activated the primary housing market in the program 7-20-25.

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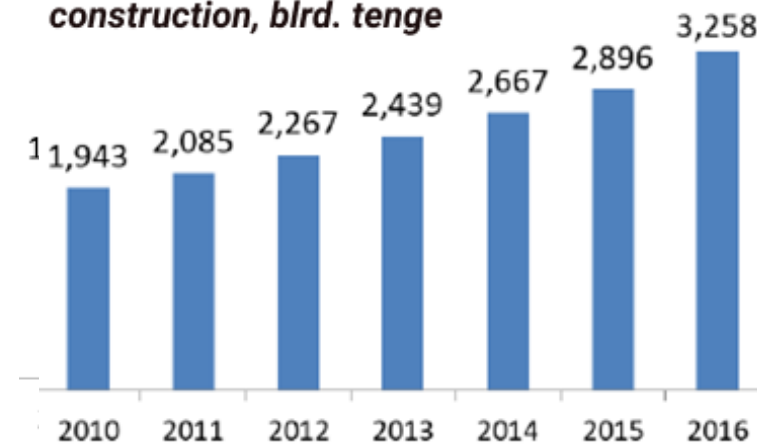
Potential partner in the Republic of Kazakhstan: «Giessenhaus» LLP

The volume of construction work in absolute terms (tenge) shows growth in the past few years. Growth rates increase annually

Physical growth rate of construction work in Kazakhstan, %



Total volume of building construction, blrd. tenge



MANUFACTURE OF PRODUCTS FROM FASON CASTING OF ALUMINUM AND ITS ALLOYS

Project Description: Construction of a plant for the production of aluminum radiators

Investment amount: 2 976 thousand USD

Capacity: 1 million pieces of radiators per year

Location: Pavlodar region, SEZ «Pavlodar»

Implementation period: 36 months

Target markets: Kazakhstan, CIS, Central Asia, Europe

Raw material base: primary aluminum («Kazakhstan Electrolysis Plant» JSC)

Consumers: Kazakhstan, CIS and Central Asia markets, Europe

Financial performance

Net profit per year	798 thousand USD
Payback period	3,7 years
Rate of return	40%
Contributions to the budget per year	610 thousand USD
Number of workplaces	73

Market prerequisites:

The project of production of aluminum radiators is an integral part of the development of the metallurgical aluminum cluster of Kazakhstan. Therefore, it has all the advantages that this cluster gives him:

- necessary energy resources;
- available raw materials;
- labor resources of the metallurgical region of the necessary qualification;
- universities with specialization in the field of metallurgy and engineering.

Development of this metallurgical cluster before the release of finished products with high added value, the introduction of innovations and high-tech industries is a priority objective of the industrial development of the country.

Extensive market for aluminum reactors: the population of Pavlodar region and the nearest regions amounts to 12.3 million people.



PRODUCTION OF CROWNS / PRONGS FOR EXCAVATOR BUCKETS

Project Description: Construction of a plant for casting crowns / bucket prongs of excavators

Investment amount: 1 202 thousand USD (partner required for 900 thousand USD)

Capacity: 1 million pieces of radiators per year

Location: Pavlodar region, SEZ «Pavlodar»

Implementation period: 36 months

Target markets: Kazakhstan, CIS

Base of raw materials: «ArcelorMittal Temirtau» JSC

Consumers: mining companies, mining and processing plants, coal mining companies, construction organizations of Kazakhstan, CIS (possibility of an offtake contract with ERG)

Market prerequisites:

The project implementation will allow:

- To take market share, with the prospect of sales to the countries of the Customs Union
- Reduce the final cost of goods in comparison with foreign analogues
- Independence of final product prices on currency fluctuations
- Creation of job places.

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The production of casting on gasified models is almost waste-free and requires a small amount of related materials as compared to chill casting and the method of casting on investment casting. In addition, there are practically no emissions of toxic organic substances into the environment; harmful resins and toxic materials are not used in production.

The main competitive advantages of products are:

- Having your own foundry.
- Competitive price due to the use of recycled metal of local origin
- Competitive price due to the absence of costs associated with delivery and customs clearance
- There is no risk of rising prices associated with currency fluctuations.
- Minimum percentage of marriage
- Saving energy through the use of energy-saving technologies
- The term of development and introduction of new models/new products is about 1-1.5 months (depending on the complexity)
- Low cost in comparison with analogues produced in other countries.

Наименование показателей	Сумма, тыс. руб.	Структура, %
Общая стоимость Инвестиционного Проекта	79 958	100%
Модернизация производственных площадей	15 000	19%
Приобретение оборудования	64 958	81%

СТРУКТУРА ФИНАНСИРОВАНИЯ

Наименование показателей	Сумма, тыс. руб.	Структура, %
Общая стоимость Инвестиционного Проекта	79 958	100%
Проектное финансирование Инвестора	79 958	100%
Модернизация производственных площадей	15 000	19%
Приобретение оборудования	64 958	81%
Потребность в финансировании (привлеченные инвестиции)	79 958	100%



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PROCESSING INDUSTRY



PRODUCTION OF CHAMOTTE FIREBRICKS

Project description: Construction of a plant for the production of chamotte firebricks

Investment amount: 5 721 thousand USD

Capacity: production of 50 thousand tons of refractory products per year

Location: Pavlodar region, SEZ «Pavlodar»

Implementation period: 25 months

Target markets: Kazakhstan, CIS, Central Asia, Europe and China

Raw material base: refractory clay deposits in Pavlodar region

Consumers: metallurgical industry of Kazakhstan, CIS, Europe and China

Market prerequisites:

The demand of the metallurgical industry of Kazakhstan and the CIS countries - Russia, Belarus, Uzbekistan, in carbon-oxide products for the lining of the units is at least 250 thousand tons / year. Considering the importance of the refractory component for the metallurgical industry, it becomes urgent to build cooperative supply chains with metallurgical enterprises in ensuring the supply of raw materials.

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The main share of consumers is represented by ferrous metallurgy enterprises - this is 73-75%, non-ferrous metallurgy enterprises account for 7-9%, for cement producers - 6-7%. In addition, engineering, refining, production of building materials. The main areas of cooperation are Russia, the CIS, Europe, and China.

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In the Pavlodar region there are several deposits of refractory clay. According to experts, the clay from the Sukhanovsky deposit is suitable for use as a raw material for the production of chamotte and fireclay products of various classes.

Financial performance

Volume of sales	152 777 thousand USD
Net profit	60 010 thousand USD
Payback period	31 months
Internal Rate of Return	28%
Net present value	19 499 thousand USD





METAL GALVANIZATION PLANT

Project Description: Construction of a plant for metal galvanization

Investment amount: 22 247 thousand USD

Capacity: hot galvanizing of metal structures - 55 thousand tons per year

Location: Pavlodar region, SEZ «Pavlodar»

Implementation period: 30 months

Target markets: domestic market of Kazakhstan

Raw material base: steel structures and steel products

Consumers: Kazakhstan's industrial market - road construction (45%); industry (25%); construction (15%); energy (10%)

Financial performance

Volume of sales	146 617 thousand USD
Net profit	21 583 thousand USD
Payback period	30 месяцев
Internal Rate of Return	13%
EBITDA	42 656 thousand USD
EBITDA to sales	29%
Net profit to revenue	52 693 thousand USD

Market prerequisites:

The potential capacity of the Kazakhstan market of metal structures with corrosion protection by hot-dip galvanizing is about 300 thousand tons per year.

The sale of galvanized metal products is focused primarily on consumers:

- road construction involved in the implementation of the Nurlı Zhol State Program for Infrastructure

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Development under the road reconstruction projects with a total cost of about 2.4 trillion. tenge;

- power engineering - in the implementation of the investment program of "KEGOC" JSC for 2018-2028, for the construction of new and reconstruction of existing high-voltage lines (OHL) with a length of 19.17 thousand km;

- oil production, oil refining: NC "KazMunayGas" JSC - in the capital expenditure program for 2018-2022 about 5.4 billion USD;

■ ■ ■

Overhaul of the river fleet of the Pavlodar region, as well as the Caspian flotilla, involves the replacement of the internal metal structures of vessels galvanized for corrosion protection in connection with operation in aggressive marine (salt) and river environments.





PRODUCTION ON THE PROCESSING OF ASH AND SLAG WASTES

Project Description: Construction of a plant for the processing of ash and slag waste

Investment amount: 17 136 thousand USD

Capacity: 100 million bricks per year

Location: Pavlodar region, SEZ «Pavlodar»

Implementation period: 30 months

Target markets: domestic market of Kazakhstan, CIS

Raw material base: sand, lime, ash and slag from ash dumps of CHP in the Pavlodar region

Consumers: Kazakhstan market, CIS, Central Asia

Financial performance

Sales volume 2019-2026	73 770 thousand USD
Net profit 2019-2026	13 658 thousand USD
Payback period	8 years
Break even point	3 913 thousand USD
Product profitability	47%
Return on sales	18,3%

Market prerequisites:

Organization of a full-scale project for the development of innovative products.

Obtaining state support on the terms of PPP (financing preferences, tax benefits) and other state programs.

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Additional income from the sale of bricks and reducing the cost of organizing the functioning of the ash dumps.

Increase value chain

Meeting the internal needs of Pavlodar region and other regions in building materials.

■ ■ ■

Improving the environmental situation in the region.

Tax revenues in the budget for the further development of the industry and "green" energy.

Creation of new job places.





GLASS TARE PRODUCTION

Project description:

Construction of an industrial complex by manufacture of glass tares

Investment amount: 69 911 thousand USD

Capacity: 276 million bottles per year

128 thousand tons of glass mass per year

Products: colorless bottle, weighing 370 g

Location: Pavlodar region, SEZ «Pavlodar»

Implementation period: 24 years, including construction period

Target markets: Kazakhstan, Russia, Uzbekistan, Kyrgyzstan, China

Buyers:

- Producers of alcohol and low alcohol drinks;
- Producers of soft drinks;
- Producers of fruit canning products.

Market prerequisites:

- Lack of production - the volume of glass tare production in the country does not cover the needs of the population. At the end of 2016, 658 million pieces of glassware were imported into the country, which is 3 times higher than domestic production.
- Price differential - there is a significant price differential for a glass tare with Russia (the difference reaches 20 USD per thousand pieces of glassware).
- Raw material base - there are deposits in the territory of Kazakhstan for the development and production of quartz sand, dolomite and limestone.
- Advantages of glass tare - glass tare is a natural and environmentally product that can be recycled.

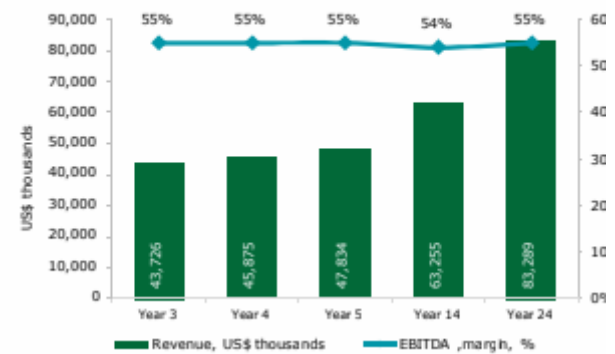
Location Benefits:

- Ready infrastructure - the region has a developed infrastructure, including transportation hubs, warehouses for storing products and raw materials, electricity and energy supply.
- Domestic consumption pattern - the largest volumes of beverages were produced in Almaty (1249 million liters) and South Kazakhstan (387 million liters) regions.
- Rich resources of high-quality raw materials - the southern regions are best supplied with raw materials. Explored reserves of raw materials will ensure the uninterrupted production of glass

Key investment indicators

Indicator	Result
Investment amount, US\$ thousands	69,911
Project NPV, US\$ thousands	114,214
IRR	26.8%
EBITDA margin	54-55%
Payback period, years	5.7
Discounted payback period, years	7.3

Project profitability



HYDROMETALLURGICAL ENTERPRISE FOR PROCESSING ASH

Project description:

Construction of hydrometallurgical enterprises for the production of 100 thousand tons of ash per year processed products

Investment amount: 57 million USD

Production and power: Amorphous silica (silica): 56 thousand tons per year

Alumina: 23 thousand tons per year

Iron concentrate: 10 thousand tons per year

Raw material: Ash and slag waste by Ekibastuz CHP, Ekibastuz SDPP-1 and Ekibastuz SDPP-2

Location: Pavlodar region, SEZ «Pavlodar»

Market: Kazakhstan, EAEU countries

Key Investment Indicators

Indicator	results
Period of implementation, years	24
including investment phase, years	2
operational phase, years	22
Amount of investments, thousand USD	57088
NPV	106259
IRR, %	29,9%
Yield EBITDA, %	52%
Payback period	5,4

Market prerequisites:

Potential for import substitution and silica exports. Due to lack of production of amorphous silica in the Republic of Kazakhstan and insignificant production in the territory EEU, there are sales prospects for these products in the domestic market and abroad.

Further increase in demand for dioxide silica. According to the Technavio forecast, by 2021 global precipitated silica market will increase to 3313.2 million USD. In 2018-2021 the global growth is expected to accelerate of precipitated silica, and the cumulative average annual growth rate will be 6.64%.

Cheap raw materials. The use of ash and slag waste (ASW) in the form of relatively cheap raw materials for commodity production; reducing the cost of finished products, which gives indisputable advantage for the industry participant.



Innovative ash-and-slag waste processing technology

More than 300 technologies for the processing and utilization of ash and slag waste are known, but they are mainly devoted to the use of ash in building and construction materials, without affecting the extraction of useful and valuable components from them.

The patented hydrometallurgical technology "Method for processing aluminosilicate raw materials" (patent №28163 registered in the State Register of Inventions of the Republic of Kazakhstan on January 21, 2014; patent №2574252 registered in the State Register of Inventions of the Russian Federation on December 30, 2015) effectively extracts amorphous silica, alumina and iron concentrate on an industrial and economical scale.

Project Profitability

