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million TOE hydrocarbon reserves (2P)

OIL & GAS



Transforming commodity revenues

JSC "National Company "KazMunayGas" (hereinafter - KMG) is the leading vertically integrated oil and gas company in Kazakhstan. KMG manages assets throughout the entire production cycle from exploration and production of

hydrocarbons to transportation, refinery and service provision in regions where it operates. The company founded in 2002 represents Kazakhstan interests in the country's oil and gas industry and controls four of the largest oil refineries in

Kazakhstan and two in Romania. When using natural resources, KMG recognizes its responsibility to society for the rational use of these resources and the preservation of a favorable environment.



Key performance results

Indicator	2021	2022
production indicators, million tonnes:		
oil and gas condensate production volume	21.7	22.0
oil refining volume	18.8	19.9
oil transportation volume*	74.6	74.7
volume of natural and associated gas production**, billion m ³	8.14	8.2
financial indicators, KZT billion:		
revenue	6 459	8 686
dividends of the Fund and the National Bank of the Republic of Kazakhstan	50	200
net profit	1 305	1 289
operating profit	1 444.2	1 701.1
net debt	1 984	2 143
taxes paid and other obligatory payments to the budget	787	1 176

* Includes pipeline and sea transportation. ** Taking into account the exclusion of JSC NC QazaqGaz and its subsidiaries and dependent organizations from the perimeter of consolidation.



2022 was a year full of significant and positive events for KMG.

Despite price volatility, geopolitical instability, "gray" imports from neighboring countries, increased competition and subjective problems, KMG managed to achieve positive dynamics of production indicators in all areas of business - from exploration and production to transportation and processing of hydrocarbons.

The company made the initial public offering of shares in its history. The IPO was the most significant on Kazakhstan's stock exchanges KASE and AIX. On December 8, 2022, secondary trading in KMG shares started on the stock exchanges. Listing on stock exchanges opened a new stage of the Company's corporate development. An important strategic event was the acquisition of an 8.44% stake in the Kashagan project from Samruk-Kazyna JSC for USD3.8 billion. The transaction is one of the largest deals for KMG in the last decade.

A historically significant event was the launch of the integrated gas chemical complex of Kazakhstan Petrochemical Industries Inc. LLP, in which KMG acquired 49.5%. The project is designed to produce up to 500 thousand tonnes of polypropylene per year and is focused on creating its own cluster of petrochemical enterprises in Kazakhstan. At the end of 2022, the products of the new plant were exported. The raw material for production is dry gas supplied by Tengizchevroil.

In 2022, the company consistently followed the course of implementing

social and environmental initiatives and reducing its carbon footprint. In this direction, cooperation was continued with major international partners - Total Eren S.A, Chevron, Eni and others.

Hydrocarbon reserves

In 2022, KMG achieved significant increase in hydrocarbon reserves, through actively conducted geological exploration activities.

According to an audit by an international independent company prepared in accordance with international PRMS standards, KMG proven and probable hydrocarbon reserves (2P) as of December 31, 2022 amounted to 707 million tonnes in oil equivalent (5 478 million barrels of oil equivalent). As compared to 2021, the level of 2P reserves increased by 9.8%.

Net hydrocarbon reserves by PRMS (as of December 31, 2022)

Reserves category, million TOE*	2021 (for the KMG share)	2022 (for the KMG share)	change, %
Proven (1P)	477	486	+1.9%
Proven plus probable (2P)	645	707	+9.8%
Proven plus probable plus possible (3P)	761	816	+7.1%

* in oil equivalent



Production

KMG's oil and gas condensate production for 2022 totalled 22 012 thousand tonnes of oil (456 thousand barrels per day), up 1.7% year-on-year. Production of associated and natural gas (before reinjection) increased by 2% to 8.2 billion m³.

Oil production at Tengiz increased by 10% to 5 836 thousand tonnes (128 thousand barrels per day). Associated gas production increased by 9% to 3.23 billion m³. The increase in production was due to restrictions on production under the OPEC+ agreement in 2021 and the absence of restrictions in 2022.

	2021	2022	
Oil and condensate production, thousand tonnes	(for the KMG share)	(for the KMG share)	change, %
Ozenmunaigas	5 332	5 096	-4.4%
Mangistaumunaigas	2 944	3 049	+3.6%
Embamunaygas	2 522	2 581	+2.3%
Tengiz	5 311	5 836	+9.9%
Kashagan*	1 344	1 402	+4.3%
Karachaganak	034	1 013	-2.0%
Other	3 165	3 036	-4.1%
Total	21 651	22 012	+1.7%

* The KMG share in the project is 16.88% after September 15, 2022

Total oil production at Kashagan decreased by 21.9% to 12 682 thousand tonnes. It was caused by two circumstances.

First, the scheduled overhaul of the marine and land complexes in mid-2022.

The second is the need for repair and restoration work after the detection of a gas leak at the Gas pre-Selection Plant.

At the same time, the KMG share of oil production increased by 4.3% to 1 402 thousand tonnes (34 thousand barrels per day), and crude gas production increased by 7.3% to 877 million m³ due to increase in the KMG share in the project from 8.44% to 16.88% from September 15, 2022.

Oil and condensate production at Karachaganak decreased by 2% to 1 013 thousand tonnes (22 thousand barrels per day) as compared to the previous year due to a reduction in the intake of crude gas for processing from the Orenburg Gas Processing Plant, and the extension of scheduled preventive maintenance at its processing facilities Gas production increased by 2.4% to 1 944 million m³, due to increased re-injection of crude gas at integrated gas treatment plant No. 2, the commissioning of the fourth compressor and increased gas processing at the Karachaganak processing complex.

Oil and condensate production at operating assets decreased by 1.4% to 13 761 thousand tonnes (273 thousand barrels per day).

The decrease in oil and condensate production volumes was due to emergency power outages by the utility company servicing the production facilities of Ozenmunaigas JSC, as well as natural decline in production levels at some mature fields.

At the same time, decrease in oil production at operating assets was partially offset by increased production of 3.6% at the enterprises of Mangistaumunaigas JSC and 2.3% at Embamunaigas JSC.

Gas production decreased to 2 190 million m^3 due to the decision of the managing holding Samruk-Kazyna

JSC on the allocation of JSC NC QazaqGaz (former KazTransGas JSC) to the separate National Company in November 2021, to which the gasproducing asset Amangeldy Gas was also transferred.

Oil transportation

The total volume of trunk and sea oil transportation increased by 0.1% to 74.7 million tonnes as compared to 2021.

The volume of oil transportation via trunk pipelines increased by 0.9% and amounted to 65 316 thousand tonnes.

In 2022 there was a change in the volume of oil transportation by direction.

Firstly, the volume of transportation to Kazakhstan refineries through pipelines has increased to produce the required volume of petroleum products for the domestic market. At the same time, export volumes of oil transportation decreased due to natural decline in oil production at mature fields.



Secondly, the change occurred due to the redistribution of oil by shippers from the external to domestic market.

Thirdly, due to decrease in production volumes at Kashagan due to the repair work mentioned above.

By the end of 2022, there was also 3.3% decrease in transportation volumes at the Caspian Pipeline Consortium (CPC). The decrease was mainly due to repair work at Kashagan and repair of outriggers at the marine terminal of CPC itself.

The total volume of crude oil transportation by sea decreased by 5.2% to 9 343 thousand tonnes. The decline was mainly due to drop in oil volumes in the Mediterranean Sea due to decrease in export volumes of Kazakhstan shippers (due to increase in supplies to the domestic market).

Sales of hydrocarbons

Sales of oil and gas condensate produced directly by enterprises owned by the KMG group increased by 2.1% to 22 126 thousand tonnes. 62% of this volume was exported. 8 415 thousand tonnes of own produced oil and gas condensate were supplied to the domestic market of Kazakhstan. Including the supply of crude oil assets of Ozenmunaigas, Embamunaigas, Kazakhturkmunai and Urikhtau Operating in the amount of 4 907 thousand tonnes to Atyrau Refinery (AOR), Shymkent Refinery (PKOP) and Pavlodar Oil Chemistry Refinery (POCR) for further processing into petroleum products and their subsequent sale.

Refining

The total volume of hydrocarbon feedstock refining increased by 5.7% to 19 900 thousand tonnes compared to 2021.

At Kazakhstan refineries, the volume of hydrocarbon feedstock processed increased by 2.5% to 14 269 thousand tonnes (KMG's share). This is a record figure in the history of independent Kazakhstan.

Growth of refining volumes was due to increase in demand for petroleum products on the domestic market, the stable operation of PKOP in 2022 and the postponement of its scheduled preventive maintenance to 2023. The volume of processing at the plants of KMG International (Petromidia, Vega) in Romania increased by 14.8% to 5 631 thousand tonnes. The increase in refining volumes was due to the stable operation of the plants in 2022 and the absence of shutdowns.

Annexes

In total, the petroleum products production volume at Kazakhstan and Romanian refineries increased by 6.8% to 18 639 thousand tonnes.

Kazakhstan refineries produced 13 128 thousand tonnes of petroleum products, which is 4.1% more than in 2021, mainly due to the PKOP volume.

At the same time, the production of petroleum products at Atyrau Refinery was 4.5% lower due to scheduled maintenance in October 2022.

KMG International refineries (Petromidia, Vega) produced 5 512 thousand tonnes of petroleum products, which is 14.1% higher than in 2021. The increase in refining volumes was due to restrictive measures during the pandemic in 2021 resulting in lower demand for petroleum products, as well as due to the shutdown of the plant in July 2021 at the Petromidia refinery.

Oil transportation* , thousand tonnes	2021 (for the KMG share)	2022 (100 <i>%</i>)	2022 (for the KMG share)	change, %
KazTransOil	41 224	40 656	40 656	-1.4%
Kazakh-Chinese Pipeline	8 706	19 235	9 618	+10.5%
MunaiTas **	2 179	5 606	2 859	+31.2%
Caspian Pipeline Consortium	12 601	58 711	12 183	-3.3%
Kazmortransflot	9 855	9 343	9 343	-5.2%
Total	74 565	-	74 659	+0.1 %

* Part of the oil volumes can be transported by two or three pipeline companies, and, accordingly, these volumes are taken into account more than once in the consolidated volume of oil transportation.

** MunaiTas is a joint venture consolidated by the equity method, therefore the transportation volumes are specified according to the ownership share of 51%.

	2021	2022	
Hydrocarbon processing, thousand tonnes	(for the KMG share)	(for the KMG share)	change, %
Atyrau Refinery	5 473	5 224	-4.6%
Pavlodar Refinery	5 407	5 480	+1.4%
PKOP*	2 582	3 103	+20.2%
Caspi Bitum*	464	461	-0.7%
Petromidia	4 586	5 258	+14.7%
Vega	321	373	+16.2%
Total	18 833	19 900	+5.74%

* The volume of processing by PKOP and Caspi Bitum is indicated for a share of 50%.

Financial results of KMG in 2022

The increase in world oil prices and the positive dynamics of production results ensured the growth of almost all financial indicators of the Company by the end of 2022.

- Revenue increased by 34.5% to KZT8 686 billion (USD18 845 million) compared to KZT6 459 billion (USD15 161 million);
- EBITDA increased by 25.9% to KZT2 538 billion (USD5 505 million) compared to KZT2 015 billion (USD4 730 million);
- The Company's net profit adjusted for share of profit in joint ventures and associates increased by 2.4% to KZT1 317 billion (USD2 858 million);
- Net profit adjusted for the share in profit in joint ventures and associates was KZT788 billion (USD1 710 million) compared to KZT1 022 billion (USD2 398 million);
- Free cash flow excluding the byout of KMG Kashagan B.V. stake was KZT1 116 billion (USD2 421 million) compared to KZT756 billion (USD1 774 million) for 2021;
- Free cash flow restated in accordance with the new dividend policy, given the stake redemption in KMG Kashagan B.V. was minus KZT82 billion compared to KZT756 billion for 2021;

- The total debt as of December 31, 2022 was KZT4 143 billion (USD8 956 million) compared to, KZT39 746 billion as of December 31, 2021 (USD89 676 million);
- The Company's net debt as of December 31, 2022, was KZT2 143 billion (USD4 632 million) compared to as, at the level of KZT1 984 (USD4 594 million) billion of December 31, 2021.

Dividends from KMG Kashagan B.V.

In September 2022, KMG repurchased 50% of the shares of KMG Kashagan B.V. from the Fund, which owns a 16.88% stake in the North Caspian project.

As a result, dividends were paid in favor of the Shareholders for USD1 508 million, including USD941.5 million in favor of KMG.

IPO Entry

As already mentioned, the IPO of KMG was one of the most important events not only for the company, but also for the equity capital market of Kazakhstan.

KMG shares were offered on the trading platforms of the Astana International Financial Center (Astana International Exchange, AIX) and the Kazakhstan Stock Exchange (KASE).

The offering was the very first "digital" IPO in Kazakhstan - 99% of applications were submitted online via mobile applications of second-tier banks.

KMG IPO was the largest in the history of the stock market of Kazakhstan. Moreover, both in terms of the number of bids received - 129.9 thousand bids and the volume of offering - KZT153.9 billion. Citizens of Kazakhstan purchased securities of the company for KZT74.6 billion.

The volume of bids of legal entities is estimated at KZT72.7 billion.

The offering price per share was KZT8 406, implying a capitalization of KMG for about KZT5.1 trillion (USD11 billion, at December 2022 exchange rate).

The proceeds from the IPO were transferred to the National Fund of the Republic of Kazakhstan.

Life-Saving Rules - IOGP

Since 2022, KMG adopted the International Association of Oil and Gas Producers (IOGP) the Life-Saving Rules, which are uniform for all members.

IOGP analyzed two thousand fatal accidents that occurred in a hundreds IOGP member enterprises between 1991 to the present. As a result of the analysis, the association identified the most frequent safety violations. To prevent these violations, nine life-saving rules have been developed. These rules allow employees to be informed about the actions they can take to protect themselves and their colleagues from fatalities.



Plans for 2023

In 2023, KMG sets ambitious and large-scale tasks. Taking into account the discovery of new deposits in a number of fields, the Company intends to increase the pace of energy production in order to fulfill all obligations to the state and shareholders in a timely manner.

KMG oil production plan in 2023 is over 23 million tonnes per year.

The company has a long-term exploration strategy, with plans to increase reserves through organic and inorganic growth. In 2023, a total of 22 exploration and evaluation wells are planned to be drilled:

- completion of drilling of one exploration well at the Zhenis offshore site;
- commencement of drilling of one deep technologically complex well (more than 5 km) on Paleozoic deposits in the Karaton Podsolevoi and Turgai Paleozoic sites;
- Drilling of 19 appraisal wells is planned for all major operating companies (EMG, MMG, OMG, KGM) as part of the ongoing work on additional exploration of mature fields and previously discovered deposits.

In 2023, KMG intends to conduct 3D seismic exploration at the Al-Farabi site, start drilling at the Karaton Podsolevoi and Turgai Paleozoi sites.

Also, the implementation of the project on Geological Subsurface Exploration (GSE) is starting at five new promising regional sites within the main oil and gas basins of Kazakhstan.

Ozenmunaigas JSC has been instructed to accelerate the work planned for 2023 on the rehabilitation of the Uzen and Karamandybas fields. This project has not only economic, but also important social significance. In the field of energy transportation, a joint project with Abu Dhabi Ports Group, the agreement on which was signed during the visit of Kassym-Jomart Tokayev to the UAE, is to be filled with real content. The creation of a large transport and logistics hub in the Caspian region. Particular attention is paid to the acquisition of two oil tankers with a carrying capacity of 8 000 tonnes and the completion of the modernization of the "Barys" vessel into a container ship.

Great importance is attached to the completion of the joint construction with ENI of a hybrid plant based on wind and solar energy with a capacity of 120 MW in the Mangystau region. Providing the population with clean drinking water is a serious indicator of KMG's efficiency. As part of the company's social responsibility program, construction of a new desalination plant in Mangystau region and reconstruction of the Astrakhan-Mangyshlak main water pipeline will be started. This issue is under the control of the Head of State.

KMG also plans to further develop oil and gas chemistry — the development of the project for the construction of a gas chemical complex for the production of polyethylene.





Gas supply to the domestic market

JSC "National Company "QazaqGaz" (hereinafter – QazaqGaz) manages the centralized infrastructure for the transportation of commercial gas through main gas pipelines and gas distribution networks, provides international transit and sells gas on domestic and foreign markets, develops, finances, builds and operates pipelines and gas storage facilities in 15 regions of operation. Founded in 2000 the company operates the largest network of trunk pipelines in the country with



a total length of over 20.6 thousand km (including 2 793 km of branch pipelines) and gas distribution networks with a length of more than 59 thousand km.



Key performance results

Indicator	2021	2022
production indicators, billion m ³ :		
gas transmission volume	95.4	83.7
realized gas volume	23.6	22.7
sold gas volume (export)	6.0	4.3
financial indicators, KZT billion:		
revenue	896.3	952.3
net profit	400.2	386.6
operating profit	166.3	103.7
net debt	512.5	425.1
taxes paid	52.7	106.4

QazaqGaz: milestones of history

On February 5, 2000 the resolution of the Government of the Republic of Kazakhstan on establishment of the KazTransGas Closed Joint Stock Company was signed. On June 9, 2004 KazTransGas Closed Joint Stock Company was renamed into KazTransGas Joint Stock Company.

On November 30, 2021, KazTransGas JSC was awarded the status of the National Company.

On December 31, 2021 KazTransGas was renamed to QazaqGaz.

The company operates along the entire chain: from geological exploration and production to the sale of final products.

QazaqGaz provides international transit and uninterrupted supply of gas to the domestic market, plans to introduce scientific developments, nurture young specialists and contribute to the energy security of Kazakhstan.

Over 23 years, the company has provided more than 2.3 million subscribers with blue fuel, who consume about 85 million m³ of gas daily during the heating season.

The company plans to achieve the level of gasification of the population of Kazakhstan up to 59% and increase the length of gas trunk pipelines and distribution networks up to 86 thousand km.

Today, the company operates the largest network of main gas pipelines in the country with a total length of more than 20.6 thousand km (of which 2 793 km are gas pipelines branches) and gas distribution networks with a length of more than 59 thousand km.

In mid-2022, a new division, QazaqGaz Exploration & Production was created in QazaqGaz JSC by transformation of Amangeldy Gas LLP. Thus, all new subsurface use projects are consolidated in one structure.

Corporate governance

The company has received 10 new licenses for exploration and development of new fields.

In 2022, the QazaqGaz group of companies practically implemented all production plans.

The main gas transportation totalled 83 755 million m³, including:

- domestic transportation 21 956 million m³;
- gas transportation for export 9 275 million m³;
- international transit 52 513 million m³;
- gas sales amounted to 22 751 million m³, including for export -4 333 million m³.

New gas processing plant

In August 2022 GPC Investment LLP - the operator of the Kashagan gas processing plant project with a capacity of 1 billion m³ - was transferred to the trust management of QazaqGaz.

After completion of the transfer procedure, the QazaqGaz team quickly staffed and mobilized the project team, with the support of the Government of Kazakhstan, logistics of equipment supplies was established. QazaqGaz initiated and conducted the comprehensive audit of the project with the involvement of international companies.

700 people were involved in the project, at the peak of construction, 2,100 people, 300 units of special machinery and 991 units of equipment will be involved. Once commissioned, the GPP will create 600 permanent jobs in the region.

The railway tracks of the first start up complex have already been brought in, which allows for timely delivery of materials and equipment.

In order to control the quality of the equipment manufacturing process, QazaqGaz JSC engaged a specialized international company, TUV Rheinland.

In 2022, the previously approved design and estimate documentation (DED) was adjusted. When adjusting the DED, all shortcomings in terms of reliability and safety of equipment were taken into account considering world experience for similar projects. Technological equipment and technological processes have been optimized with a focus on the quality of products, as well as reducing emissions into the atmosphere and energy consumption.





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To strengthen project management and engineering support of the project, one of the world leaders in the field of engineering, Technip Energies was engaged.

QazaqGaz held public hearings in Makat district of Atyrau region. The meeting discussed the possible impact on the environment as part of the adjustment of the project for the construction of a gas processing plant at Kashagan. The hearing was attended by residents of the district, republican public environmental organizations and representatives of local executive bodies.

The Kashagan gas processing plant, which will process 1 billion m³ of crude gas and produce about 700 million m³ of commercial gas, is scheduled to be launched in 2025. The capacity of the second stage of the project will be 2-4 billion m³ of crude gas per year. The third and fourth projects should provide another 6 billion m³ of gas.

Gas Transmission System Modernization

To date, Kazakhstan-China and Beineu-Bozoi-Shymkent modern gas trunk pipelines have been built in Kazakhstan, through which gas exports and domestic gas supply are ensured.

These projects were implemented, among other things, at the expense of QazaqGaz. In addition, the entire technological infrastructure has been created, the possibilities of which are not only to increase capacity, but also to diversify gas flows in any direction.

QazaqGaz continues to implement investment projects on construction, modernization, reconstruction of gas transportation infrastructure and gasification of the regions.

In 2022, the company began work on the implementation of priority projects in Mangystau and Atyrau regions. The project is being implemented to build a gas infrastructure for the conversion of the Almaty heat power plant to gas.

In 2022, the construction of the megaproject of the gas transportation system of Kazakhstan – the second line of the Beineu-Zhanaozen main gas pipeline was launched.

According to the technological scheme of the project, the total length

of the 2nd line of the gas pipeline will be 308 km, with a capacity of 5.8 billion m³ per year.

Today Mangystau region has the highest consumption of natural gas in the domestic market of the country, so the construction of the second line is of great social economic importance, and will strengthen the energy security of the region.

The project implementation will ensure stable gas supply to the settlements of Mangystau region, large enterprises whose operation directly depends on reliable and uninterrupted gas transportation for power generation, heat supply to the population, social facilities and industrial enterprises of the region, as well as prevention of emergency situations and elimination of the risk of gas supply interruption as a strategically important service to the population of the region.

Also in 2022, the overhaul of the Zhanaozen-Zhetybai-Aktau gas transmission system was started, consisting of three threads and being a continuation of the Okarem-Beineu main gas pipeline, which covers the need for natural gas in Mangystau region, Aktau city and large industrial



Corporate governance

Annexes

enterprises of the region such as Mangistau Nuclear Power Plant etc.

Resource base

According to the company, following 2022 gas consumption in Kazakhstan totalled 21 billion m³, with exports - 5 billion m³. According to the forecast, by 2030 the volume of gas consumption in the country will grow to 40 billion m³.

To date, recoverable gas reserves in Kazakhstan are estimated at 3.8 trillion m³. The main gas reserves are concentrated in four large fields: Karachaganak, Tengiz, Kashagan and Zhanazhol. Their total volume is 2.7 trillion m³.

Meanwhile, QazaqGaz's own natural gas reserves in 2022 amounted to:

- at the Amangeldy deposit 10.26 billion m³;
- at the Zharkum deposit 0.343 billion m³;
- at the Airakty deposit 2 485 billion m³;
- at the Anabai deposit 2 226 billion m³.

In December 2022, QazaqGaz completed the procedure of acceptance and transfer of the Pridorozhnoye field, previously owned by Samruk-Energy JSC. It is known that the recoverable gas reserves on the Pridorozhnoye amount to about 10 billion m³.

The Pridorozhnoye field is located in Suzak district of Turkestan region. The field was discovered in 1975.

In 2023, the Minister of Energy of the Republic of Kazakhstan approved the roadmap for increasing the volume of commercial gas, which provides for an increase in the resource base of about 640 billion m³ of gas.

The Anabai field is planned to be commissioned in 2023. The forecasted production volume is 16 million m³ per year. In 2026, Barkhannaya field will be launched with a forecasted production volume of 48 million m³.

In 2027, Pridorozhnoye field will be launched with a production of 142 million m³ per year.

Meanwhile, the deterioration of the gas transmission infrastructure hinders the development of the gas industry. The tariff for the supply of natural gas to Kazakhstan consumers, which does not permit the modernization of the gas infrastructure, results in losses.

To reduce losses by KZT18 billion, the company approved wholesale prices with 7.6% increase on average in Kazakhstan for the period from July 01, 2022 to June 30, 2023.

In April 2022, a pilot project was launched in Zhambyl and West Kazakhstan regions, where retail prices for commercial gas were reduced by 20%. Since July 2022, retail prices for commercial gas have been reduced by 20% throughout the republic.

By 2030, gasification is planned to cover 65% of Kazakhstan's – 13.5 million people. Industrial facilities are also switching to gas. According to the Ministry of Energy of the Republic of Kazakhstan, gas consumption in the country has increased by 35% over the past 5 years. Annual increase was 7% and will only grow in the future. This is facilitated by the commissioning of new industrial facilities and the implementation of large gas chemical projects.

A significant part of domestic gas consumption is directed to needs of the population, which is a priority energy policy of the Government of the Republic of Kazakhstan.

In Kazakhstan, the Committee on Regulation of Natural Monopolies of the Ministry of National Economy of the Republic of Kazakhstan regulates gas prices for end consumers depending on regions and categories of consumers.

QazaqGaz carries out wholesale sales of commercial gas at marginal wholesale prices approved annually by the Ministry of Energy of the Republic of Kazakhstan in coordination with the Ministry of National Economy of the Republic of Kazakhstan.

QazaqGaz IPO

The company plans to go public in 2025. However, before offering securities to a wide range of investors, it is necessary to increase the investment attractiveness of QazaqGaz. Anti-crisis measures are already being taken in all areas of the company' business, and work is underway to optimize costs.

But the main agenda item remains the pricing of commodity gas. To date, its cost is underestimated, which is why producers are not interested in production.

This situation led to the shortage of this product in Kazakhstan, which could not but affect the activities of the national operator.

According to calculations of the company's analysts, the national gas operator loses KZT11 from each "cube". Over the past five years, the company has KZT587 billion of accumulated loss (from gas sales to the domestic market), and if nothing is changed, in three years the company's loss may reach KZT1 trillion.

In this regard, the company has developed and presented the new business plan. Now all the nuances are being worked out together with the Sole Shareholder - Samruk-Kazyna JSC.

QazaqGaz participates in the implementation of a comprehensive plan for the development of the country's gas industry for 2022-2026.



The company has already initiated a number of proposals to the law "On Gas and Gas Supply" on socially fair pricing reform, including expanding the list of categories of consumers willing to purchase marketable gas at market value.

Plans for 2023

On the run-up to the IPO, the company focused on achieving a

higher position in the ESG rating, improving corporate governance, and reviewing environmental regulations.

Among the priorities of QazaqGaz – modernization of gas transmission infrastructure in Mangystau and Atyrau regions. The company intends to start developing a feasibility study on the project "Increasing the Capacity of Beineu-Bozoi-Shymkent Main Gas Pipeline". Besides, it is planned to increase the volume of marketable gas, due to the commissioning of Anabai field into commercial development.

Negotiations are underway with the operator of the Kashagan field (NCOC) to reach an agreement on the management of the entire volume of liquefied petroleum gas.

From the extraction of raw materials – to a new processing stage Oil and Gas Chemistry Development

The idea of deep processing of the country's gas resources to produce high value-added products was discussed at the dawn of Kazakhstan's independence in 1993. From the very beginning of the development of the Tengiz field, all agreements with Tengizchevroil LLP included provisions on the supply of associated gas produced in the process of oil production to Kazakhstan for needs of the petrochemical industry at a significant discount. The intention to implement petrochemical projects was adopted in 2008. According to the Development Program of the petrochemical industry of the Republic of Kazakhstan for 2008-2013, it was supposed to build, among other things, a single polypropylene and polyethylene production complex. Given the capital intensity of such project, it was decided to divide it into two independent projects and implement them in stages.

Kazakhstan Petrochemical Industries. Polypropylene as a basis of new production

In November 2022, the Kazakhstan Petrochemical Industries (KPI) plant was launched in Atyrau.

KPI is the first large-scale project in the petrochemical industry of Kazakhstan with deep processing of raw materials. The KMG subsidiary will annually produce up to 500 thousand tonnes of finished products





- about 1% of the global production of polypropylene.

The feedstock for the polypropylene production is propane delivered from the Tengiz field. Propane is delivered to the site of the complex by railway transport tank wagons. On average, 72 wagons with a total volume of 2 300 tonnes were discharged per day.

The KPI plant will not only cover the country's current demand for polypropylene, but will also trigger the expansion of existing facilities and the opening of new related industries.

It is calculated that production of the petrochemical industry for the country and Atyrau region in particular for each USD will bring USD2-3 of growth in the economy. It is assumed that the contribution to the country's GDP from the first integrated gas chemical complex will soon reach 1%.

90% of the polypropylene produced here will be exported to China, Turkey, European and CIS countries.

43 Kazakhstan enterprises took part in the project implementation. AtyrauNefteMash, Petropavlovsk Heavy Machinery Plant, Imstalcon JSC and others were engaged in the manufacturing and supply of equipment and materials. Over 4 000 jobs were created during the construction period.

For the first time, a laser scanning of 1 million points with an accuracy of dimensions up to 0.1 mm was carried out at the Kazakhstan enterprise. Each constructed part of the plant was compared with a 3D model in the process of such scanning to track the compliance of works with design and technical documentation. During the construction, 29 thousand tonnes of metal structures were installed, more than 165 thousand cubic meters of concrete were poured, 2.5 thousand kilometers of cables and 261 kilometers of technological pipelines were laid.

The new petrochemical complex meets the strictest environmental safety standards. The propane supplied to the enterprise from the Tengiz field has already been purified from harmful substances, which implies minimal formation of harmful gases and safety of production.

KPI has become the successfully implemented first phase of the integrated gas chemical complex.

The next stage is the creation of production facilities for the polyethylene and butadiene production.

KMG PetroChem LLP

KMG PetroChem LLP (formerly KLPE LLP) was established to implement the second stage of this project. The goal is to produce polyethylene with a capacity of 1 250 thousand tonnes per year. The raw material for the project is ethane in the amount of 1.6 million tonnes per year.

The project is being implemented on the territory of FEZ National Industrial Petrochemical Technopark in Atyrau region.

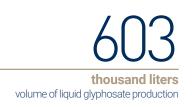
The feedstock for the Polyethylene project is also the gas from Tengiz field.

The total amount of funds raised (including borrowed funds and funds of foreign investors) for the project implementation is more than USD6.5 billion.

More than 8 000 jobs will be required for the construction, 875 qualified personnel will be engaged during the operational period. According to preliminary estimates, tax revenues will amount to USD5.7 billion. The country's dividends are about USD18 billion.

It is expected that the availability of own production of basic petrochemical products will lengthen the value-added chain by developing new production facilities that will process basic products into industrial and household products with further export of finished products. The development of such approach can noticeably change the specialization of the economy of the Republic of Kazakhstan and provide significant increase in small and medium-sized businesses and new jobs.





Development of chemical production

Samruk-Kazyna Ondeu LLP (hereinafter – SK Ondeu) was established in 2009 to organize and conduct research, expertise and other work required for the implementation of investment projects in the chemical industry in four areas of operation.



Key performance results

Indicator	2021	2022
production indicators:		
liquid glyphosate production volume, thousand liters	196	603
biaxial – oriented polypropylene film production volume, tonnes	9 357	5 299
polypropylene bags production volume, million pcs	15.5	15.5
sulfuric acid production volume, thousand tonnes	194.5	175.4
electricity production volume, million kWh	1.8	2
financial indicators, KZT billion:		
revenue	36.1	37.5
net profit	- 38.5	-144
operating income	1.7	3.6
net debt	72.6	67.3
taxes paid	2.8	3.5



In 2009 the Fund established United Chemical Company LLP. The main purpose of the company's activity is to promote the development of new chemical industries in Kazakhstan through equity participation.

In 2022, the company rebranded and since February 3 is called Samruk-Kazyna Ondeu LLP, the Company's logo and corporate colors have been changed. It is planned to focus on the development of chemical industry production, including the processing of secondary materials ("ondeu", translated from the Kazakh language "processing"). In 2022, changes in the geopolitical situation mainly caused not achieving production and financial indicators. The main product is Biaxiall oriented polypropylene film, exported (more than 80%) mainly to Russia. However, due to the sanctions restrictions in 2022, the market of the Russian Federation was oversaturated with its own similar products. This led to a significant drop in sales of SK Ondeu products in 2022.

In addition, the company faced a shortage of tank wagons for the transportation of sulfuric acid, which was caused by the recall of Russian wagons. This led to a shortage of the wagon fleet in the domestic market. But despite the changes in the market, the company has reached its planned income indicators.

The subsidiary producing agrochemical products in 2021-2022 faced a sharp rise in the price of the main raw material - glyphosate from China for the production of herbicides, which accordingly affected decrease in production volumes as compared to 2019-2020.

In order to minimize the negative impact of sanctions restrictions, the following measures were taken. The company increased its own wagon fleet, reoriented from exports to the domestic market, and concluded contracts for the supply of raw materials with local producers. For the first time in the entire history of SK Ondeu operations, dividends were received from two Subsidiaries in the amount of KZT6.8 billion by the end of 2022. This had a significant impact on improving the financial stability of the companies group.

In 2022, a foreign currency loan from Sberbank of Russia JSC, raised in 2013 for the implementation of polymer products manufacturing project, was fully repaid.

The new Development Strategy of SK Ondeu for 2022-2032 was developed and approved, revealing the main trends in the development of the chemical industry of the Republic of Kazakhstan and promising areas.

With in the framwork of the Fund management assignment to reform Portfolio Companies and withdraw non-core assets in 2022, successful work was carried out to bring KPI LLP, KLPE LLP, Silleno LLP into KMG. The work on portfolio optimization will continue in 2023. Along with the withdrawal of non-core assets, the company is actively forming a pool of promising projects for subsequent implementation in accordance with the approved strategy.

Modernization

During 2022 the project was developed to expand a sulfuric acid plant on the basis of an operating enterprise in Stepnogorsk due to the annually growing demand for sulfuric acid. The expansion will allow to produce additional 193 thousand tonnes of sulfuric acid of the highest quality annually.

As a result of pilot tests of Polymer Production LLP, a technological line for the production of polyethylene sleeves launched at the production site. The line capacity is up to 4125 tonnes. The finished products will be oriented on the domestic market of Kazakhstan. In 2022, the company submitted four R&D projects to the Scientific and Technical Council of Samruk-Kazyna JSC, which were approved for implementation. The first stage of the R&D project for the production of a bactericidal-fungicidal drug based on lump sulfur was successfully implemented.

In 2023, the company intends to implement the measures of the 2022-2032 Strategy aimed at improving operational efficiency, sustainable development and diversification of production. Work will continue on optimizing the portfolio of Subsidiaries by transferring noncore assets to the competitive environment.

It is planned to attract investor partners for the implementation of promising projects.

ENERGY





Ensuring energy security

Samruk-Energy JSC was established 2007 in order to develop and implement a long-term state policy on modernization of existing and commissioning of new generating capacities.



Key performance results

Indicator	2021	2022
production indicators:		
electricity sales volumes, million kWh	35 609	35 884
capacity sales volumes, MW	3 248	4 013
heat energy sales volumes, million Gcal	5.76	5.50
electricity transmission volumes, million kWh	7 650	8 154
coal sales, million tonnes	44.8	42.4
financial indicators, KZT billion:		
revenue	332.5	381.5
dividends	3.2	2
net profit	15	30.1
operating profit	53.9	64.6
net debt	297.3	268
taxes paid	41.2	54.6

Power generation

In 2022, electricity generation amounted to 35 884 million kWh, including at Ekibastuz CHPP-1, production amounted to 23048 million kWh, at Ekibastuz GRES-2 – 6002 million kWh, at the AIES – 5099 million kWh, at the Moinak HPP – 973 million kWh, at the Shardara HPP – 518 million kWh, RES – 244 million kWh.

The volume of electricity generation at Ekibastuz GRES in 2021-2022 were the highest on record for the entire period of their ownership by the company.

Ekibastuz energy hub provides up to a quarter of the electricity produced in the country. The group of companies of Samruk-Energo JSC generated 31.8% of electricity from the entire energy balance.

As part of measures to reduce the wear and tear of the main and auxiliary equipment, increase the reliability of electricity supplies to the Almaty energy hub, as well as reduce the environmental load on Almaty, work is underway to transfer Almaty HPP from coal to gas.

Almaty CHPP modernization

A feasibility study was developed on the project of converting Almaty HPP-2 to gas and a positive conclusion has been received from Gosexpertiza RSE.

Also last year, an open two-stage international competition was announced to select an EPC contractor according to the rules of the European Bank for Reconstruction and Development (EBRD). The technical specification for the selection of an EPC contractor and the draft EPC contract were developed according to the "yellow book" of International Federation of Consulting Engineers. On November 25, 2022, a Loan agreement was concluded between Almaty Electric Power Stations JSC (hereinafter -AIES) and the EBRD on financing the project.

A feasibility study has also been developed on the project of converting Almaty HPP-3 to gas and a positive conclusion of the Gosexpertiza RSE has been received.

At the end of 2022, AIES took part in an auction, according to the results of which AIES was announced the winner of the auction with the declared capacity of the station – 480 MW. The contract for the purchase of services for maintaining the availability of electric power during the construction of newly commissioned generating units with maneuverable generation mode with LLP "Settlement and Financial Center for support of renewable energy sources" guarantees a return on investment.

Contribution to the development of renewable energy

In September 2022, a wind power plant with a capacity of 60 MW was commissioned in the Shelek corridor.

In addition, the Board of Directors of Samruk-Energy decided to create a new company on the basis of the Astana International Financial Center (hereinafter -the AIFC) under the name Qazaq Green Power PLC. On November 4, 2022, this company was officially registered at the AIFC site. Work on consolidation of the assets of RES and HPP to prepare for an IPO is in progress.

Bogatyr Komir

Bogatyr Komir LLP is a leading openpit coal mining company, which is a structure of Samruk-Energy JSC. The company's total industrial reserves amount to about 3 billion tonnes of coal. Currently, the production capacity of the Bogatyr mine is 32 million tonnes of coal per year (with input of Cyclic-Flow technology (CFT) - 40 million tonnes), the Severny mine -10 million tonnes of coal per year. The company accounts for 66% of the total coal produced in the Ekibastuz coal basin and 38% of the total coal production in the Republic of Kazakhstan.

The Bogatyr Komir LLP company is the largest supplier in the market of thermal coal of the CIS countries. Most of Kazakhstan's thermal power plants and Russia's largest power plant, Reftinskaya GRES, operate on Bogatyr Komir LLP coal. The company employs 6.3 thousand people.

Coal production volumes

In 2022, Bogatyr Komir LLP produced 42473.2 thousand tonnes of coal. At the same time, the volume of coal sold last year amounted to 42409.4 thousand tonnes, of which 32324.9 thousand tonnes accounted for the domestic market of Kazakhstan, 10084.5 thousand tonnes for export to Russia.

Technological update

The end of 2022 was marked by a long-awaited event: at the Bogatyr coal mine, a CPT was put into pilot operation. The new technology will increase the production capacity of Bogatyr Komir LLP from the current 42 to 50 million tonnes of coal per year. The full commissioning of the facility is planned for the summer of 2023.

The need for a fundamental change in the technology of coal mining at the Bogatyr mine is associated with the achievement of the depth of mining operations, in which the existing railway scheme of coal transportation is ineffective, and the main mining equipment has exhausted its resource and requires updating.



Annexes

The CFT project provides for the introduction of auto-conveyor technology of coal mining, which will increase the capacity of the Bogatyr coal mine from 32 million to 40 million tonnes per year, which allow to increase labor productivity by 25%, reduce the production cost of coal mining by 12%, reduce the average turnover time of wagons from 14.3 to 5.4 hours.

By the end of 2022, the implementation of the CFT project has reached the final stage. The first tonnes of coal, having passed the main technological lines of the complex — from the crusher to loading into wagons, were sent by train to the HPP-2 of Astana.

The main importance of the CFT project for Bogatyr Komir LLP and the economy of the Republic of Kazakhstan is to update the worn-out main technological equipment for guaranteed supply of coal to power plants, and to ensure complete and rational extraction of coal reserves from a depth of 230 meters, which would be impossible when using the old railway technology.

However, the traditional methods of mining on Bogatyr Komir LLP have not yet been abandoned. In May 2022, the EKG-12K excavator was successfully put into operation. This model of the machine is equipped with a modern control system that allows full control of the operation of the equipment and parameters of the main drives of the excavator. Also last vear. a new EKG-15M excavator No. 1903, manufactured by P.G. Korobkov IZ-KARTEX LLC, was put into operation to work in conjunction with dump trucks with a lifting capacity of 130 tonnes. Along with excavators, three Caterpillar-777E heavy-duty dump trucks, five HITACHI dump trucks, and one Caterpillar-785D dump truck were put into operation in 2022.

A powerful reinforcement was the heavy truck crane of the Sany brand. The new machine is characterized by mobility and the ability to lift loads weighing up to 130 tonnes. The crane is intended for use during the repair of mining equipment. At the moment, the main mining equipment involved in the shipment of coal are seven rotary excavators SRs(K)-2000, manufactured by the German company TAKRAF. The Bogatyr Komir Production and Technical Department is armed with five PRO TANDEM DER-300 tractor robots manufactured by the German company Vollert.

The equipment and the CFT put into operation will allow to release the old equipment that has worked out its resource and increase the productivity of miners.

However, the update affected not only the equipment, but also the laboratory equipment. In 2022, Bogatyr Komir acquired an integrated MicroLab 40 Series oil analyzer. The device is designed for the analysis of oil samples of internal combustion engines and hydraulics. Its appearance in the company will allow determining the condition of parts and assemblies of technological machines in advance.

TRAINING OF PERSONNEL OF CFT COMPLEX

194 peop	le - covered	l by the learning process	Stage 1	Stage 2	Stage 3
schnology	115 people	OPERATIONAL PERSONNEL (machinists/operators)	Integration Theoretical training Trainings with the participation of representatives of the		2023 – the training and
Cyclic Flow Technology	38 people	SERVICE PERSONNEL (electrical equipment)	Basic training (with the consciousness of special programs Sinamics, WinCC, Siemens, Simotion, Step7, ST7-PR0-2) 2022	Actemium BEA GmbH, KUKLA 2022 – 2023	development of CFT maintenance and repair personnel on the stated topics will continue
R300 obot		OPERATIONAL PERSONNEL	Workshop with the		
PRO TANDEM DER300 Maneuverab le robot	41 people MAINTENANCE personnel participation of representatives of the Vollet, KUKLA company 2	Internship 2023, April	Qualification tests 2023		
PR0 ⁻ Man		MANAGERS	2022 – 2023		

The process of personnel training for the CFT facilities is continuous and will be continued in the following years

Corporate governance

Annexes



THE MAIN OBJECTS OF ACQUISITION IN 2022



Bucket Excavator EKG-12K

Bucket Excavator EKG-15K



Rotary Excavator SRS-2000



Dump trucks BELAZ - 75139

Dump trucks CAT-777E



2BC-105

The Bogatyr Komir LLP has successfully implemented an Automated Dispatching Control System for Open-pit Mining Operations (ADCS), which has proven its effectiveness in practice.

Salary increase for miners

Since January 1, 2022, tariff rates (salaries) have been increased by 15% at all enterprises of Bogatyr

Komir LLP. The company did this despite the fact that the cost of coal was reduced to the level of last year. Nevertheless, the company, taking care of the quality of life of employees, increased wages.

Bulldozer

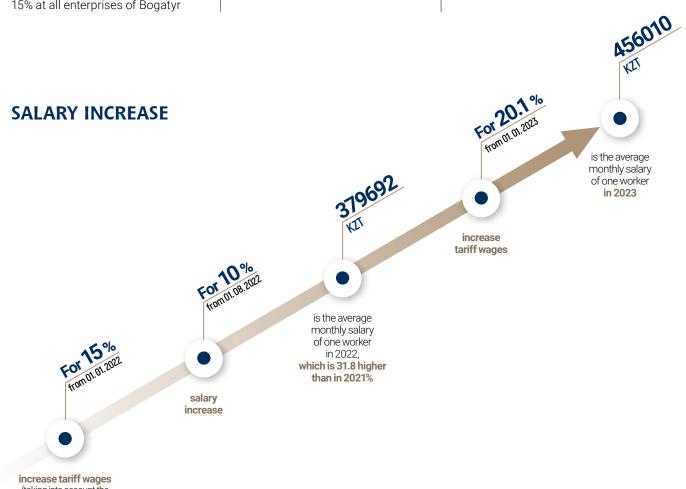
CAT D10T

The company's enterprises also increased wages by 10 % to 1212 employees of the company in low-paid professions.

Plans for 2023

In 2023, Samruk-Energy JSC plans to implement the following issues:

- commissioning of power unit No. 1 at Ekibastuz GRES-1 with an installed capacity of 500 MW;
- conclusion of EPC contracts on gas conversion projects of Almaty HPP-2 and HPP-3;
- preparation for the IPO of Qazaq Green Power PLC.



(taking into account the inflation rate in Pavlodar region according to statistical data in the amount of 8.3%)





Kazakhstan Electricity Grid Operating Company JSC (hereinafter – KEGOC JSC) is a company managing the National Electric Grid of the Republic of Kazakhstan (NEG) and has the status of the System Operator of the Unified Electric Power System of the Republic of Kazakhstan (UEPS).



Key performance results

Indicator	2021	2022
production indicators:		
electricity transmission volumes, billion kWh	54.6	58.5
financial indicators, KZT billion:		
revenue	186.4	217.3
dividends	41.5	13.2
net profit	52.6	26.7
operating profit	56.8	40.9
net debt	86.5	69.5
taxes paid	38.2	38



Factors affecting activities

2022 was the anniversary year for KEGOC JSC. Over the years, the company has created a strong foundation for stable operation and successful implementation of projects on modernization of the NEG, construction of new power transmission lines and substations.

The fulfillment of the planned volumes of services provided directly depends on the stability and development of the company. Thus, by the end of 2022, the volume of electricity transmission through the NEG reached 58.6 billion. kWh, which is higher by 7.2% compared to last year. According to technical dispatching, the supply to the grid and electricity consumption amounted to 104.3 billion kWh. Organization of balancing of production-consumption of electric energy KEGOC JSC - 203.1 billion kWh.

By the end of 2022, net profit amounted to KZT26.7 billion. It should be emphasized that the unbalanced operation of the UES caused by a shortage of capacity had a significant negative effect on financial indicators. Thus, the loss from operations for the purchase and sale of electricity from the Russian Federation in 2022 is KZT17.9 billion. In addition, as a result of the revaluation of fixed assets in December 2021, depreciation charges increased by an order of KZT24.3 billion. Excluding these negative factors, the financial result amounted to KZT 51.1 billion.

High qualification and experience of employees is the key to further successful development of the company, solving complex technical and technological problems. That is why the main focus of 2022 was the policy aimed at improving the social well-being of employees. In the reporting period, staff salaries and tariff rates were increased, quarterly bonuses were increased, due to which the total annual income of working personnel increased by 28 -48%, engineering and technical workers and specialists by 15-36% and middle managers by 10-15%.

Investment activity

During 2022, the implementation of projects for the development of network infrastructure of social importance for the country was continued. The company has completed the project "Strengthening the external power supply scheme of Turkestan. Construction of electric grid facilities", within the framework of which the 220 kV substation "Ortalyk" was put into operation.

The reconstruction of 220-500 kV overhead power lines in the branches of Aktobe, Western and Sarbai intersystem electric networks continued. Among the projects being implemented is "Strengthening the electric grid of the Western zone of the UEPS. Construction of electric grid facilities", scheduled for completion in 2023. All the company's projects are implemented at the expense of own and borrowed funds without budget financing.

Dividends and payments

KEGOC JSC paid dividends in the amount of KZT13.2 billion at the end of 2021 in June 2022.

KEGOC JSC fulfills all obligations to financial institutions in a timely manner. Moreover, in September 2022, KEGOC repaid the loan of the International Bank for Reconstruction and Development in the amount of USD46.3 million ahead of schedule. This was done in order to reduce currency risk, debt burden and the cost of servicing loans in foreign currency. The funds were raised in 2010 for the implementation of the investment project "Construction of the 500 kV Alma substation with connection to the NEG of Kazakhstan with 500, 220 kV lines", for a period of 25 years with the date of the last repayment in 2035. That is, the Company repaid it in full 13 years ahead of schedule.

Issue of "green bonds"

Annexes

KEGOC JSC issued the first "green" bonds. The funds from their placement will be used to implement the company's projects related to the construction of the necessary network infrastructure for large-scale involvement of renewable energy sources in the energy balance, ensuring the energy security of the country, as well as improving the efficiency of electricity transmission. The volume of the issue amounted to KZT35 billion at the rate of 35 million coupon bonds without collateral. with a nominal value of KZT1,000 per piece.

One of the important events for KEGOC JSC in December 2022 was the successful placement of "green" bonds of KEGOC JSC on the trading platform of Kazakhstan Stock Exchange JSC (KASE) with a total volume of KZT16.1 billion with a margin of 3%.

The Year of Occupational Health and Safety

In October 2022, KEGOC JSC held the first forum on occupational safety and health, which was attended by representatives of the Ministry of Energy of the Republic of Kazakhstan, managers and experts in the field of HSE (Health Safety Environment) of the Fund and companies within its structure, KEGOC JSC, as well as representatives of companies from the countries CIS.

At the forum, held under the auspices of the "Year of Occupational Health and Safety - 2022", profile specialists and leaders in the HSE field shared best practices in ensuring safe working conditions, talked about industrial medicine and modern means of protection at work.

At the event, the Chairman of the Business Council of Vision Zero Kazakhstan presented KEGOC JSC with a certificate confirming that the company is a participant in the international zero injury movement - Vision Zero (the Vision Zero concept, based on three main aspects of work at all levels – safety, health and wellbeing, unites leading manufacturing companies around the world).

Another significant event at the forum was the signing by the heads of the branches of KEGOC JSC of personal obligations in the field of Health & Safety, according to which any employee of the company is entitled to stop the work if they identify unsafe working conditions.

Future prospects

Due to the influence of global trends related to the energy transition, especially decarbonization, geopolitical instability and changes in the country's macroeconomic environment, it became necessary to update the company's Development Strategy. At the same time, the company will continue to work to achieve the goal of increasing long-term value by strengthening the financial stability of KEGOC JSC, defining a portfolio of projects and initiatives, investing in profitable projects, implementing large infrastructure projects, improving corporate governance and ensuring sustainable development.

The Ministry of Energy of the Republic of Kazakhstan has developed a draft Concept for the development of the electric power industry until 2032, the adoption of which is planned in 2023. The adoption of the Law "On Heat Power Engineering" is expected in the near future, which will focus on solving the problems of heat supply in the regions, determine long-term plans and systematize the relationship between central and local executive bodies.

In addition, the change in legislation provides for the transition to a new target model of the market - a single buyer who will carry out centralized purchase and sale of electric energy. The bill also provides for the introduction of a balancing market in real time.

The introduction of a Single Buyer model will allow:

- to ensure the return on investment for the construction of a new generation, including basic and maneuverable generation, taking into account environmental requirements;
- to provide an opportunity for consumers to declare a curve consumption schedule, which will reduce their imbalances (deviations of actual values from planned ones);
- to ensure the distribution of expensive electricity from renewable energy sources and from new generation, as well as expensive electricity imports during electricity shortages in the energy system.

When introducing the balancing electricity market (BEM) in real time, it is provided:

- targeting the responsibility of wholesale market entities for hourly deviations from the approved dispatch schedule;
- encouraging consumers to shift their load schedule from peak hours to another time of day (the price of BEM during the "peak" of consumption is much more expensive than during the so-

called "failure" of consumption), which will reduce the need for the construction of new regulatory capacities;

 as a consequence, the possibility of reducing deviations of actual consumption from the planned one at the border with adjacent power systems.

KEGOC JSC will continue to work actively to create conditions for the development of generating capacities, including traditional and maneuverable generation, actively participate in the development and discussion of a new model of the electric energy market, preparation of legal acts on the connection of wholesale market entities to the National Power Grids of Kazakhstan.

Based on the analysis of industry development trends in Kazakhstan and in the world, the current state of production and corporate processes, KEGOC JSC has formed key areas of technological development and digitalization, including the main ones: development and application of energy storage systems for the provision of system services and integration of renewable energy, consideration of the use of digital substations.

In order to ensure effective support of the core business, the company will develop a Program for the development of the information and telecommunications complex of KEGOC JSC, reflecting the priorities of the development of the information and telecommunications complex, as well as the technologies of innovation and technological development of Smart Grid.





Low-carbon Energy Sources



Kazakhstan Nuclear Power Plants LLP (hereinafter – KNPP LLP) was established in order to ensure the development of a pre-project and design documentation for the construction of nuclear power plants, as well as the organization of work on the construction of nuclear power plants in the Republic of Kazakhstan.

The current status of implementation of the NPP construction project

In 2022, the Marketing section of the feasibility study was developed and updated. In May last year, at a meeting of the Interdepartmental Commission on the Development of the Nuclear Industry of the Republic of Kazakhstan, the proposals of KNPP LLP in choosing an area near the village of Ulken for the construction of a nuclear power plant were supported.

Work has also been carried out on the selection of potential vendors of nuclear power plants, a corresponding "shortlist" has been compiled, which includes proposals from the Chinese company CNNC, Korean KHNP, Russian Rosatom and French EDF.

Information and explanatory work

In 2022, 668 materials were released in the Kazakh media on the topic of nuclear energy, including 87 television, 581 print and Internet. 441 materials were published with the direct organizational, consulting, expert and technical participation of KNPP LLP (on TV – 54, in newspapers and Internet resources – 387).

In July 2022, a professional sociological study was conducted by order of the KNPP LLP to determine the attitude of the country's population to nuclear energy and directly plans for the construction of nuclear power plants. The results of the 2022 survey showed an increase in the level of public acceptance compared to 2021.

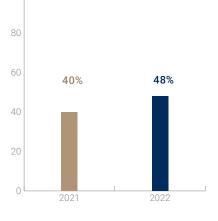
The number of people who are aware of nuclear energy has doubled in a year – from 19 to 38%. However, 48% of respondents believe that Kazakhstan needs to build its own nuclear power plant. The number of opponents of the NPP construction project has decreased to 44%.

Plans for 2023

KNPP LLP is planning for 2023:

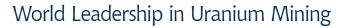
- holding public hearings in Ulken village and adoption of the Decree of the Government of the Republic of Kazakhstan on the choice of the NPP construction area;
- preparation, coordination and adoption of the resolution of the Government of the Republic of Kazakhstan on the choice of the vendor;
- determination of the scope of work and approval of the Terms of Reference for engineering surveys and development of feasibility studies.

Supporters of building a NPP in Kazakhstan



PRODUCTION AND EXTRACTION





Kazakhstan is the world leader in uranium mining in the world and produces about 42% of the world's uranium production. JSC NAC Kazatomprom (hereinafter – Kazatomprom) is the national operator of the Republic of Kazakhstan on export and import of uranium and its compounds, nuclear fuel for nuclear power plants, special equipment and technologies. Kazatomprom is the world's largest producer of natural uranium with priority access to one of the world's largest resource bases. All of the company's uranium deposits are suitable for cost-effective and the least environmentally harmful in-situ leach mining, which, combined with a long operating life of mining assets, allows Kazatomprom to remain among the world's leading producers



with the lowest uranium production costs.

Kazatomprom's shares have been traded on the Astana International Financial Center and the London Stock Exchange since November 2018.



Key performance results

Indicator	2021	2022
production indicators, thousand tonnes:		
uranium production by the Holding	21.8	21.2
uranium sales by the Group	16.5	16.4
financial indicators, KZT billion:		
revenue	691	1001.2
dividends	150.1	227.4
net profit	140.8	348
operating profit	238.2	455.9
net debt	-115.1	-32
taxes paid	148.6	215.2

The 2022 was turbulent for Kazakhstan and the entire world community. The 2022 has experienced risk management processes that have proven their resilience in key areas such as finance, operations and supply chains. The Company continues to monitor

the situation and respond to emerging challenges.

The events that took place in 2022 in the country and in the world did not have a significant impact on the activities of Kazatomprom.

All enterprises have been working and are working without interruption due to the introduction of timely measures on preventing the destabilization of the situation at work and ensuring the safety of personnel and production sites.

In 2022, Kazatomprom shipped contracted volumes via its regular route without any interruptions or problems related to logistics.

In 2022, Kazatomprom successfully delivered natural uranium via the Trans-Caspian International Transport Route, which has been used by the company as an alternative since 2018. This was done in order to offset the potential risk of unavailability of the main route.

The Company continues to monitor the situation with sanctions against Russia and their potential impact on the transportation of finished products through the territory of the Russian Federation. To date, there are no restrictions related to the supply of finished products to the Company's customers around the world.

However, the management of Kazatomprom is closely monitoring the current situation, and is ready to make decisions that will minimize risks and ensure the continuity and efficiency of the holding's activities.

Prospects

Against the background of the energy crisis associated with rising prices for fossil energy carriers and the need to achieve decarbonization goals, nuclear energy has become increasingly regarded by countries as a reliable low-carbon energy source.

The growth of activity of energy companies in the long-term uranium market against the background of the geopolitical situation and positive changes in the nuclear power plant market has become a driver of decision-making by manufacturers around the world about restarting suspended and launching new production facilities in the coming years.

These factors also influenced the company's decision to increase production volumes from 80% to 90% of the nominal volumes specified in subsurface use contracts in 2024.

Despite the continuing uncertainty, Kazatomprom showed good results in 2022.

Consolidated revenue in 2022 for the first time amounted to KZT1 trillion, an increase by 45% compared to 2021. This was mainly due to increased average selling price associated with growth of the spot price and a weakening of KZT against USD, while sales volumes in 2022 were comparable to 2021.

Operating profit in 2022 amounted to KZT456 billion, an increase by 91% compared to 2021, which is also a consequence of the growth in the average selling price of products.

Net profit for 2022 amounted to KZT473 billion⁵, an increase by 115% compared to 2021.

Production volumes were 3% lower compared to last year and amounted to 21227 tonnes on a 100% basis due to the impact of the COVID-19 pandemic on well development in 2021.

As a rule, the development of wells and the extraction of uranium by underground well leaching takes from eight to ten months, and therefore in 2021 delays and limited access to certain key materials and equipment affected the schedule of commissioning wells, which resulted in a decrease in production in 2022.

Consolidated sales volumes in 2022 were similar to those of 2021 and amounted to 16358 tonnes.

Due to the increase in the spot price of uranium, the average selling price for the Group in 2022 amounted to KZT52051 per 1 kilogram, which is 42% higher compared to 2021.

The first delivery of Kazakhstan's nuclear fuel

In 2021, the Ulba-TVS LLP plant for the production of fuel assemblies was put into commercial operation. In December 2022, the plant carried out the first delivery of nuclear fuel (slightly more than 30 tonnes of low-enriched uranium in the form of fuel assemblies) to China, where the products were accepted by the Chinese corporation CGNPC-URC. In 2024, Ulba-TVS plans to increase production volumes to reach full production capacity, which is 200 tonnes of uranium in the form of fuel assemblies per year. This is the only production facility in Kazakhstan for the production of nuclear fuel for nuclear power plants and has a guaranteed market for 20 years ahead.

⁵ Including non-controlling interest.

Occupational health and industrial safety

Industrial safety has been and remains for Kazatomprom an absolute priority. The company is constantly improving the level of industrial safety, and statistics in recent years show a trend to reduce the number of accidents.

Production activities are conducted in compliance with Kazakhstan and international requirements, comprehensive measures are implemented to prevent accidents, systematic work is carried out to improve the safety culture among employees and managers at all levels.

In 2022, Kazatomprom allocated more than KZT8 billion for the implementation of labor protection and industrial safety programs (similar to 2021).

Radiation exposure and nuclear safety remained stable in 2022 without any excess or radiation accidents. In 2023, the issues of labor protection, ecology and radiation safety will also remain key for Kazatomprom.

Plans for 2023

Kazatomprom's expectations for the volume of production in 2023 are still consistent with the market-oriented strategy. The company maintains its intentions to reduce production by 20% from 2018 to 2023 (compared to the production levels set under the subsoil use contracts).

Sales volume in 2023 is expected to range from 15,400 to 15,900 tonnes.

Kazatomprom still strives to maintain the target level of stocks (stock balances), which corresponds to approximately six-seven-month production volume of the Company in proportion to the share of participation.

The financial performance of the company may be affected by factors such as difficulties with the supply of necessary raw materials, changes in the Tax Code of the Republic of Kazakhstan and possible requests for social contributions. Kazatomprom retained its position as the largest producer and seller of natural uranium in 2022, and is confident in the long-term prospects of the nuclear industry.

The company's strategy in 2022 has remained unchanged: Kazatomprom continues to focus on market discipline in production and sales, in order to obtain benefits and create value for all stakeholders.

Kazatomprom continues to operate in accordance with the highest international professional standards in key aspects of its activities, such as transparency, corporate governance, as well as health, safety and environmental protection.





gold produced



Mining and metallurgical industry

Joint Stock Company "National Mining Company "Tau-Ken Samruk" (hereinafter – JSC NMC Tau-Ken Samruk) is a vertically integrated company established in 2009. The main objectives of the company are to promote the economic and strategic interests of the state in the management of state assets of the mining and metallurgical industry and the development of the mineral resource complex of the country. The mission of the company is to contribute to the development of the individual sectors of mining and metallurgical industry of the Republic of Kazakhstan by means of the projects implementation in collaboration with strategic investors.

The mining and metallurgical complex remains one of the most competitive and dynamically developing sectors of the economy of Kazakhstan. The 2022 is marked by the development of the global crisis. The trends in the development of the world and Kazakhstan mining and metallurgical industry were determined by the slowdown in the pace of development of the world economy and geopolitical tensions, with a downward trend in metal prices on the world market.

Despite the negative trends in the global and domestic economy, JSC NMC Tau-Ken Samruk made every effort to implement the planned activities of the company's Development Strategy.

Key performance results

Indicator	2021	2022
production indicators, tonnes:		
gold production volume	51.1	55.6
silver production volume	6.4	8.3
gold sales volume	52.4	55.6
silver sales volume	14.9	4.3
financial indicators, KZT billion:		
revenue	724	945
dividends	46	89
net profit	72	-16
operating profit	-2.02	2.16
net debt	-9	23
taxes paid	1.5	2.4

During this difficult period, JSC NMC Tau-Ken Samruk continued to implement existing exploration, mining and metallurgical projects. At the same time, the company pays considerable attention to attracting and introducing new innovative technologies. JSC NMC Tau-Ken Samruk as a national company has the necessary experience and competence to effectively manage mining projects.

Implementation of projects with investors

Currently, JSC NMC Tau-Ken Samruk is focused on development of gold, copper, and lead-zinc deposits, participates in the implementation of projects for other metals (Severniy Katpar and Verkhneye Kairaktinskoye – tungsten and molybdenum).

The projects contributing to the development of the company include:

 a project for development of the world's largest deposit of polymetallic ores Shalkiya with the construction of a processing plant and plants for the production of metallic zinc and lead;

- project for development of the Alaigyr lead deposit with the release of lead concentrate;
- a project for development of the Severniy Katpar rare metal deposit with the construction of rare metal production on its basis;
- a project for the production of refined gold and silver at the refining plant in Astana.

All these projects are created and mastered with participation of foreign partners, including European ones.

New record of Tau-Ken Altyn

In 2022, the refining plant located in the capital exceeded the gold production plan by more than 10% (against the plan for 50 tonnes, the company refined 55.6 tonnes of gold.

In total, 249 tonnes of gold have been refined at Tau-Ken Altyn since its commissioning. The plant produces 99.99 gold, the so-called "four nines", in standard ingots of 12 kg and in granules. The plant's products are of strategic importance – replenishment of the country's gold and foreign exchange reserve, the buyer of bullion is the National Bank of the Republic of Kazakhstan.

Tau-Ken Altyn LLP is the holder of the "Good Delivery" certificate of The London Bullion Market Association (LBMA). This means that the gold produced in Tau-Ken Altyn meets 100% international quality standards and has a guarantee of legal purity.

In addition, in 2022, the plant confirmed compliance with the standards:

- quality management ISO 9001:2015;
- environmental aspects ISO 14001:2015;
- occupational health and safety ISO 45001:2018.

The company's success in terms of occupational safety is also recognized by the industry community – Tau-Ken Altyn became the leader of the year in industrial safety according to the Astana Mining & Metallurgy (AMM) International Congress.

The refining plant of Tau-Ken Altyn LLP was put into operation in December 2013. The plant uses modern high-performance and energy-efficient equipment, maintains the strictest environmental standards: innovative technological solutions can reduce the risk of negative impact on the environment to zero.

Interaction of JSC NMC Tau-Ken Samruk with Kazzinc LLP

Currently, JSC NMC Tau-Ken Samruk is a partner of Glencore International



and owns 29.82% in the authorized capital of Kazzinc LLP. According to the Report on the preliminary financial results of Glencore International Corporation for 2022, the losses of Kazzinc LLP amounted to USD51 million.

Non-core assets

In July 2022, JSC NMC Tau-Ken Samruk announced the sale of Tau-Ken Temir LLP and Silicon Mining LLP.

The design capacity of the Tau-Ken Temir LLP plant is 25 thousand tonnes of metallurgical silicon. The company is located on the territory of the special economic zone "Saryarka" in Karaganda, which implies 100% exemption from corporate income tax, property tax, land tax, customs duties and VAT on imported goods.

The raw material base of the Tau-Ken Temir plant is the Aktas quartz deposit, located in the Karaganda region and owned by Silicon mining LLP. The total reserves of quartz deposit - about 4 million tonnes with an average SiO_2 content of 99.5% - can provide the plant with the necessary raw materials for 30 years.

Tau-Ken Temir LLP and Silicon Mining LLP are included in the list of facilities proposed for transfer to the competitive environment as a priority in accordance with the Decree of the Government "On Some Privatization Issues for 2021-2025" dated December 29, 2020.

The first stage of the competition was held until November 7, 2022. Following the results of the first stage of the competition, guided by the rules, the competition was declared invalid, the corresponding notice was posted on the official website of JSC NMC Tau-Ken Samruk.

International cooperation

The reserves of mineral raw materials in Kazakhstan are quite large, but not always competitive due to the low content of the target metal, the persistence of ore, as well as territorial, transport and other restrictions.

The existing technologies for the production of non-ferrous and rare metals in Kazakhstan do not fully meet the modern requirements of ecology, economy and integrated use of mineral raw materials. Therefore, the company is establishing close cooperation with a number of major global companies offering the latest technological solutions for mining and metallurgical industries.

In August 2022, JSC NMC Tau-Ken Samruk and the Turkish holding Eczacibaşı established a joint venture South Ural Resources LLP to search for gold and copper in the republic. The new joint venture will operate in the Aktobe region of Kazakhstan. In case of successful completion of the exploration stage, joint mining and production of non-ferrous and precious metals is planned.

Eczacıbaşı Holding was founded in 1942. Today Eczacıbaşı is one of the leading industrial producers of mineral and metallic minerals in Turkey and the only producer of primary magnesium in Turkey and Europe. As a supplier of high-quality minerals, industrial materials and equipment, Esan sells more than 150 products for industry in 50 countries.

A preliminary agreement on the establishment of the joint venture was reached in May 2022 during the state visit of the President of Kazakhstan to the Republic of Turkey.

It is worth noting that the Kazakh enterprise aroused genuine interest in Qatar. In October 2022, JSC NMC Tau-Ken Samruk and Qatar Mining signed a memorandum of understanding with the intention to develop strategic business relations to jointly explore opportunities for the development of projects in the mining and metals sector at the international level.

Social Partnership

The social well-being of JSC NMC Tau-Ken Samruk is an indisputable priority for the holding. The company pays great attention to the preservation of their health, provides medical insurance, supports the pursuit of healthy lifestyle, and provides opportunities for sports.

In 2022, within the framework of social partnership, salaries of employees holding low-paid positions have been increased by 5-41% in the entire group of companies of JSC NMC Tau-Ken Samruk. The corporate IR standard has been implemented. Today, the staffing of qualified personnel in the JSC NMC Tau-Ken Samruk group of companies is 92%. There is a need for specialists with project management skills, and, as in many mining and metallurgical companies, there is a shortage of good technical specialists.

In order to train, retrain and improve the qualifications of the company's employees and to employ young specialists, JSC NMC Tau-Ken Samruk has signed a number of memoranda with Satbayev University, Kazakh University of Technology and Business, D. Serikbayev East Kazakhstan Technical University, MISIS National Research Technological University and other universities. Students who have expressed a desire to build a career in JSC NMC Tau-Ken Samruk are paid for their studies, a scholarship is paid.





TRANSPORT AND LOGISTICS

🍕 air astana

Development of passenger transport

Founded in 2002, Air Astana JSC is the largest airline in Kazakhstan in terms of revenue and fleet size.



Key performance results

Indicator	2021	2022
production indicators:		
passenger traffic, thousand people	6618	7,349
cargo traffic volume, tonnes	18 772	12 839
aircraft load factor, %	80	83
on-time flight performance indicator, %	82	74
financial indicators, KZT billion:		
revenue	324.9	478
net profit	15.5	37.6
operating profit	43.6	70.1
taxes paid	14.5	41.9

Market Overview

Being one of the largest airlines in Eurasia by income and fleet size, Air Astana JSC Group has 71% and 42% market share on domestic and international routes from Kazakhstan, respectively. In 2022, Air Astana JSC group transported more than 7.3 million passengers on more than 51 thousand flights covering 88 routes in 20 countries. Despite the COVID-19 pandemic, the Air Astana group of companies has increased its fleet to 43 aircraft, the average age of which is 5 years.

The Air Astana JSC group operates under two brands: Air Astana, a full-service carrier, and FlyArystan, which is a budget carrier. Each of these brands of the Group is aimed at different customer markets and geographical regions, providing a choice according to a range of customer needs and travel goals.







FlyArystan is one of the first low-cost carriers, or LCC, in Eurasia⁶ and the largest domestic airline in Kazakhstan in terms of capacity and volume of traffic with a growing network of international routes. The company's strategy is to adhere to the principles of the ultra-low cost model used in the USA and Europe, while Air Astana JSC remains a full-service option for travel within the country and abroad. The COVID-19 pandemic resulted in the stoppage of domestic air traffic in Kazakhstan in March 2020, but later that year it recovered and exceeded the volume of domestic passenger traffic in 2019. This permitted FlyArystan to take advantage of the growing domestic market and promote a new way of air transportation in the region.

FlyArystan renders low-cost air transportation services on regular short- and medium-haul routes through Kazakhstan and further to the Caucasus, Central Asia and the Middle East. The FlyArystan brand was established in May 2019 and by the end of 2022 operates 14 aircraft from five bases in Kazakhstan on 40 routes.

A strong financial position and a flexible approach to decision-making during difficult periods in the market permitted the Group to react quickly to the geopolitical events of 2022. During the year, the airline's route network continued to expand due to the resumption of flights from Almaty to London, Almaty to Beijing and Atyrau to Istanbul, as well as the launch of new flights to the Greek island of Crete. Along with flights to Phuket in Thailand, the airline has started daily flights to Bangkok since November, which is an important step in the restoration of the Asian network. Frequencies to Dubai and Delhi have also been significantly increased.

Factors that Affected Results

Freight sales on domestic routes within Kazakhstan decreased slightly due to increase in the capacity of trucks between Almaty and Astana. The volume of Kazakhstan exports on international routes was negatively affected by the suspension of flights to Russia and Ukraine; those heading to China were also affected by the absence of freight charters from Almaty to Beijing.

The main factors that affected the indicator of timely flight performance in 2022, which resulted in its decrease are as follows:

- Almaty airport infrastructure: equipment problem and staff shortage;
- Shymkent airport infrastructure: security restrictions, very limited number of maintenance equipment and weather conditions;
- the closure of the Astana airport during the daytime due to construction work, which resulted in longer delays when the flight deviated from the schedule;
- the unstable political situation in the world, which forces us to quickly change the routes of most

international flights, which leads to an increase in flight time and to a violation of the timely arrival / departure of flights;

- the airline industry is facing an extreme crisis, expressed by strikes and a shortage of resources, including human resources, at foreign airports;
- environmental factors (e.g. bird strike or damage by foreign objects);
- inability to provide spare parts by the manufacturer Pratt& Whitney due to global supply chain disruptions.

The above violations affect the duration of the flight crew's duty.

To minimize the impact of the above, the following actions are performed:

- from July 20, 2022, aircraft are being introduced daily in case of unforeseen circumstances in order to avoid or minimize massive schedule disruptions and long delays;
- regular meetings with the management of Almaty Airport to improve the work of the Group and service at the airport;
- Air Astana JSC has officially appealed to all domestic airports with a request to inform in advance



⁶ The Eurasian countries include Afghanistan, Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Mongolia, and the Republic of Moldova, Tajikistan, Turkmenistan, Ukraine and Uzbekistan (as defined by the Organization for Economic Cooperation and Development (OECD). about all planned construction works for more accurate planning of the flight network;

- regular meetings with the Civil Aviation Committee and the Aviation Administration of Kazakhstan regarding Kazakhstan airports and the condition of equipment;
- the approach to crew planning has been changed due to the postponement of basic vacations and training for periods of low load.

Aircraft Fleet

In December 2022, Air Astana JSC received its 10th Airbus A321LR aircraft directly from the manufacturer. The Airbus A321LR is a long-haul version of the A321neo with a two-class layout: 16 seats in business class and 150 seats in economy. Airbus A321LR operates flights of the international Air Astana network to destinations such as Antalya, Bangkok, Dubai, Frankfurt, Istanbul, London, Phuket and Sharm el-Sheikh, as well as a new flight to Heraklion on the Greek island of Crete.

As of December 31, 2022, the Group operated 43 aircraft, including 35 Airbus A320/A321 family aircraft, three Boeing 767s and five Embraer E190-E2. 29 aircraft are operated by Air Astana JSC and 14 by FlyArystan in accordance with a single operator certificate owned by the Group. The average age of the Group fleet at the end of 2022 was 5 years, which makes it one of the youngest in the world.

By decommissioning the Boeing 757 and Embraer E190-E1 in 2020-2021, the Group will continue to implement its fleet simplification strategy aimed at reducing the aircraft family to two types. By the end of 2027, it is planned to increase the fleet to 64 aircraft.

Engineering and Technical Support

To ensure the highest level of aircraft safety, airworthiness and reliability of aircraft, the Department of Engineering and Technical Support (ETS) maintains the Group fleet of aircraft in accordance with the aircraft manufacturer's maintenance program approved by the aviation regulator. ETS is one of the largest and most complex divisions of the airline, which employs more than 850 employees in 6 subdivisions.

High standards of maintenance of Air Astana are carried out in accordance with the rules of the European Aviation Safety Agency (EASA). The airline is an approved EASA Part 145 maintenance organization that is regularly examined by EASA to ensure compliance. The airline has EASA permits to perform aircraft maintenance at bases in Almaty and Astana, with linear stations in Atyrau, Shymkent and Aktau, which opened in 2021, there are also hangars for maintenance in Almaty and Astana. In addition, Air Astana JSC provides line maintenance services for external customers-airlines.

In 2022, the ETS Department continued to expand the project to organize its own maintenance and repair (M&R) in the form of C-check for the Airbus A320 family of aircraft, which provides significant cost savings in comparison with the M&R outsourcing scheme. In October 2022, Air Astana JSC became the first Kazakhstan carrier to perform comprehensive C2 level maintenance, which includes in-depth inspections and tests of each part of the aircraft, including non-destructive testing of the aircraft structure. At the end of 2022, the company has completed 14 C-checks, which has significantly reduced costs and at the same time increased engineering experience.





Training Academy

The Air Astana JSC Training Academy is an accredited aviation training center of the Aviation Administration of Kazakhstan (AAC), which also provides mandatory (regulatory) trainings to external clients.

In 2022, the development of instructors' skills was focused on computer and e-learning, focusing both on new programs and on improving existing courses. To improve the employee experience and encourage a culture of selflearning, the Learning Management System (LMS) has been redesigned to make it more user-friendly. The LMS has launched a new personal development library with over 40 new courses/articles and videos to support individual personal development and training plans based on evaluation results, company values and core competencies.

The development of an on-the-job training program for engineering and ground services was also the key aspect to maintain continuous on-thejob training and the integration of new employees into their departments.

A full-fledged flight simulator will be installed at the base in Astana to support pilot training, which will be the first of its kind in Kazakhstan, which will be put into operation in April 2023. The simulator will be operated in accordance with EASA standards with the support of an EASA-approved flight simulator training organization and under the supervision of the EASA Aviation Administration. The operation of the flight simulator and the technical capabilities provided by Air Astana JSC will comply with EASA requirements. This will significantly expand the airline's training capabilities as part of its planned future growth.

Booking System

The development of a new online booking mechanism (IBE) has significantly improved the quality of customer service and interaction with users. www.airastana.com remains the key source of international e-commerce in Kazakhstan, offering customers various convenient payment methods in addition to credit cards, such as using ApplePay or obtaining instant credit from the largest banks in Kazakhstan. Flexible self-service and registration options also attract customers online, rather than through portals run by global agents who require high costs for a global distribution system due to their overseas locations.

Innovations

Annexes

A distinctive feature of any business aimed at success in the future is the emphasis on innovative processes and digitalization. In 2022, the Company continued to actively invest in the Company's IT and e-business infrastructure, launching new products and implementing ongoing development projects in response to customer feedback, and to optimize and improve the efficiency and convenience of the entire travel process.

About 10000 passengers use selfservice terminals every month. During 2022, Air Astana JSC took part in the EGOV ID project in cooperation with the aviation authorities and airports of Kazakhstan, allowing passengers to use e-ID for domestic flights, and this system is now fully operational at all airports in Kazakhstan. A Baggage Reconciliation System (BRS) has been implemented to avoid cases of improper handling of baggage.



Plans for 2023

- Development and restoration of regional routes by launching new destinations and increasing the frequency on existing routes;
- Expansion of the fleet due to the supply of new aircraft;
- Implementation of a number of new digital projects: biometric airport, which permits to perform all airport formalities faster and more efficiently; payment system at airports; interactive mobile boarding pass, integration of SCS (Station Control System) in Astana with the airport system (automation of services and billing); digital station files (paperless procedures);
- Increase in annual enrollment in the Ab-Initio Cadet program;

- Further expansion of heavy maintenance facilities in Astana by adding workshops for composite repair, airframe construction repair, repair and testing of emergency equipment, repair of on-board entertainment components and calibration of instruments;
- Meeting the maintenance needs of the expanding fleet by considering all aspects of the expansion of hangars in Almaty and Astana, human and technical resources, including training requirements;
- Increase in the indicator of timely execution of flights;
- Expansion of Almaty Airport in 2023-2024 will increase the capacity, as well as improve conditions for passengers;

- Presentation of a number of initiatives to improve passenger service on board;
- The transition to a more environmentally friendly approach, supported by the introduction of MyPress (digital content for passengers), which reduces the number of printed press.
- Expansion of the film and music library due to improved built-in monitors and a signed agreement with Disney;
- Getting ESG rating;
- Verification of the section on sustainable development in the Annual Report of the Group;
- Integration of the Sustainable Development Goals into the practice of AS reporting.



Corporate governance

Annexes







QAZAQ AIR JSC is the Kazakhstan airline established to improve the safety and accessibility of interregional air services in the Republic of Kazakhstan and the border areas of neighboring states. Annually confirming the IOSA certification and being an official member of IATA, the Airline brings a culture of international safety standards to regional air transportation. The airline was created specifically to operate on domestic airlines of Kazakhstan, as a response to the growing public demand for stable connections between regional centers.



Key performance results

Indicator	2021	2022
production indicators:		
passenger traffic, thousand people	569.8	561
cargo traffic, tonnes	50.2	32.1
aircraft load factor, %	78	82
on-time flight performance indicator, %	73	75.7
financial indicators, KZT billion:		
revenue	12.8	20.4
net loss	-6.5	-6.6
operating profit/loss	-2.8	3.2
taxes paid	0.8	0.8

Market Overview

The main strategic goal of the Airline is to establish internal regional routes for the development of air traffic, especially in those areas where there is an active demand, and there is no or insufficient supply on the market.

The airline contributes to economic development by connecting regions with affordable domestic flights to cities that are engines of growth, providing connections with international and longer routes from these cities.

In Kazakhstan, in the field of regional transportation, there are destinations that are not sufficiently covered by convenient and affordable air transportation. At the same time, the development of regional communication contributes to the disclosure of the social economic potential of the regions of Kazakhstan. Today, most of our passengers use unique routes that other airlines do not have. QAZAQ AIR JSC continues intensive work on the development of domestic air transportation and will work towards border routes in order to support the qualitative growth of the Kazakhstan economy and improve the standard of living of the population.

In 2022, the Airline entered the top three in the nomination "Best Regional Airlines of Central Asia and the CIS 2022" according to Skytrax. The high appreciation of the Airline's work within the framework of the Skytrax award is proof of the commitment to high standards and recognition from passengers. High customer orientation, provision of reliable products and services at all stages of travel: from ticket purchase, on board and assistance in expedited passage of all airport check-in procedures.

Factors that Affected Results

The results of 2022 confirm the achievement of QAZAQ AIR JSC of the key results of the airline's formation and contribution to the



development of civil aviation in Kazakhstan.

In 2022, the Airline demonstrated 61% increase in income, including due to the expansion of the international flight program.

At the same time, it is necessary to identify a number of factors that influenced decrease in the indicator of timely flight performance in 2022:

- infrastructure of local airports: limited number of maintenance equipment and weather conditions; lack of aircraft parking to check engines and difficulties with their organization) and lack of personnel;
- unstable political situation in the world, which affected the number of traffic in 2022.

Launch of its own aviation training center

The airline's first educational institution for the training of aviation personnel was successfully launched in 2022. In May, the training center received a certificate confirming its compliance and readiness to train aviation industry specialists. 23 flight attendants have already been trained and started working at the center. Also in 2022, 6 Kazakhstan's – co-pilots - became aircraft commanders.

Route Network

In 2022, the airline launched international flights from Atyrau to Astrakhan and from Aktobe to Baku. Flights with the border million cities - Omsk, Novosibirsk, Kazan and Yekaterinburg began to be carried out on a regular basis.

The Airline's regional route network includes popular, socially important routes subsidized by the state in the following directions: from Turkestan



to Kostanai, Uralsk, Aktobe, from Almaty to Zhezkazgan, from Astana to Taldykorgan and Pavlodar, as well as from Zhezkazgan to Karaganda.

Compliance with the IOSA international industrial safety standard

In 2022, QAZAQ AIR JSC has once again successfully confirmed compliance with the international IOSA standard and is an official member of IATA. Accredited independent auditors checked the implementation of IOSA standards and recommended practices in all areas of the airline's operational and production activities: organization and safety management system, flight operations, organizational support of flights and flight control support, aircraft engineering and technical support, actions of flight attendants and technical crew, ground handling, freight transportation and maintenance aviation security.

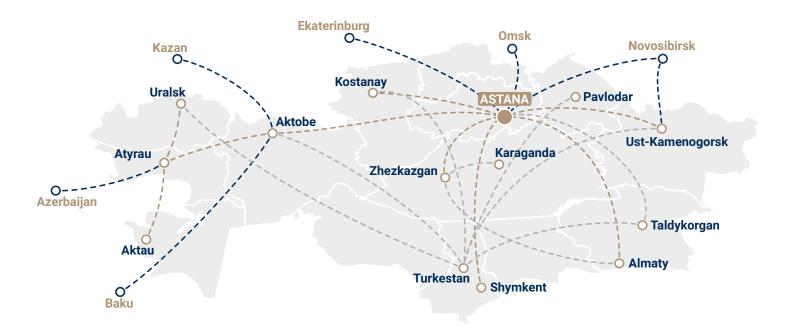
Safety Culture

The health and safety of employees determines the basis for the implementation of the company's strategic goals. QAZAQ AIR JSC follows the indicators of industrial safety, reducing the risks of injuries and accidents by introducing a safety culture in all aspects of its activities. For 2022, the coefficient of injuries with loss of working time (LTIF) is 0, no accidents and incidents were registered during the period.

Toward the goal

Annexes

QAZAQ AIR JSC fleet consists of five modern De Havilland Dash-8-Q400NG turboprop aircraft (formerly known as Bombardier Q400) of Canadian production. In order to increase passenger traffic and expand the route network, the company is working on the acquisition of a jet aircraft. Increased fleet will ensure competition in the air transportation market and will make it possible to fly longer distances. In 2023, it is planned to launch new international flights Astana - Chelyabinsk - Astana, Aktobe - Mineralnye Vody - Aktobe, as well as a new subsidized direction on the route Astana - Urjar - Astana.



Performance of the Fund





Transport and Logistics Potential Development

Joint Stock Company "National Company "Kazakhstan Temir Zholy" (hereinafter - JSC NC KTZh) is a transport and logistics holding company, operator of the main railway network of the Republic of Kazakhstan, national railway freight and passenger carrier. The group of JSC NC KTZh companies provides economic interconnection with 17 regions of the Republic of Kazakhstan and 3 cities of republican significance, and through 16 junction points - with five neighboring countries: China, Russia, Uzbekistan, Kyrgyzstan and Turkmenistan. JSC NC KTZh is the largest owner of locomotives, freight and passenger cars in the country. JSC NC KTZh is one of the largest employers in Kazakhstan.



Key performance results

Indicator	2021	2022
production indicators		
cargo turnover (operational), billion ton-km	239	252
passenger turnover, billion pkm	9.5	12.4
transit in containers, thousand TEU*	1065.6	1129.2
financial indicators, KZT billion		
revenue	1330.2	1482.1
net profit	119.1	34.9
operating profit	254.8	177.9
net debt	1937.4	2161.4
taxes paid	140.4	148.8
* Twenty foot aquivalant unit		

* Twenty-foot equivalent unit.

In the outgoing year, JSC NC KTZh achieved a record, in the entire history of its existence, freight turnover, which exceeded the mark for 252 billion tonnes per kilometer. Over 20 years, this indicator has doubled, by 5.4% to the level of 2021. This achievement was made possible through changes in logistics, increase in the range of transportation and growth of exports of mining and metallurgical products.

The passenger turnover of railway transport also increased by 29.7% as compared to the level of 2021, therefore, the share in the total passenger turnover of the entire transport industry, including civil aviation and road transport, increased by 22% and amounted to 14%.

Factors that Affected Results

Decrease in financial results was due to increase in the costs of materials, fuel and services due to rising prices, financing costs because of growth of debt obligations, payroll fund expenses due to increased salaries to employees of the Company.

Increase in net debt is due to the attraction of debt financing for the renewal of the Company's locomotive fleet, in the amount of KZT132 billion, and the first issue of bonds was made for the implementation of the infrastructure project "Construction of the Second Tracks of the Dostyk-Moiynty Section", the KZT162.9 billion.

Growth of greenhouse gas emissions is associated with increase in fuel and energy sector costs. The reason for increase in energy consumption is explained by growth of the volume of freight and passenger traffic by 4.9%.

The volume of disposed waste has been reduced due to the segregation of waste with the subsequent transfer of waste from production and consumption on a reimbursable basis to stakeholders. In addition, in 2022 there were problems associated with the disruption of traditional transport and logistics chains.

These problems included the following factors:

- the geopolitical situation and logistics changes that resulted in the disruption of the traditional transport chain on the China-Europe-China route;
- difficulties in receiving trains at Kazakhstan-Chinese border crossings;
- inability to accept trains in full at Kazakhstan-Russian and Kazakhstan-Turkmen border crossings;
- sanctions policy towards Iran;
- increased competition from alternative modes of transport.

To ensure the safe and uninterrupted passage of goods through the territory of Kazakhstan, work was carried out on the formation of alternative routes. A new transit freight flow was attracted along the route from China to Russia and Belarus, as well as in the opposite direction.

The Trans-Caspian International Transport Route (TITR) is a promising direction for the development of international transportation and was actively in demand among shippers for the delivery of goods to the ports of Georgia, Turkey and further to European markets. To expand the TITR capacity, a unified approach to infrastructure development was formed by all participants of the route, a number of projects were planned to improve the infrastructure of the Kazakhstan section of the route, as well as on the territory of Azerbaijan and Georgia.

A lot of work has also been done on the development of the Southern Corridor. Transit traffic along the Southern Corridor, which runs from China through the territory of Kazakhstan and Iran to Turkey, is actively developing.





Infrastructure Modernization

As part of the National Project "Strong Regions is the National Development Driver", construction of the second tracks on the Dostyk - Moiynty railway section began in November 2022. The aim of the project is to increase the capacity of the site and develop the transit potential of the country.

The construction of the second line with a length of 836 km will increase the capacity of the section by 5 times (from 12 pairs of freight trains to 60 pairs per day). This will solve the important task of ensuring the uninterrupted export of domestic products and will provide the possibility of transporting goods of Kazakhstan exporters in this direction.

The construction is planned to be carried out using domestic materials. At the same time, the share of local content will be over 80%. As part of the project, 3700 builders will be involved, and after the line is put into operation, 500 permanent jobs will be provided on the railway.

The project implementation contributes to the development of small and medium-sized businesses. The cumulative effect of the project implementation will further increase budget revenues in the amount of KZT4.1 trillion over 20 years. The construction is scheduled to be completed in Q4 2025.

In addition, work has been done on a number of projects: construction of the Darbaza–Maktaaral railway line, with the length of 106 km, is scheduled for 2024-2025, construction of the Bakhty-Ayagoz railway line - 3rd border checkpoint with the length of 270 km - is scheduled for 2024-2025, construction of a bypass railway junction around Almaty, with the length of 73 km is scheduled for 2023-2024. Along with major infrastructure initiatives, a plan has been formed to modernize the main railway network and access roads. In the next three years, it is planned to carry out major repairs of more than 2 thousand km of railway tracks.

As part of the development of international transport routes, Kazakhstan has signed joint Roadmaps with Azerbaijan, Turkey and Georgia for 2022-2027 to synchronously eliminate bottlenecks and strengthen the Trans-Caspian International Transport Route. The state plans to increase the capacity of Aktau and Kuryk ports, build a "container hub", and replenish the merchant fleet with 10 new ferries. It is expected that similar measures will be taken by other signatory countries. Also in 2022, on behalf of the President, the process of transformation of JSC NC KTZh into the National Transport and Logistics Company started. To date, the Competence Center has been established at JSC NC KTZh, whose main task is to organize new logistics products and reorient transit freight flows to trans-Kazakhstan routes.

Passenger Transportation

The passenger turnover of railway transport also increased by 33.2% as compared to the level of 2021, therefore, the share in the total passenger turnover of the entire transport industry (including civil aviation and road transport) increased by 22% and amounted to 14%.

Passenger Transportation JSC, the KTZh subsidiary, does a lot to create comfortable conditions for passengers. Moreover, given the length of railways on the territory of Kazakhstan, this is a very important factor in maintaining the image attractiveness of this business sector of JSC NC KTZh. The preferences of passengers are studied, feedback is provided, complaints about the service are carefully recorded and sorted out in the company. It does a lot to update the car fleet.

Passenger turnover of Kazakhstan in 2022 by means of transport, million pkm

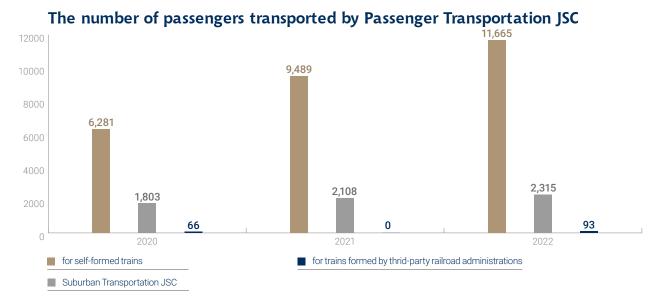
		Passenger turnover, million pkm				otal passenger nover, %
	2020	2021	2022	Change 2022/2021, %	2021	2022
All transport	108283.6	106813.1	116516.1	9.08	100	100
Automobile and urban electric transport	91298.4	79709.3	80040.8	0.42	74.63	68.70
Air transport	8335.0	14815.7	20109.3	35.73	13.87	17.26
Railway transport	8649.3	12286.1	16363.0	33.18	11.50	14.04
Water transport	0.5	1.4	2.4	71.4	0.00	0.00
Sea transport	0.3	0.6	0.7	16.7	0.00	0.00

SAMRUK K A Z Y N A

The Company passenger turnover in 2022 increased by 29.7% as compared to the level of 2021 and amounted to 12353 million pkm (in 2021 – 9524.3 million pkm). Increase in passenger turnover was due to the lifting of restrictions on the movement of trains associated with coronavirus infection and due to the resumption of interstate and transit trains, as well as the optimization of the route network on Talgo trains with the transfer of individual trains from commercial to social routes. The number of passengers transported by Passenger Transportation JSC in 2022 amounted to 14,073 thousand passengers (in 2021 – 11,597 thousand passengers), including: as for trains of the formation of Passenger Transportation JSC – 11,665 thousand passengers;

Annexes

- as for the branch "Suburban Transportation" – 2,315 thousand passengers;
- as for trains of the formation of third-party railway administrations - 93 thousand passengers.



Income from passenger

transportation in 2022 amounted to KZT88.4 billion, which is 54.4% higher than the Actual of the same period in 2021 due to increase in passenger turnover by 29.7%.

New Routes

In January 2022, passenger train No. 77/78, following the route "Mangystau – Almaty-2", with new compartment and second-class carriages, left Aktau for the first route. This was a big event for Mangistau residents, as the peninsula is located far from both the capital and Almaty.

The Mangystau — Almaty route is the longest in the country, its length is 2,812 kilometers, and, of course, the issue of comfortable travel conditions is top-of-mind for passengers.

The population of the region immediately felt a direct benefit,

because the trains of brand-new cars provide incentives for the development of the region's economy, since the Caspian Sea coast is very attractive for tourism development. And new trains running from here are in great demand not only among local residents, but also among visiting guests and tourists.

By the way, the schedule of these trains has changed: the travel time from Aktau to Almaty has been reduced by 2.5 hours. Passengers will spend this time on the way in new cars with increased service.

The cars have connectors for charging phones (two electrical outlets and two modern USB ports), there is a video surveillance system. For the convenience of passengers, each car has a refrigerator, a microwave oven, a titanium with hot water and a dispenser with drinking water. The cars were purchased within the framework of the Nurly Zhol infrastructur development state program and assembled at the Tulpar plant according to the technology of the Tver Car Building Plant. Industrial Development Fund JSC funded the purchase of cars.

A railway operation between Atyrau and Astrakhan has also been opened. Trips are carried out by international passenger train No. 625/626 with the Atyrau-Astrakhan traffic. The decision to launch was taken based on a bilateral agreement between the railway administrations of Kazakhstan and Russia. The frequency of running is every other day.

In September 2022, JSC NC KTZh, meeting customer requests, launched the Astana–Zhezkazgan train, running every other day. There are 344 seats in the train formed from Talgo cars. The cars are equipped with air conditioning and toilets. There are sockets in each compartment, and on the way they can watch movies and listen to music on the Vputi.kz multimedia portal.

About the Fund

In addition, passengers can use the services of a dining car. Shower cabins are provided in the Grand and Grand PMR class cars (for persons with disabilities).

Passenger Transportation JSC is constantly updating its car fleet. Only in the period from 2010 to 2022, the company purchased 1,224 cars, of which 141 cars were used to upgrade train fleet in Mangystau region.

A pleasant news for the fair sex was the appearance of a special female car on the Mangistau -Almaty-2 route. In 2021, the company conducted a market analysis and a customer survey, as a result of which Passenger Transportation decided to introduce a new service for female passengers. Externally and internally, women's cars are no different from others. Only when booking train tickets on the BILET.RAILWAYS. KZ website or at the ticket offices of Passenger Transportation JSC. if there is a "female" sign, this car will be intended only for the sale of tickets to exclusively female passengers. As part of the pilot project, the service was decided to be implemented on the longest Mangystau – Almaty and Almaty – Ust-Kamenogorsk routes.

As part of the pilot implementation of the loyalty program, from March 14, 2022, Passenger Transportation JSC launched the Altyn discount card. It provides a 25% discount on trips in standard passenger cars and Talgo. The card can be purchased at the company's ticket offices, its cost in 2022 amounted to KZT19,999. You can use the discount card for offline and online ticket purchases.

Comfortable Conditions for Passengers

In 2022, 62 Talgo railcars were added to the passenger railway fleet of Kazakhstan. According to results of the international competition, it is planned to purchase about 500 more new cars in the coming years. All of them will comply with international standards. After the delivery of these cars, the fleet will be updated by a total of two-thirds. At the end of 2022, according to the results of an international competition, based on the recommendations of DB Engineering & Consulting, the Swiss company Stadler Bussnang AG was identified as a partner in a project for the production of passenger cars in Kazakhstan on the basis of the Tulpar plant.

Stadler cars have a number of advantages: the service life is 40 years, the European quality standard, modern design, localization level of at least 35% and the transfer of the latest technologies.

Among the advantages is also the capacity of the fuel tank of the cars, which will permit the passenger train to operate in autonomous mode much longer compared to other manufacturers.

In general, the technical characteristics of the cars permit for uncoupling repairs, without lengthy uncoupling for scheduled repairs. Thus, the trains will ensure a continuous transportation process.

It is planned that to organize the production of cars, the local staff of Tulpar will undergo appropriate training at the Stadler plants. To date, JSC NC KTZh is working on the issue of financing with the participation of Samruk-Kazyna JSC, negotiations are also underway to minimize currency risks.

Cargo transportation

Increase in the volume of freight turnover was observed in inland waterway transport – 54.5%, sea transport – by 23.4%. Increase in the turnover of pipeline transport amounted to 3.6%.

In 2022, the tariff turnover of JSC NC KTZh amounted to 245.2 billion tonnes per kilometer, which is 5.1% higher than the level of 2021. Growth is due to increase in freight turnover in export and transit traffic. The total operational freight turnover has reached a historical maximum and amounted to 252 billion tonnes per kilometer – and this is an absolute record of the railway workers of Kazakhstan.

It is noteworthy that freight transportation within the country, on the contrary, demonstrated decrease of 1.9%. This happened due to decrease in the volume of transportation of ferrous scrap, iron ore and non-ferrous metal ore, grain.

But for export, freight turnover increased by 10.3%. Freight turnover decreased by 2.3% on import to Kazakhstan (due to decrease in the volume of freight transportation by 3%). The volume of transportation of petroleum products, coal, chemicals, construction goods, ferrous scrap, fertilizers, non-ferrous metals, coal coke, cement has decreased.

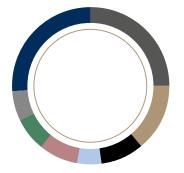
Freight trains transiting through Kazakhstan resulted in 14% increase. Which is not surprising, given growth in the volume of traffic as a whole - by 10.5%. Coal shipments from Kyrgyzstan to Belarus, Russia and European countries have increased; iron ore from Russia to Uzbekistan and China; petroleum products from Russia and Belarus to Central Asian countries, etc.

In 2022, there was increase in freight turnover in relation to 2021:

- coal by 3.5%;
- oil products by 11.7%;
- grain by 9.4%;
- non-ferrous metals by 20.5%.



The share of main cargo in the freight turnover of JSC NC Kazakhstan Temir Zholy for 2022 as a percentage



In 2021, the railway administration
of Kazakhstan took measures to
overcome pandemic restrictions.
And this permitted us to maintain
positive dynamics in 2022. Transit
freight transportation increased by
more than 10%, including in containers
– by 6%.

Coal	25%
Ores of all kinds	14%
Petroleum	9%
Building materials	5%
Grain	8%
Fertilizers and chemicals	7%
Ferrous metals	6%
Others	26%

The main factors of increase in transit traffic were a new freight flow of coal from Kyrgyzstan to Russia, Belarus and European countries; significant increase in petroleum products from Russia and Belarus to the Central Asian countries and Afghanistan due to decline in exchange prices in Russia; increase in grain transportation from Russia to Kyrgyzstan; change in the logistics of chemical freight transportation – growth in the supply of polyvinyl chloride and caustic from China to Russia and Central Asian countries.

Logistics, which changed due to geopolitical reasons, resulted in the fact that in the absence of transportation of fertilizers (carbamide, potassium chloride, ammonium nitrate) from Uzbekistan to Ukraine, producers from this country reoriented to partners from Latvia, Poland, Belarus and other European countries. Transportation of potash fertilizers in containers from Belarus to China has increased. Growth of container traffic on the China-Russia-China route has sharply increased.



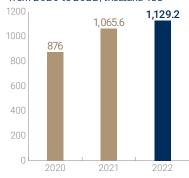


Alternative Transportation Routes

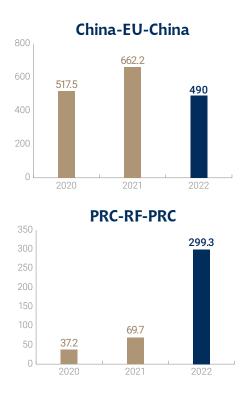
In August 2022, the President of Kazakhstan gave instructions on the Trans-Caspian International Transport Route (TITR). Today, this promising area of international transportation development is actively in demand among shippers for the delivery of goods to the ports of Georgia, Turkey and further to European markets. The eastern direction of the North-South international transport corridor is also considered by shippers as an alternative route for transporting their products to the markets of Iran, India and the Persian Gulf countries.

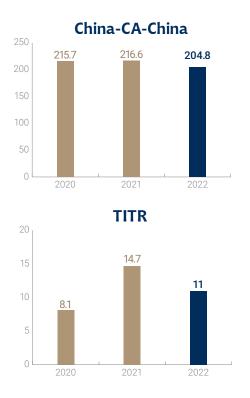
Transit in containers increased by 6% to the level of 2021 and amounted to 1,129.2 thous. TEU⁷.

Transit in containers from 2020 to 2022, thousand TEU



Transit in containers in the period from 2020 to 2022, thous. TEU





⁷ TEU or "twenty-foot equivalent" (TEU, eng. TEU) is a conventional unit of measurement of the quantitative side of transport flows, the capacity of container terminals or the capacity of freight vehicles. Equivalent to the size of an ISO container with a length of 20 feet (6.1 m) – editorial note.

In addition, active work is being carried out to increase transit freight traffic through the Trans–Caspian International Transport Route and the North-South Corridor in the direction of India and the Persian Gulf countries through Iran and the Iranian port of Bandar Abbas.

A container service and, in particular, a shuttle train on the Altynkol-Aktau-Baku-Poti/Batumi TITR route has been organized and launched.

A roadmap has been developed for the project "Construction of the Ayagoz-Bakhty Railway Line", within the framework of which JSC NC KTZh together with Russian Railways JSC has begun to analyze the existing and potential (in conditions of increasing) volumes of freight transportation in the Russia-Kazakhstan-China traffic until 2030.

Plans for 2023

In 2023, JSC NC KTZh plans to implement the following goals:

- increase the operational freight turnover to 268.8 billion tkm (6.7% by 2022);
- increase container transit to 1,250 thous. TEU (10.7% by 2022);
- continue work on the renewal of the park and modernization of infrastructure;
- continue the construction of the second tracks of the Dostyk– Moiynty railway section;
- start the construction of two railway lines (bypassing Almaty station, Bakhty-Ayagoz)
- start implementing trade hub projects;
- create a joint venture with PSA to manage TITR assets;
- start the production of passenger cars built using Stadler technology;
- continue the transformation of the Company into a national transport and logistics company.



INFORMATION & COMMUNICATION OPERATORS





National Information Superhighway

Kazakhtelecom JSC, the largest telecommunications company in Kazakhstan, established in 1994, occupies 93% of the fixed voice market (2.6 million subscribers), 61% of the mobile market (14.5 million subscribers), 74% of the broadband market (1.8 million), 33% of the segment pay TV (930,7 thousand subscribers) and 18% — in the market of ICT services.

Kazakhtelecom JSC owns the National Information Superhighway, which is a transport fiber-optic ring connecting large cities of Kazakhstan with digital streams with high data transfer rates. The company's infrastructure includes more than 87 thousand km of fiber-optic network and more than 13 thousand base stations, which



provides coverage of the entire territory of the country with fixed communications and 81% of the total population of the country with an LTE network. The infrastructure base of the group also includes 27 commercial data centers.

Key performance results

Indicator	2021	2022
production indicators:		
number of fixed lines, thousand lines	2774.5	2651.5
number of fixed BBA subscribers, thousand subscribers	1860.7	1863.2
pay TV, thousand subscribers	918.7	930.7
mobile subscribers, thousand subscribers	14543.3	14548.9
financial indicators*: KZT billion		
revenue	594.2	634.5
operating profit	160.9	174.3
net profit	90.8	128.8
dividends paid**	22.0	39.5
net debt***	139.7	32.1
taxes paid	89	118

* decrease in the indicator is due to the refusal of subscribers from landlines

** dividends accrued following 2020 and 2021 were paid in 2021 and 2022, respectively.

*** Net debt is calculated according to the consolidated financial statements, where: Debt – loans and lease obligations,

Cash - cash and cash equivalents + Short-term financial assets measured at amortised cost.



Last year 2022, although it turned out to be difficult for the company, but in general it became quite productive for the national operator of the telecommunications market.

In Q1, during the tragic events of January, the company took unprecedented measures to support subscribers who tried to call relatives to make sure of their safety. Namely, by providing a 50% discount on the subscription fee for a number of services to individuals and businesses, canceling the penalty for late payments, and providing free long-distance phone calls for 1000 minutes to each subscriber.

Similar steps were taken in early September, when Kazakhtelecom JSC exempted residents and entrepreneurs of Auliyekol district of Kostanai region affected by largescale forest fires from subscription fees for services.

At the same time, the company has allocated significant financial resources to improve the welfare of its employees. All these measures could not but affect financial indicators at the beginning and middle of the year, however, at the end of four quarters, Kazakhtelecom JSC managed to completely neutralize negative deviations and significantly improve the net income indicator."

According to the consolidated financial statements, in 2022, Kazakhtelecom JSC group of companies showed growth in all major financial and economic indicators, despite the objective difficulties of last year.

Already in Q3 2022, Kazakhtelecom JSC's net income directly exceeded KZT88 billion, having increased by 2.4% as compared to January – September 2021. (It is noteworthy that in H1 2022, the company showed 13% decrease in net income).

The consolidated revenue of the group companies in the same period increased by 9.8%, and the EBITDA

margin remained at 46% throughout the year. Positive trends continued in Q4 2022.

The book value of the company's ordinary shares, calculated according to requirements of Kazakhstan Stock Exchange JSC, has increased by almost 40% since December 31, 2021, amounting to more than KZT37 thousand.

Despite a fairly large amount of capital expenses, in 2022, the company maintained a comfortable level of liquidity: Kazakhtelecom JSC had a significant amount of cash both on the balance sheet and available for attraction under open credit facilities.

At the same time. Kazakhtelecom JSC was not exposed to currency risk, since all the company's liabilities were denominated in KZT. These positive factors were also noted by the international rating agencies, S&P Global Ratings and Fitch Ratings, which in 2022 appraised the rating at the "Stable" level, forecasting further organic revenue growth and recognized a significant margin of financial stability of the companies group. The data of the consolidated financial statements for the companies group by the end of 2022, in particular, growth of income and net profit in the difficult conditions of 2022, fully confirm this assessment of international analysts.

Infrastructure Investments

The Kazakhtelecom JSC group of companies has been investing more than KZT100 billion annually in its long-term assets over the past years. At the same time, the volume of investments in the development and modernization of the network (construction of 5G networks, replacement of copper networks with "optics", continuation of the construction of broadband access networks in urban and rural settlements, etc.) in 2021 increased by 40%, and by the end of 10 months of 2022 - by 17% (as compared to the same the period in 2021). Income, including from invested investments, also show growth: in 2021 by 13%, and by the end of 10 months of 2022 by 8% as compared to January-October 2021.

The company continues to continuously improve the quality and availability of communication services throughout Kazakhstan, planning even more significant investments in 2023. The share of capital expenses in income is about 20%. The share of receipt of new fixed assets from their residual value at the end of the period is about 20%. This shows that the company's development process is continuous.



Dividend Payment

In 2022, Kazakhtelcom JSC (according to the decision of the Extraordinary General Meeting of Shareholders) allocated 43.53% of the consolidated retained income for 2021 - KZT39.5 billion to pay dividends.

For comparison, at the end of 2020, 30% of net income - KZT19.0 billion was allocated to pay dividends.

Social Partnership

The year 2022 was declared the year of social support for employees in the company. In the spring of 2022, Kazakhtelecom JSC adopted a new version of the collective agreement, which assumed increase in official salaries of employees (with an emphasis on workers of mass professions, including engineering and technical personnel) by an average of 20%.

In addition, 475 employees of Kazakhtelcom holding low-paid positions have their salaries increased on average from 4% to 20%.

In addition, various payments and support measures were provided: financial assistance for labor leave for recovery, social benefits for temporary disability, a one-time allowance for early retirement, payments in connection with the birth of a child and monetary assistance in cases when an employee found himself in a difficult life situation.

Thus, the company's expenses on the payroll fund increased by 27% in 2022 as compared to the previous year - up to KZT95.5 billion.

Mobile communication

In the mobile communications market, Kazakhtelcom JSC group includes operators of Kcell JSC (Kcell and Activ brands) I and MT-C LLP (Altel and Tele2 brands).

In December last year, the consortium of operators of Kazakhtelecom JSC group of companies represented by MT-C LLP and Kcell JSC won the auction of radio frequencies for the fifth generation of mobile communications (5G) at the information system site "gosreestr. kz" for lot No. 1 in the 3600-3700 MHz (100 MHz) radio frequency bands and lot No.2 in the 3700-3800 MHz (100 MHz) radio frequency bands. According to terms of the competition, these companies must deploy more than 7 thousand 5G base stations throughout the country by 2027, of which 486 base stations in Astana, Almaty and Shymkent will be put into operation this year.

Despite the difficulties of the beginning of last year, Kcell has maintained positive dynamics due to the development of its own digital ecosystem, mobile financial services, B2B segment and retail sales of devices. In 2022, Kcell invested KZT41.6 billion, most of which was aimed at upgrading the network to improve the quality of communication.



As part of the program to improve the quality of communication, equipment was installed and upgraded at 1,272 base stations and up to 40% increase in data transmission speed was recorded at locations where installation work took place. 604 sites⁸ (including partner sites) were

launched in rural areas to provide the population with mobile broadband access. The company has provided new coverage and improved the network by upgrading and activating 246 base stations.

Last year Tele2 confirmed its leadership position by becoming the winner in the nomination "Fastest Mobile Internet Network" based on the results of tests of users of the Speedtest service from Ookla⁹.



In addition, Kazakhtelecom JSC contributes to the development of rural talents through access to high-speed Internet and, as a result, to social networks. The project was awarded the national award in the field of communications – Ak Mergen.

According to the analysis of nonpersonalized traffic in our network for 2022 in small villages - where the MBBA was connected under the 250+ program¹⁰ - the share of video services and social networks was almost 40%.

Plans for 2023

The positive results of 2022 permit the companies group to start work on a number of large and expensive projects this year. The priority is the launch of fifth–generation mobile communication networks in Kazakhstan.

According to the commitments made as a result of the auction, it is expected that by 2027 75% of cities of republican significance, 60% of regional centers will be provided with 5G technology.

⁹ Ookla is a world leader in the field of intelligent analysis of mobile and broadband networks, application testing and related technologies. Speedtest is the Ookla's flagship network testing platform, receives and processes hundreds of millions of network performance and quality measurements around the world every day. Ookla trademarks are used under license and reprinted with permission.
¹⁰ Mobile broadband access

⁸ The site is the base station



FOL on the bottom of the Caspian Sea will connect the countries of Central Asia with a single Internet space

In 2023, Kazakhtelecom JSC will continue working on an international complex project for the construction of a fiber-optic line along the bottom of the Caspian Sea on the Azerbaijan– Kazakhstan route.

The main route will run from Aktau to the Azerbaijani district of Sumgait and will be more than 340 km, a reserve channel with a length of about 330 km will be laid from the Kazakh port of Kuryk to the district of Sumgait, which is not far from Baku.

The Trans-Caspian project is strategically important for Kazakhstan (and, in general, for the entire Central Asian region), because with its implementation, our country will receive additional access to the international transit market, which will ensure the transit of global traffic from Asian countries through Kazakhstan to Azerbaijan with access through Georgia, the Black Sea and Bulgaria to Europe. The project will also serve as a driver for accelerating the creation of a new digital telecommunications corridor and will help to reach a higher level of development of highspeed and secure data transmission infrastructure, strengthening trade ties.

Closer to the Consumer

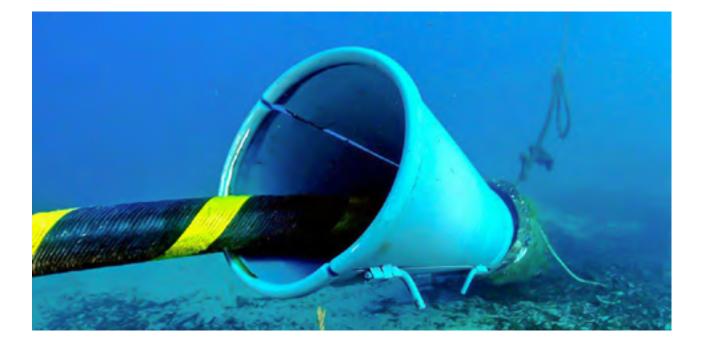
Kazakhtelecom JSC will also continue to carry out a large-scale transfer of Kazakhstan subscribers from outdated ADSL data transmission technologies to optics within the framework of the Network Deduplication program, which in 2023 will affect more than 25 thousand users in nine cities of the republic.

Also, the country's largest telecom operator intends to install additional caching servers of global content providers Akamai, Facebook, Google, Cloudflare, Netflix, and Meta.

The undoubted competitive advantage of the company is a developed and powerful infrastructure, which includes more than 87 thousand kilometers of fiberoptic lines throughout the republic, more than 13 thousand base stations, 27 data processing centers and 40 thousand city video surveillance cameras. This infrastructure permits the companies group to render highquality services to more than 1.8 million subscribers in the broadband access sector, over 14.9 million in the mobile communications segment and serve 913205 thousand pay-TV connection points

The year 2023 has been declared the "Year of Service and Customer Orientation" in the company. Six main goals for managing customer experience are formulated, in particular:

- achieving NPS-service satisfaction index 11%;
- achieving 90% of the indicators of solving consumer requests from the first request - FRR (First request resolution) – that is, 90% of all requests must be solved at the first attempt;
- achieving 63% of the eNPS staff satisfaction index;
- achieving 68% in the SRS Social Stability Index;
- achieving 90% of the implementation of GPON



technology service installations in 24 hours;

 achieving 95% elimination of single damages in 12 hours.

In 2022, Kazakhtelecom JSC approved the Development Strategy of Kazakhtelecom JSC "JRun" for 2023-2032.

The two most important areas of the strategy are Jakyn - leadership in the telecom market by improving customer experience and Birlik success by improving employee experience. Special attention in the strategy is focused on the client experience not only of the external, but also of the internal client.

Today, the service is the main differentiator in the service market. And that is why 2023 has been declared the year of service quality improvement in Kazakhtelecom JSC.

The main goal of the company is to become the No. 1 operator in terms of customer experience in the B2C and B2B segments. This goal can be achieved only through the involvement of each employee of the company, so special attention will be paid to the SRS and eNPS indices. There is serious work to be done on the transformation of current business processes for servicing, changing and improving communication channels and further digitalization of online service channels.

Occupational health, environment and industrial safety

For achieving zero occupational injuries, Samruk-Kazyna JSC has developed the Occupational Safety Action Plan for all Portfolio Companies.

As part of the implementation of this plan, Kazakhtelecom JSC held the I Annual Occupational Safety Forum, at which all top managers of the company signed personal labor protection obligations.

The main measures for occupational safety in the Plan can also include the granting of all employees of the company the right to work stoppages, the introduction of a behavioral monitoring program, training in the field of occupational safety according to the methodology of international programs, and the "Safety for Children" project.

The implementation of all these measures, according to the results of 2022, showed a positive result. The LTIF coefficient (frequency of injuries



with temporary disability) decreased by 85% as compared to the beginning of the year, that is, from 0.7 to 0.1, and in comparison with the result of 2021, the company achieved 41% decrease in injuries, from 0.17 to 0.1. During the final meeting on occupational safety among Portfolio Companies, the Company was awarded for the best indicators and achievements in the field of occpational safety by the end of 2022.

For improving results achieved in the future, the Company has developed and started to implement the concept "Kazakhtelecom JSC Kauipsizdigi", which is based on four pillars, such as: involvement of senior management in occupational safety issues; improving the quality of personal protective equipment, tools, equipment and devices; improving the efficiency of employees of the Safety and Labor Protection Service, involving all employees of companies.

Kazakhtelecom JSC retains absolute leadership in the telecommunications market of Kazakhstan. The company renders a wide range of services and services in all segments of the domestic telecommunications market: in the field of fixed telephony, broadband Internet access, mobile communications, pay television and IT products.

Kazakhtelecom JSC takes an active part in the construction of New Kazakhstan, developing digital services and helping to digitalize industrial and commercial enterprises of the country, local and central executive bodies. The main result of the work of Kazakhtelecom JSC is that about 99% of the country's population has the opportunity to use all modern digital technologies. Corporate governance

Annexes





Postal & Logistics, Financial and Digital Services

Kazpost JSC today is an aggregator company of a large–scale range of socially significant activities, rendering postal and logistics, financial, brokerage, agency and other services. This is the only subsidiary of the Fund, bears social responsibility for the delivery of pensions, benefits and periodicals.



Key performance results

Indicator	2021	2022
production indicators:		
postal, in thousand units	131 662	114 663
financial, KZT million	1 144 094	994 618
agency, KZT million	36 067	28 677
financial indicators, KZT million		
revenue	53 521.7	60 977.5
net profit	-7 172	-12 453.7
operating profit	-7 109.6	-6 837.3
net debt	7 000	7 000
taxes paid, KZT billion	5.8	6.0

About the Fund

The company employs about 20 thousand persons. And, despite the fact that the company has not always experienced favorable periods from a financial point of view, over the past 10 years, the question of cuts has never been raised. The close-knit team of Kazpost consistently implements the Development Strategy, which is expressed in a set of measures to launch new projects and initiatives that improve the financial situation.

The accelerated digitalization is one of the key areas of the Strategy. The Kazpost team is actively automate logistics processes, reengineer courier products, and introduce piecework remuneration for our couriers.

In 2022, the company focused on improving the quality of courier delivery service. A mobile application was developed to reduce the processing time, unloading and loading of mail due to automation of processes, GoPost application for couriers, palletization and containerization of parcels.

The development of e-commerce opens up an international market for Kazakhstan with global resources for the sale of goods, access to quality products, and the transition to non-cash payments. Therefore, Kazpost JSC keeps pace with the market. For improving the quality of e-commerce services, processes

were reengineered in 2022 and the GoPost ecosystem was created. Fulfillment centers have been opened where online store owners can receive a range of services, including acceptance, processing, storage, tracking and delivery of goods to the final consumer. At the same time, online stores minimize their logistics costs, warehouse rental for goods, personnel and other costs, as well as significantly reduce the delivery time of parcels. In almost all regional centers of the country, e-commerce centers operate in the Kazpost offices. The post offices and parcel supermarkets are another areas of e-commerce. The Kazpost market share in this segment exceeds 19%.

The company's social responsibility is great – Kazpost employees deliver pensions and home benefits to over-80 population, people with disabilities, veterans. Periodicals are delivered 24/7 to the most remote settlements. It is no coincidence that the year 2022 was declared the "Year of the Postman" in the company, which allowed solving a number of pressing issues of the activities of postmen and operators of Kazpost.

Today, Kazpost JSC renders almost the entire range of financial services, except for lending. At the same time, Kazpost JSC operates in the competitive environment of banks that have licenses for lending and



maintaining deposits, which is the most important component of profitability. Kazpost JSC renders these services as an agent of partner banks.

But the main vector of Kazpost JSC business remains postal and logistics services, which, alas, do not bring such a volume of income as credit and financial activities.

Today, Kazpost JSC is the only window for 41% of the country population – rural residents – to receive the following services: postal, financial and agency services, starting from the sale of railway and air tickets and ending with consumer lending. Postmen remain a link between the state and residents, especially in rural areas.

The focus is on infrastructure

In 2022, the bonded warehouse located on the territory of the Khorgos - Eastern Gate SEZ reached self-sufficiency. It carries out the import and transit of commercial goods from China to Europe and Central Asia through Kazakhstan, as well as operations for processing transit freight to the EAEU countries and receiving mail intended for Kazakhstan (with the possibility of up to 100 tonnes daily). The bonded warehouse has the ability to receive and send freight by rail and road. Its main feature is the storage of goods without payment of customs duties. The commissioning of the warehouse made it possible to realize postal shipments to non-CIS countries, contributing to the development of Kazakhstan's transit potential, reducing the delivery time of goods from 1 to 10 days and increasing trade turnover.

Kazakhstan bond's services are in demand by clients from Russia, Uzbekistan, Kyrgyzstan, and Azerbaijan. Cooperation agreements have been reached with major Chinese logistics companies and with partner postal administrations, which will increase the volume of

SAMRUI

direct commodity flows. A contract for transit to Russia has been concluded with Yiwu Yuexuan Trade Co. LTD, work is underway to conclude an agreement with other clients. In August 2022, a pilot of receiving postal transit in the amount of 400 kg to the Russian Federation was conducted.

Storing goods in a bonded warehouse is most profitable for retailers and electronic trading platforms. Such warehouse placement helps them to have the goods "at hand", while paying tax duties and fees only after the actual export of the goods from the customs territory for delivery to the purchaser. This permits the business to reduce costs and at the same time deliver their orders to customers faster.

It is also beneficial for end consumers who receive their goods

in a shorter time without waiting for delivery from the country of origin. Together, all these advantages contribute to the development of e-commerce and the solution of the state task of reducing the volume of shadow turnover of funds due to increased number of non-cash payments.

Kazpost JSC pays a lot of attention to the modernization of logistics infrastructure. To date, the company has 13 sorting centers and three hubs with a total area of more than 25 thousand square meters. Within five years, production capacity will increase by another 33.4 thousand square meters, that is, almost 2.5 times by 2025.

E-commerce

The branch network of Kazpost, including the branches of the partner network, covers the entire territory of the country, up to rural areas and comprises more than 2,700 production branches employing more than 18 thousand people.

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Fulfillment centers operate in Almaty, Aktobe, Astana with a full cycle of services for the reception, storage, collection, packaging and delivery of goods to customers. This is convenient for entrepreneurs who minimize their logistics costs, rent a warehouse for goods, etc. Due to the placement of goods in the fulfillment center, the delivery time of parcels is reduced.

There are 219 parcel supermarkets for self-service, which have two zones: receiving and sending parcels. This format of service rendering increases the efficiency of business processes by introducing the service in self-service mode.

Nº	Indicator	Unit of measure	2020	2021	2022
1.	Workers	person	21 101	18 468	17 972
2.	Consolidated income	KZT billion	56.1	54.2	62.6
3.	Volumes of services:				
	- Postal	million units	149.2	146.4	114.7
	- Financial	KZT billion	1 372.9	1 144	994.6
	- Agency	KZT billion	27.6	36	28.7
4.	Production network	unit	3 081	2 873	2 746
5.	Automation of post offices	%	87.5%	88.3%	87.1 %
6.	Supermarkets	unit	237	219	219
7.	Automated parcel terminals	unit	151	151	151
8.	Branches transferred to the partner network	unit	625	253	216
9.	Transport	unit			
	- Passenger cars	unit	1 881	1 747	1 783
	- Trucks	unit	188	191	246
	- Mail cars	unit	36	36	35
	- Other	unit	113	117	811

Automated parcel terminal is an automated terminal for the delivery of goods ordered from online stores and catalogs, created as an alternative delivery service with a working mode of at least 8 hours. At the moment, 151 post offices are operating in Kazakhstan in all regional centers and cities of republican significance.

The "post.kz" corporate Internet portal is a hypermarket of services. The portal is constantly working to improve its convenience for users of postal and financial services online. This system permits carrying out Internet banking for individuals with attaching of bank cards.

Clients of B2B services at post.kz are more than 700 companies. The

service of sending parcels, online filling out forms and other services helps to make doing business more convenient. The total number of registered users was about 1,770 thousand, 600 people join post.kz everyday.

There are licenses for brokerage, dealer, transfer-agency activities, opening and maintaining bank accounts of individuals.

Every year the business sphere expands, new projects are implemented aimed at creating comfortable conditions for the client. It takes an active part in the process of implementing state and industry programs in the field of mail. Transparency and balance are maintained as part of the national infrastructure that performs important social functions, and at the same time as a commercial organization

Postal Services

The company plans to reformat the technology of rendering services in rural post offices by introducing a mobile application based on the GoPost ecosystem by the end of 2023.

The new system for monitoring written correspondence "GMS"

(Global Monitoring System) is operating. As you know, quality can be improved only if it is measured. The Global Monitoring System is a modern measurement system managed by the International Bureau of the UPU. Its main goal is to provide each participant with accurate and high-quality operational results. This information can be used to determine remuneration for UPU expenses in accordance with the performance bonus system established within the UPU, and to facilitate informed decisions to improve performance and quality.

Earlier, new GMS equipment was received from the UPU, which is currently installed and configured in Almaty, Astana and Shymkent. The technical capabilities of this equipment permits to more accurately assess the quality and timeliness of delivery of written correspondence. The GMS system implementation is also expected in other major cities of the country.

Postal items from the UPU are read by RFID antennas installed at work sites where mail traffic is received and processed. This process generates the bulk of the information needed to determine the quality of service. Integration with the State Revenue Committee of the Ministry of Finance of the Republic of Kazakhstan has been carried out with respect to international postal items not exceeding 200 euros or 31 kg. Preliminary transmission of data on these types of postal items to the state customs control bodies and receipt of preliminary decisions is carried out. Due to integration, it is possible to reduce the processing time of mail and the number of requests from state bodies.

As part of the network modernization, it is required to purchase about 2 thousand tablets for operators and 3.5 thousand smartphones for couriers for a total amount of KZT2.4 billion. As a result of the network modernization, the Company will cover rural support settlements in the north and east of Kazakhstan with a population of less than 2 thousand people.

Social Partnership

The year 2022 exposed the contradictions between the difficult conditions of the company's activities in the new economic realities and the increased needs of the Labor Man. Not without conflicts, but in Kazpost, through the efforts of professional associations of workers and representatives of employers, through conciliation procedures and mediation, it was possible to reach compromise solutions.



With the support of the Sole Shareholder - Samruk-Kazyna JSC - the management of Kazpost JSC decided to increase the official salaries of the company's production staff – over 14 thousand people (93.5% of the total staff). In 2022, the average monthly official salary of employees increased by 29.6% or from KZT149.2 thousand to KZT193.4 thousand, including for production personnel, the average official salary growth was 33.3% or the average monthly official salary increased from KZT135.0 thousand to KZT179.9 thousand

In 2022, the preparation of the new version of the Collective Agreement began. For employees with continuous experience of 30 years or more, in case of reaching retirement age and termination of the employment contract, a one-time allowance in the amount of three average monthly official salaries will be paid. Previously this item was absent. Also, upon termination of the employment contract, a one-time allowance in the amount of three average monthly official salaries will be received by employees of branches with disabilities of group 1 or 2 (previously there was one average monthly official salary).

The contract takes into account the interests of employees who have suffered an occupational injury or who

have fallen ill in the performance of their work duties. They will be released from work with the payment of at least 100% of the average official salary until the employee regains his/her working capacity. Or he/she will be diagnosed with disability or loss of professional ability to work. Previously, this category of employees was paid no more than 50% of the average official salary.

The list of employees associated with the transportation and delivery of cash and valuables has been expanded. Along with the approved list of specialists, the heads of mobile post offices are included; employees for this position are provided with an additional payment for risk.

Participation in the KMG IPO

In the period from November 09 to December 2, 2022, as part of the IPO, the company participated in accepting applications for the acquisition of KMG shares. Residents of the country were given the opportunity to submit applications to acquire shares through 1,170 branches and remotely through our website.

For creating conditions for accessibility to all citizens of the country in the IPO program and for reaching the maximum number of investors, in August 2022, integration measures were carried out with the information systems of Astana International Exchange Central Securities Depository Limited (AIX CSD). This event permitted citizens of the country to make a direct subscription to acquire KMG shares through the Tabys application.

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The company took part in information and explanatory work in preparation for the IPO in field meetings in Kazakhstan together with representatives of the Fund, KMG, stock exchanges and brokerage companies.

In support of the annual World Investor Week 2022 program of the World Federation of Stock Exchanges (WFE), KASE held a fair of Kazakhstan brokers KASE FEST in leading universities in Almaty and Astana, we also took an active part in this event.

Kazpost JSC continues to fulfill its duty to the country and its population, remaining in some cases the only link between citizens and the State. Strategic modernization has resulted in the emergence of new areas of profitable activity of this institution, which previously seemed "stagnated" and "backward". Today, Kazpost JSC keeps a confident course for renewal, helping the development of society and SMEs.





INVESTMENT ACTIVITY

To increase commercial assets in the Fund's portfolio, and thus focus on continuing to optimize and restructure the portfolio with a full transition to active management of the investment portfolio by 2024 – these are the objectives of the Fund in the foreseeable future.

The transition of the Fund to the format of an investment holding implies the presence of two categories of assets in the portfolio. The first is strategic assets, where the controlling share of the Fund will be retained. These assets will be managed through the exercise of shareholder rights and with the help of the Fund's representatives on the Board of Directors of these companies.

During the period of economic recovery, the Fund's investments will concentrate on development of priority areas under the principles of co-investment.

There are two directions for foreign investments: direct and portfolio. Direct investments in the long term are planned to invest in projects implemented in developed countries, in industries that will ensure the diversification of the Fund's portfolio. In this part, the Investment Policy of Samruk-Kazyna JSC fully complies with and supports the implementation of the Fund's Development Strategy until 2032.

Investment Policy

The Fund's investment policy is designed to implement the strategic goal of portfolio management and defines the goals and principles of the Fund, as well as the main provisions and tools for managing the Fund's investment portfolio.

It is important to know that the Policy does not apply to cases of alienation of shares in the authorized capital (blocks of shares) of portfolio companies and other legal entities included in the list of organizations subject to transfer to the competitive environment recommended by the Government of the Republic of Kazakhstan for approval.

Three priority goals define the Fund's investment policy. The first is to ensure long-term sustainable growth in the value of the Fund's portfolio and a reasonable increase in capital. The second is the formation, preservation and multiplication of financial well-being for future generations.



And, finally, the third is to ensure the diversification of the portfolio by geography, economic sectors and asset classes.

At the same time, the Fund is guided by investment principles.

The principle of commercial expediency is that the investment projects of the Fund and portfolio companies are based on the principles of commercial expediency, long-term interests and maximizing the profitability and return on investment.

The principle of "yellow pages": the Fund's investments in facilities conducting their economic activities on the territory of Kazakhstan are carried out taking into account the restrictions established by the legislation of the Republic of Kazakhstan and do not hinder the development of the private sector, do not restrict competition, do not lead to monopolization.

The principle of responsible investment is to promote sustainable development, including economic, social and governance principles (ESG principles), as well as a ban on investments in tobacco, alcohol, weapons, etc.

The Fund is a long-term investor aimed at creating sustainable value and able to withstand short-term market volatility.

Investment criteria

- All investments must have a positive net present value (NPV>0) and an internal rate of return above the cost of equity (IRR>CoE).
- Availability of a strategic partner: new investments of the Fund are carried out jointly with a strategic partner.
- The Fund carries out international investments in sectors of the economy that are linked

strategically to Kazakhstan (with the exception of the oil industry). It also makes investments at all stages of the project implementation and stages of the project life cycle.

To implement investment plans, the Fund uses all available sources of funds - its own funds, dividends from portfolio companies, funds from divestments (sales of companies (shares) when deciding to exit, borrowed funds raised on domestic and international capital markets, intra-group financing and other sources.

Priority investment projects of the Fund

In 2022, the Fund continued to implement the First package of priority investment projects, which was approved at the meeting of the Investment Headquarters of the Government of the Republic of Kazakhstan on November 9, 2021. Most of them are included in the National Action Plan and various country program documents.

In accordance with the investment strategy of Samruk-Kazyna JSC, an initiative has been put forward to implement the Second package of priority investment projects of the Fund Group totaling more than KZT20 trillion. The projects cover the areas of expansion of critical infrastructure of petrochemistry, electric power, gas infrastructure, railway transport and telecommunications.

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The implementation of this group of projects will create over 39 thousand temporary and 10 thousand permanent jobs, introduce additional electrical power up to 8.4 GW, give a powerful impetus to the development of the petrochemical cluster in the western region (polyethylene - 1.25 million tonnes/year, butadiene – 45 thousand tonnes/year, isobutaneisobutylene fraction - 130 thousand tonnes/year, synthetic rubber – 100 thousand tonnes /year, methyl tertbutyl ether - 40 thousand tonnes/ year), increase the volume of main gas transportation by 15 billion m³/ year, increase the level of raw gas utilization by 4 billion m³/year and much more.

Preliminary cost

Name of projects	billion tenge
1 st package	
Reconstruction of the Astrakhan-Mangyshlak main water pipeline (stage 1)	113.8
Construction of a seawater desalination plant in Kenderly	127.2
Construction of a looping MG "Makat-North Caucasus"	98.2
Reconstruction of the gas transmission system of the Mangystau region, including Construction of the 2 nd line of MG "Beineu-Zhanaozen"	228.3
Construction of gas infrastructure for the thermal power plant of Almaty	95.6
Gasification of the area "Sarsha" and the resort area "Warm beach"	33.2
Construction of a gas processing plant on Kashagan m. (Stage 1)	390
Construction at the Almaty CHPP-2 CCGT with a capacity of up to 600 MW	421.1
Reconstruction of Almaty CHPP-3 on the basis of CCGT with an increase in the station's capacity to 450 ${\rm MW}$	341.4
Expansion of CHP-1 with the construction of a 200-250 MW CCGT	466.6
Reconstruction of Almaty cable networks	83.3
Construction of a CCGT with a capacity of up to 1000 MW in Turkestan region	626
Modernization of the Dostyk-Moynty railway corridor (Stage 1)	543
TOTAL for the 1 st package	3 567.7



Name of projects	Preliminary cost billion tenge
2 nd package	
Production of polyethylene	3 661
Construction project of a gas separation plant for the Polyethylene project	1 071
Production of butadiene and its derivatives in the Republic of Kazakhstan	417
Increasing the capacity of the main gas pipeline MG "Beineu-Bozoy-Shymkent"	1 992
Development of Kashagan Crude Gas Utilization Project (Stage 2)	1 010
Expansion and reconstruction of Ekibastuz SDPP-2 with the installation of power unit No. 3	445
Expansion of Ekibastuz SDPP-2 with the installation of power unit No. 4	548
Expansion of Ekibastuz SDPP-2 with the installation of power units No. 5 and 6	1 096
Construction of the station based on clean coal technologies of SDPP-3	1 400
Unification of the energy system of Western Kazakhstan with the UES of Kazakhstan	103
Strengthening of the electric network of the Southern zone of the UES of Kazakhstan	222
Construction of a nuclear power plant with a capacity of up to 2800 MW	5 760
5G network construction in Kazakhstan	395
Laying of a fiber-optic highway along the bottom of the Caspian Sea	59
Construction of a sulfuric acid plant with a capacity of 800 thousand tons per year	73
Construction of a bypass railway line bypassing the railway junction of Almaty station	94
Construction of the Darbaza – Maktaaral railway line	162
Construction of the Bakhty-Ayagoz railway line (3 rd border checkpoint)	321
Construction of a 1 GW wind farm with an energy storage system jointly with Total Eren	905
Construction of a 1 GW wind farm jointly with ACWA Power	675
TOTAL for the 2 nd package	20 409



The Fund participates only in projects that are critically important for the country, as well as in projects identified by the Head of State that cannot be implemented by private investors.

New investments in renewable energy

In 2022, the Fund, together with Portfolio Companies, worked on innovative investment projects involving strategic partners in the renewable energy industry, among others. Thus, within the framework of the Memorandum of Understanding signed in 2021 and 2022, the Agreement on Principles and the Term Sheet between the Fund, KMG, Total Eren and the Ministry of Energy of the Republic of Kazakhstan, it is planned to implement a large-scale project for the construction of a 1 GW wind farm with an energy storage system.

A similar wind generation project is discussed with a partner from Saudi Arabia, ACWA Power. The project "Construction of the wind powere plant in the Shelek corridor with a capacity of 60 MW with the prospect of expansion to 300 MW" is also has been launched. On September 12, 2022, as part of the opening ceremony of the WPP station in the Shelek corridor with a capacity of 60 MW, a Memorandum of Cooperation was signed between Samruk-Kazyna JSC and PowerChina Resources Limited on further development of Phase 2 of the project.





Activities of Samruk-Kazyna Invest LLP

Samruk-Kazyna Invest LLP (SK Invest) is an investment company that, together with strategic partners, makes direct investments in projects on the territory of the Republic of Kazakhstan. The main objective of the company is to diversify the investment portfolio of the Fund.

SK Invest is designed to stimulate development of the economy by

creating new industries, quality jobs, reducing import dependence, increasing exports, attracting foreign investment and technology.

Key performance results

Indicator	2021	2022
financial indicators, KZT million		
net profit from transactions with financial instruments measured at fair value, changes in which are reflected in profit or loss for the period	4 067	3 853
income (loss) from operations	3 991	4 523
financial income (expenses), net	5 488	14 877
income (loss) before taxation	1 497	13 488
corporate income tax expenses	462	2,938
profit/(loss) for the period	1 035	10 550

In December 2022, Fitch Ratings assigned SK Invest long-term issuer default ratings (IDR) at the level of BB+ with the "Stable" outlook. The received international credit rating will increase the reputation and the level of trust in the company, as well as have a positive impact on the brand awareness of SK Invest.

Plans for 2023

In 2023, the company plans to increase its investment portfolio by investing in industrial projects in the field of building materials, food industry, mechanical engineering, chemical and electrical industries. The total cost of the projects is KZT290.7 billion, including direct foreign investments in the amount of KZT101 billion from investors of China, Switzerland, Turkey. It is planned to update the Development Strategy of Samruk-Kazyna Invest LLP for 2023-2032 in accordance with the mission, vision, strategic initiatives and key priorities, as well as with the national development priorities of the Republic of Kazakhstan.

Taking into account the current socioeconomic development situation in Kazakhstan and the role of the Fund in the country's economy, it seems appropriate to focus investments primarily in the economy of Kazakhstan (in strategic projects).

Globally, the Fund will strive to diversify its portfolio and fill it with breakthrough projects with a high share of exports. In foreign markets, emphasis will be placed on cooperation with major international organizations and sovereign wealth funds in order to implement jointly initiatives and projects.

Attracting international strategic partners will have a positive effect in the form of technology transfer and attracting investments for the sustainable development of the country's economy.

This will allow the Fund to gain access to new markets and increase the experience of international investments, pooling resources through co-investment mechanisms and improving the image of Kazakhstan and Samruk-Kazyna JSC.





Support for the construction sector

Samruk-Kazyna Construction Joint Stock Company (former Real Estate Fund of Kazakhstan) is a developer company established on March 06, 2009, by the Government of the Republic of Kazakhstan in order to stabilize the situation in the real estate market, namely, solving the problems of shareholders and completing problematic objects. Initially, the company's task was to acquire residential and nonresidential premises in the facilities under construction and ensure effective management of this property. As a national operator, the company participated in the implementation of Affordable Housing 2020, Nurly Zher and a number of other state programs in eleven regions of the presence of the Fund group of companies. In March 2019, the Government of the Republic of Kazakhstan transferred 100% of the company's shares to the Sole Shareholder - Samruk-Kazyna JSC. According to the updated Development Strategy, the real estate company is moving from the functions of the operator of state programs to rendering services in the field of construction and real estate management for the Fund group of companies.

Key performance results

Indicator	2021	2022
production indicators:		
real estate commissioning, thousand m ²	8.18	150.65
real estate sold, thousand m ²	29.07	99.08
production of non-primary goods and services, KZT million	22.04	26.09
labour productivity, KZT million/person	170.62	255.08
financial indicators, KZT billion:		
revenue	14.31	19.64
dividends	1.02	2.03
net profit	9.78	5.28
operating profit	9.51	9.52
net debt	93.36	71.94
taxes paid	2.57	2.28

"Comfortable school"

The goal of the National Project is to eliminate emergency schools, three-shift training and a shortage of student places in secondary education organizations. Sources of financing: KZT646,535,206 thousand is provided at the expense of the National Fund, KZT1,960,060,849 thousand - at the expense of the Republican Budget.

The total amount of funding required for the implementation of the National Project is KZT2,606,596,055 thousand. The total number of facilities put into operation during the implementation of the National Project under the first mechanism is 401 schools in 20 regions of the Republic of Kazakhstan.

Design capacities of secondary education facilities are as follows: 300, 600, 900, 1,200, 1,500, 2000, 2,500 students. The repayment of funds allocated to the Company for the implementation of the national project will be carried out by transferring secondary education facilities to the ownership of local executive bodies, simultaneously with the commissioning of these facilities Since 2023, Samruk-Kazyna Construction JSC is appointed the Directorate for the target construction of secondary education facilities. The company manages the project in accordance with the Rules for Rendering Engineering Services in the Field of Architectural, Urban Planning and Construction Activities, while being endowed with the function of the customer.

Financial results

At the end of 2022, net Income of the company amounted to KZT5,284 million with a planned net income for KZT8178.6 million. The high volatility of the Russian ruble had a negative impact on the financial result: the company recognized a loss from the currency difference on a previously issued ruble loan repaid in the first decade of September (at the exchange rate as of the maturity date for KZT7.84/RUB1), and on the ruble bond loan (at the exchange rate as of the end of the reporting period for KZT6.43/RUB1).

Support for the construction industry

As of December 31, 2022, residential construction investment agreements were concluded for 11 objects in Astana, Almaty, Atyrau, Aktobe, Konayev and Ust-Kamenogorsk; the company's real estate pool for which is 362.98 thousand m², the total cost of projects amounts to KZT129 billion, including the volume of the company's own investments - KZT55.3 billion. The Company's share in projects averages 60%. Of these, three projects were commissioned in 2022 and three projects were partially commissioned, the total share of the Company's commissioned real

estate amounted to 150.7 thousand square meters, 99.1 thousand square meters were sold. These projects are financed at the expense of own funds and borrowing on market conditions.

One of the tasks assigned to Samruk-Kazyna Construction JSC is participation in the program of plants for the production of import-substituting construction materials. In 2022, the company signed an investment agreement for the construction of a plant for the production of roofing and cladding materials in Astana. The project cost is KZT2.6 billion.

The project provides for the production of up to 630,000 units of metal roofing elements per year and up to 2,200,000 units of cladding materials per year.

With the start of plant operation, about 70 jobs will be created. More than 90 people will be involved in the construction process.

On August 19, 2022, on the territory of the Astana – New City special economic zone, a capsule was laid at the construction site of the plant for the production of roofing and cladding materials in Astana.

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Improving the operational efficiency

In 2022, the company started automating the rental payment management system with completion in 2023.

As part of the automation of internal corporate business processes for personnel records management, the electronic platform SimBASE has been introduced.

Plans for 2023

In 2023, the Company plans to complete the construction of 5 residential complexes in Astana, Almaty, Aktobe, Konayev. Among the priorities is the completion of the construction of the plant for the production of roofing and cladding materials in Astana; the beginning of the construction of schools in 20 regions as part of the Comfortable School pilot national project.







3 591 KZT billion the amount of contracts concluded

Procurement Support

Samruk-Kazyna Contract LLP (hereinafter referred to as SKC) is the Procurement Operator of the Fund group of companies. The company was founded in 2009. SKC provides support and development of the electronic procurement information system (the Fund's procurement web portal), monitoring of local content

Key performance results

and marketing of prices for goods purchased by the Fund group of companies. The company is also the developer of the Unified Stock Item Catalogue of Goods, Works and Services used in the procurement of the Fund group, public procurement, as well as procurement of the quasipublic sector and subsoil users. In addition, SKC carries out the preliminary qualification of potential suppliers and has been designated by the Management Board of the Fund as the Competence Center for Managing Procurement Categories of the Fund.

Indicator 2021 2022 procurement indicators for the Fund group amount of contracts concluded, KZT billion 3 381 3 591 77% 79% total share of local content in procurement, % 61% local content in goods procurement, % 67% local content in the procurement of works and services, % 83% 89% Total amount of single-source procurement (SSP), KZT billion (the share of the total 1 340 (39%) of 1 407 (39%) amount of procurement is specified in %) them 488 (14%) are IHC Total amount of procurement through an open tender (OT), request for price quota-2 041 (61%) 2 184 (61%) tions (PQ) and other competitive methods, KZT billion (the share of the total amount of procurement is specified in %) number of concluded offtake contracts (at the end of the year, auto-incremental), 192 331 units 822 101.4 amount of concluded offtake contracts (at the end of the year, auto-incremental), KZT billion Indicators of Samruk-Kazyna Contract LLP production indicators number of potential suppliers registered on the procurement web portal (at the end 81 65 of the year, auto-incremental), thousand units number of potential suppliers who have passed the pre-qualification, units 83 129 number of procurement category strategies (at the end of the year, auto-incremen-78 21 tal), units number of codes of the Unified Stock Item Catalogue of Goods, Works and Services 52 363 50 670 (at the end of the year, auto-incremental), units financial indicators, KZT million 2 781 revenue 8 6 2 4 dividends 164 1 721 1 902 585 net profit 2191 663 operating profit net debt 0 0 1 008 taxes paid 1 115



Implementation of the import substitution program

One of the strategic objectives of the Fund is to participate in the implementation of socially significant, industrial and innovative projects that contribute to the sustainable development of the economy of Kazakhstan.

An effective mechanism for supporting domestic producers has become the Import Substitution Program, under which the manufacturer undertakes to create a new production of imported products, and the Fund companies acquire it on a long-term basis.

To implement this direction, the Fund approves the "Pool of Net Import Goods" on a quarterly basis in which the Fund group of companies has a long-term need. Enterprises are proposed to establish production on the territory of Kazakhstan, and the Fund companies undertake to ensure long-term demand. From 2018 to 2022, 53 projects were approved for the conclusion of offtake contracts. 331 offtake contracts were concluded for a total amount of about KZT101.4 billion.

Maintaining the Register of Commodity Producers of the Fund

In order to support domestic producers, acception, consideration and decision-making on materials submitted for inclusion in the Register of Commodity Producers of the Fund (hereinafter - the FCP Register), the presence in which gives producers the priority right to participate in the procurement of the Fund.

Based on the results of 2022, 2 890 applications from businesses for inclusion in the FCP Register were considered. At the moment, 719 organizations for more than 17 thousand commodity items are included in the FCP Register.



Potenial supplier prequalification (PQ)

Pre-qualification of potential suppliers (PQ) in modern procurement practices is important, indirectly contributes to reducing the risks of subsequent contracting, reduces the cost of procedures, ensures transparency and ultimately contributes to the development of fair competition. Prequalification means the selection of precisely such business entities that will be able to satisfy the customer's needs for goods, works, and services of appropriate quality with the maximum degree of probability.

The Register of Qualified Potential Suppliers includes 243 potential suppliers. For 2020-2021, 83 potential suppliers were included in the QPS Register.

During 2022, together with Portfolio Companies of the Fund, 24 categories of goods, works and services have been developed for which the PQ is applied. In addition, 5 categories have been developed for major investment projects of JSC NC KazMunayGas, JSC NC Kazakstan Temir Zholy, KEGOC JSC, Samruk-Energy JSC.

The ongoing monitoring of the quality of service rendering indicates a 100% level of satisfaction with the PQ process on the part of potential suppliers.

Category procurement management

Categorical procurement management (CPM) is a modern global management practice that can increase the economic efficiency of a company's procurement.

The CPM is aimed at changing the approach to procurement, taking into account the specifics of a particular business area. The implemented changes contribute to reducing purchase prices, improving the quality of purchased goods, optimizing logistics costs, reducing inventory balances, etc.

The CPM advantage is that the key criterion for choosing a supplier can also be not only the purchase price, but also the total cost of all expenses incurred during the life cycle of a product, work or service from the moment of their procurement to full write-off / disposal.

The List of procurement categories of the Fund and its organizations

In 2021-2022, work was carried out to optimize procurement categories, as a result of which the new version of the List consisting of 21 categories was formed.

Results of the Fund PCS implementation:

Nº		Benefits (KZT	ˈmillion)
	Category name (strategy)	2021	2022**
1	Passenger cars and buses	66.3	8
2	Health insurance*	651.2	102
3	Electricity*	1544.3	-
4	Cable and wire products*	389.8	2
5	Special shoes*	197.7	275
6	Communication services*	158.8	-
7	IT equipment and communication equipment	143.4	-
8	IT software	190.8	230
9	Oils and lubricants*	-150.7	3
10	Special clothing	433.8	416
11	Trucks and special equipment*	120.1	405
12	Fuel*	0.1	93
Total		3745.5	1,299.2

* The Management Board of the Fund by the decision dated June 30, 2022 (Minutes No. 36/22) declared the Fund PCSs null and void.

Development and implementation of procurement category strategies (PCS) of the Fund

In 2022, the Fund PCSs were updated for the "Special Clothing" and "IT Equipment" categories, and the PCS was developed and approved for the "Pipe Products" category.

Further development of the Unified Stock Item Catalogue of Goods, Works and Services

The total number of codes of the Unified Stock Item Catalogue of Goods, Works and Services as of December 31, 2022 is 52,363, including: goods – 49,982, works – 533, services – 1,848. In 2022, 13,118 applications for the addition of a new code were considered in the USIC GWS information system, 1,527 codes were approved by the USIC GWS Codes Consideration and Approval Commission, 11,591 applications were returned with the proposed code. As part of the USIC GWS development and improvement, work was carried out on the formation of a list of high-cost goods purchased by the Fund companies (about 906 USIC GWS codes). In order to correctly apply the USIC GWS codes, templates of standard technical specifications for use in the Electronic Procurement Information System have been developed according to these codes. The implementation of the Pilot Project in procurement is expected in 2023, after the modification of the USIC GWS IS and EPIS.

Processes Digitization

For round-the-clock monitoring, identification and response to incidents related to information security of EPIS and USIC GWS, the infrastructure was connected to the operational Information Security Operational Center.

During 2022, according to the Property Realization Rules of JSC SWF Samruk-Kazyna, the Web Portal for the Fund Property Realization information system was developed. In November 2022, a pilot implementation was launched in the perimeter of several Portfolio Companies of the Fund.

The Procurement Data Analysis and Visualization System based on the Qlik BI platform has also been developed and put into operation. This system enables analyzing and report on the indicators of procurement activities in an automated form online.

List of unreliable suppliers

SKC forms and maintains the List of Unreliable Suppliers.

In total, 1,045 applications for inclusion in the List of Unreliable Suppliers were considered in 2022, 972 of them were included in the List, 73 applications were refused.





Samgau Center for Scientific and Technological Initiatives

Center for Scientific and Technological Initiatives non-profit organization is a structure created for consolidating and systematizing the research and development work of subsoil users members of the Fund group.

The mission of the center is to support R&D and innovation through the creation of an effective and transparent ecosystem of scientific, technical and innovative activities for the formation of a knowledge-intensive economy that contributes to the welfare of the population.

The Center was set goals to build an effective and transparent system for the selection and implementation of research and innovation initiatives. It should be a transparent and understandable process - from the moment of the application submission to the project completion. The selection effectiveness is ensured by an in-depth examination of projects, transparency of the process – access to information about the status of the project at all stages of selection and implementation.

The Center sets the task of creating practical mechanisms for interaction between the scientific and innovative community and industry.

Increasing the competitiveness of the domestic industry is directly related to the need to introduce innovative, hightech technologies at enterprises. The scientific and intellectual potential of research organizations in Kazakhstan should be concentrated to solve technological problems in order to optimize production processes, increase productivity and technological equipment.

The Center is in fact an integrated part of the National Innovation and Research System, building interaction with public authorities, development institutions, research organizations and universities, industry and financial institutions.

The Center activities are designed to provide synergy with all existing tools to support scientific and innovative activities.

In December 2022, the Center for Scientific and Technological Initiatives was re-registered at the site of Astana International Financial Center by transforming to Samgau Center for Scientific and Technological Initiatives non-profit organization.

Corporate R&D and Innovation Standard of Samruk-Kazyna JSC

In November 2022, the new version of the Corporate R&D and Innovation Standard was approved.

The Standard establishes uniform requirements for R&D and innovation activities of the Fund and its group of companies, and defines the procedure for their interaction.

The purpose of the Corporate Standard is to increase the efficiency and ensure transparency of R&D carried out in the Fund group of companies through qualitative selection and examination of applications.

According to the Corporate Standard, the projects are financed according to the decision of the Scientific and Technical Council of the Fund based on the results of the relevant examinations of the application.

The Center is tasked with ensuring systematic cooperation of the Fund and its Portfolio Companies with the scientific community for the introduction of scientific developments into production, promotion and support of scientific projects and domestic science in general.

Financial and non-financial support tools are being gradually applied in order to increase the scientific and innovative activity of representatives of science and industry.

Performance of Samgau Center for Scientific and Technological Initiatives for 2022

By the end of 2022, the Samgau Center has considered more than 120 R&D applications. Of this number, 70 projects totaling KZT8.5 billion were approved and recommended for implementation at meetings of the Scientific and Technical Council of the Fund.

The projects dealt with the issues of reducing environmental impact, geological exploration, geotechnology and expanding the mineral base of the uranium industry, processing of extracted raw materials.

The approved and recommended projects include 51 projects of Kazatomprom, 12 projects of KMG, 4 projects of Samruk-Kazyna Ondeu LLP, 2 projects of Samruk-Energy JSC and 1 project of JSC NMC Tau-Ken Samruk.



Shared Service Center

Samruk-Kazyna Business Service LLP (hereinafter referred to as the SK Business Service) has been acting as the general service center of the Fund since July 2020.

Due to the need to increase the efficiency of the key business by optimizing expenses not related to the implementation of the key activities of the Fund and the group of companies. On May 28, 2020, the Modernization Council of the Samruk-Kazyna JSC group of companies decided to approve the transformation program in order to implement measures on Centralizing

Operational Functions into a shared service center based on SK Business Service.

The Company is the SAP Customer Expertise Center, the Compliance Competence Center, the Operator for the Assets Transfer to the Competitive Environment and the Centralized Archival Storage of Documents project.

SK Business Service has a 51% stake in the authorized capital of the subsidiary - QazCloud LLP.

QazCloud LLP is a service company that renders services for the support, maintenance and modernization of IT infrastructure, rental of virtual IT resources, protection of information data of the Samruk-Kazyna group of companies.

The company's activity is conditioned by the need to create an infrastructure service provider for the Fund group. In 2020, a unified service center for IT functions was established based on OazCloud LLP as part of the implementation of the Transformation Program of Samruk-Kazyna JSC.

Key performance results

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financial indicators, KZT million	2021	2022
income	14 126.8	11 359.3
cost	11 753	10 184.3
general administrative expenses	884.6	1,070.5
financial income/expenses	116.8	158.8
net profit	1 120.3	61
dividends paid	165.3	245

SSC activities

Since the beginning of the SSC activity, contracts have been concluded with the Fund group of companies, including the Fund, in the following areas of activity:

- administrative and economic support;
- written translations;
- transportation of employees;
- maintenance of the managers activity;
- procurement;
- HR service;
- accounting and tax accounting
- legal support
- safety
- IT security
- Compliance functions;
- and other functions.

In 2022, the quality management system of services rendered according to the standard of ST RK ISO 9001 - 2016 (ISO 9001-2015) was certified.

Centralized archival storage of documents

In 2020, the Modernization Council of the Fund group of companies by its decision determined SK Business Service to be the operator for the implementation of the Centralized Archival Storage of Documents project (CASD), the perimeter of which included 61 PCs/Subsidiaries of the Fund.

In 2021-2022, the Company rendered services in two of the areas of the

project - scientific and technical processing of documents and services for scanning and digitizing archival documents.

For the full implementation of the CASD project, the Electronic Archive information system was transferred to the authorized capital of SK Business Service LLP according to the decision of the Management Board of the Fund dated December 09, 2022.

The IS transfer made it possible to initiate the start of a full-fledged implementation of the CASD project. The total amount of concluded service contracts amounted to KZT130 million.



SAP Customer Expertise Center

The Company enters into contracts with PCs for the distribution and technical support of the SAP LPO owned by Samruk-Kazyna JSC on the basis of Agreement on Granting Rights to Use and Render Software Maintenance Services.

The perimeter of the Agreement includes 22 Portfolio Companies of the Fund.

The SAP Customer Expertise Center performs the following main functions:

- Support Service;
- Licensing management;
- Contract Administration;
- Consulting support;
- Coordination of requests for software revision/modification;
- Information management;
- Conclusion and maintenance / execution of lease agreements with PCs.

The total amount of contracts amounted to KZT13 billion.

Single Operator for the Assets Transfer to the Competitive Environment

According to the Rules for the assets transfer to the competitive environment, the company is defined as a Single Operator. The Automated Realized and Realizable Assets Database information system (ARRAD IS) has been developed and put into operation. The Fund and all Sectorial Companies have been granted access to the ARRAD IS to fill in data on assets. By the end of 2022, general information on 66 assets specified in the Decree of the Government of the Republic of Kazakhstan "On Some Issues of Privatization for 2016-2020" dated December 2020 was entered into the system.

Plans for 2023

Annexes

In 2023, the Company plans to:

- Maintaining and developing current activities while improving the quality of services rendered;
- Automation of the services rendering processes to Customers, including using mobile services;
- Introduction of EA IS in the Fund companies with the implementation of the integration function as part of the Horizontal Monitoring project;
- Strengthening control over transparency and legality of transactions on the transfer of assets to the competitive environment;
- Distribution of licenses among the Fund group of companies, including potentially new organizations included in the SAP agreement.