

17 March 2023, Astana

OPERATING AND FINANCIAL REVIEW FOR 2022

This Operating and Financial Review is intended to assist with the understanding and assessment of trends and significant changes related to the operations and financial position of NAC Kazatomprom JSC (“the Company”, “Kazatomprom” or “KAP”).

In this document, “the Group” refers to the Company and its consolidated subsidiaries, i.e. companies that the Group controls by having (i) the power to direct their relevant activities that significantly affect their returns, (ii) exposure, or rights, to variable returns from its involvement with these entities, and (iii) the ability to use its power over these entities to affect the amount of the Group’s returns. The existence and effect of substantive rights, including substantive potential voting rights, are considered when assessing whether the Group has power over another entity.

The Group, with its associates and joint ventures (“JVs”), are collectively referred to as “the Holding”.

This review is based on the consolidated financial statements of the Group the year ended 31 December 2022, in each case without material adjustment, unless otherwise stated. It should be read in conjunction with those statements and the accompanying notes, in addition to the Kazatomprom 4Q22 Operations and Trading Update, and other Company reports. All financial data and discussions thereof are based upon audited consolidated financial statements (Financial Statements) prepared in accordance with the International Financial Reporting Standards (“IFRS”), unless otherwise indicated.

The functional currency of Kazatomprom is the national currency of Kazakhstan, the Kazakhstani Tenge (“KZT”). All references to pounds (“lb”) herein are referring to pounds of uranium oxide (U_3O_8). References to dollars are referring to the United States dollar (“USD”).

Additional information about the Group and its businesses and operations is available in regularly published documents submitted to the Regulatory News Service of the London Stock Exchange (“LSE”), on the Astana International Exchange (“AIX”) and on Kazatomprom’s corporate website (www.kazatomprom.kz).

This document contains forward-looking information (“FLI”). For more information regarding the risks and assumptions associated with FLI, see the Risks and FLI section at the end of the document.

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1.0 CORPORATE OVERVIEW

Kazatomprom is the world's largest producer of natural uranium, with priority access to one of the world's largest uranium resource bases. According to UxC, LLC ("UxC") data, the Company's 2022 uranium production represented approximately 22% of global primary uranium supply. The Holding, which includes all uranium production from Kazakhstan, represented 42% of global primary uranium supply in 2022.

As the National Atomic Company of the Republic of Kazakhstan, Kazatomprom holds national operator status for the export and import of uranium and its compounds, nuclear power plant fuel, special equipment and technologies. In 2022, approximately 29,000 tU of the world's annual uranium production was mined using in-situ recovery ("ISR"), with approximately 74% of that ISR production coming from the Holding's mines in Kazakhstan.

The Holding operates 14 mining assets with 26 uranium deposits/blocks ("deposits"), all of which are located in Kazakhstan and mined using the ISR mining method, including:

- Two uranium producing subsidiaries, wholly-owned by Kazatomprom (100% share ownership), operating on five uranium deposits/blocks;
- Twelve uranium producing companies, partly owned by Kazatomprom (based on equity shareholding), operating on 21 uranium deposits/blocks.

In 2022, uranium reserve preparatory works for production were completed as a part of preparations for pilot uranium production at section 6-7 of the Budenovskoye deposit and uranium production started at Zhalpak mine.

At 31 December 2022, the Group's attributable Proved and Probable Ore Reserves totalled 312.9 thousand tonnes of Uranium Metal Content Equivalent ("UME"). Attributable Measured and Indicated Mineral Resources (inclusive of the Mineral Resources categorized as Ore Reserves) totalled 464.8 thousand tonnes of UME. Each category is reported in accordance with the terms and definitions of the Joint Ore Reserves Committee (JORC) Code with more information available in section 8.0 RESERVES AND GEOLOGICAL SURVEYS. An update letter from the independent consultant on the Mineral Resource and Ore Reserve statements valid as at 31 December 2022 has also been published and is now available on Company's website.

As was previously disclosed by the Company, on 20 January 2023 the Ministry of Energy of the Republic of Kazakhstan granted an extension of uranium mining contracts and signed corresponding addendums with Company's two wholly-owned (100% share ownership) subsidiaries:

- with Kazatomprom-SaUran LLP for Kanzhugan and Eastern Mynkuduk deposits. The addendums provide extension of subsoil use rights period at Kanzhugan deposit until 2047 and at Eastern Mynkuduk deposit until 2027;
- with RU-6 LLP for Northern Karamurun and Southern Karamurun deposits. The addendum to the contract provides extension of subsoil use rights period at these two mines until 2040.

In early August 2022, "JV "Katco" LLP (a joint venture entity with Orano in which the Group has a 49% interest) was issued a license from the Ministry to mine the South Tortkuduk block of the Muyunkum uranium deposit. On 31 December 2022 "JV "Katco" LLP was issued an addition to the license provided with an update of the work program and an estimated return to its full annual production level of about 4,000 tonnes of uranium in 2026 at the earliest.

On 11 August 2022 participants of "JV "Katco" LLP signed amendment to the Partnership Agreement on further development of the entity, under which the Group became entitled to the one-time compensation in the amount of KZT 7,671 million from the second participant, which was recognized as income in 2022. According to the amendment, the Group also entitled to an additional 11% from distributable annual profit starting from 2022 through to the end of the entity's operations, with the Company's ownership interest being unchanged.

In 2021, "JV "Budenovskoye" LLP (a joint venture entity in which the Group has a 51% interest) obtained an amendment for the right to commence commercial production under "JV "Budenovskoye" LLP's Subsoil Use Agreement for the blocks 6 and 7. The 25-year plan (2021-2045) provides for the future development of Budenovskoye blocks 6 and 7 after the completion of its ongoing pilot production program, with a commercial ramp-up of up to 2,500 tU beginning no earlier than 2024, and the potential for maximum annual production capacity of up to 6,000 tU no earlier than 2026. As of this reporting period, pilot production at both Budenovskoye blocks 6 and 7 had not yet begun.

As part of the audited financial statements of JV Budenovskoye LLP based on the results of 2022, information

was received from JV Budenovskoye LLP on a change in the composition of the participants of Stepnogorsk Mining and Chemical Plant LLP, which includes “Uranium One Group” JSC and “NFC Logistics” JSC. Kazatomprom continues to own a 51% stake in share capital of JV Budenovskoye LLP.

Also in 2021, Kazatomprom obtained a Subsoil Use Agreement for the right to commence commercial production from the Zhalspak deposit, which was transferred to “Ortalyk” LLP (a subsidiary in which the Group has a 51% interest). The 21-year plan (2022 – 2042) provides for development of the Zhalspak mine according to the “Ortalyk” LLP mine plan, with a maximum annual production capacity of up to 900 tU no earlier than 2030.

Kazatomprom’s core business is the mining and marketing of natural uranium products. The Group is also present in other stages of the “front-end” nuclear fuel cycle, including uranium dioxide (UO₂) ceramic powder production, and the production of fuel pellets for fuel assemblies used in nuclear power stations. The Group also has access to uranium enrichment services through its agreements with TVEL Fuel Company of Rosatom. In December 2022, a plant for the production of fuel assemblies (FA) “Ulba-FA” LLP which started operating in 2021, carried out the first delivery of nuclear fuel in the volume of one reload (a little over 30 tons of low-enriched Uranium) to China, where the products were accepted by the China General Nuclear Power Corporation-Uranium Resources Co. (“CGNPC-URC”). In future the “Ulba-FA” LLP plans to increase production volumes to reach full production capacity (200 tons per year if calculated in terms of low-enriched Uranium in fuel assemblies) in 2024.

In addition to its uranium operations, the Group includes one subsidiary that is engaged in the processing of selected rare metals, primarily tantalum, niobium and beryllium.

The Group also includes subsidiaries that are primarily engaged in providing supporting services to the uranium segment, such as drilling, transportation, IT and security services.

1.1 Strategy, vision and mission

Kazatomprom’s Mission is to develop its uranium deposits and their value chain components in order to create long-term value for all of its stakeholders, in accordance with the principles of Sustainable Development. The Vision of the Company is to become the partner of choice for the global nuclear fuel industry. The Company’s 2018-2028 Development Strategy is to achieve continued growth and strengthen its position as the leading company in the uranium industry by focusing on:

- Uranium mining as the core business;
- Optimising production, processing and sales volumes based on market conditions;
- Creating value by enhancing the marketing function and expanding sales channels;
- Implementing best-practice business processes;
- Developing a corporate ethics culture that is commensurate with industry leader status.

The Company strives to be the first choice in the provision of uranium and related front-end services, focusing on reliability, technical excellence, outstanding Health, Safety and Environmental (“HSE”) performance, and fair business practice with customers.

Key highlights of the Group’s Mission include:

- **Sustainability** – the Group is committed to the best HSE practices and the management team is focused on continual improvement.
- **Uranium deposits and their value chain components** – the focus of the Group’s commercial activities will remain where it has the most significant competitive advantage: uranium mining.
- **Long-term value creation** – The Group focuses on high-margin, cash generating operations with relatively modest requirements for further expansion capital in its uranium segment. The Group seeks to return substantial cash flows to its shareholders, whilst preserving a conservative financial position and comfortable leverage to best position itself to act on market and investment opportunities.

1.2 Geopolitical events

During 2022 significant geopolitical events occurred in Kazakhstan and in Russia/Ukraine. These events have not had a material impact on the Group’s operations to date although the resulting market uncertainty has caused significant volatility in the tenge exchange rate and traded price of the Company’s securities. Management is unable to predict the consequences or future impacts of these events, if any, on the Group’s financial position or operating performance. Management will continue to monitor the potential impact of the above events and will take all necessary steps to mitigate the risks and prevent adverse business impacts.

(a) January 2022 civil unrest in Kazakhstan

On 2 January 2022 protests triggered by a rise in fuel prices began in the Mangistau region of Kazakhstan which spread to other regions in the country. The protestors demanded a number of social, economic and political reforms. Although the Government took measures to respond to these demands, including a decrease in fuel prices, the protests escalated into significant social unrest in Almaty and southern regions of the country.

As a result, on 5 January 2022 a state of emergency was declared until 19 January 2022, and restrictions were imposed on communication and transportation of people and vehicles, including railway and airline carriage.

By the end of January 2022, the situation in all regions of the country stabilised, and the state of emergency was lifted. The functioning of utilities and infrastructure were fully restored, and restrictions on communication and transportation were removed.

(b) Events in Ukraine

On 24 February 2022, the Russian President announced that Russia would recognise independency of the Luhansk People's Republic and Donetsk People's Republic and the Russian military mobilised its troops over the border of Ukraine. As a response to the Russian actions, the United States, the European Union and a number of other countries imposed sanctions against Russia including the disconnection of a number of Russian financial institutions from SWIFT.

The Group's financial position and results are currently unaffected by the events in Ukraine. The majority of Group revenues is earned in US dollars and funding is also raised in US dollars, creating a natural hedging effect on foreign exchange risk. Accordingly, fluctuations in the exchange rate of the national currency do not have a significant impact on the financial performance of the Group.

In connection with the Russian/Ukraine conflict and its consequences, the Tenge exchange rate began to be more volatile and the annual inflation rate was 20.3% in 2022. To date, the National Bank of the Republic of Kazakhstan has taken a number of measures to maintain the stability of the Kazakhstan financial system.

Due to active international sanctions processes against Russian banks, including Sberbank, VTB Bank and other organisations, it is inappropriate for the Group to service or interact with these banks and their subsidiaries. The Group has taken measures to redistribute funds to banks that are not under current sanctions.

The Group has a Uranium Processing Agreement with the Uranium Enrichment Center (UEC) (a resident of the Russian Federation). At the date of the financial statements, the Group anticipates that provision of services under this agreement will continue. A high-priority risk analysis is being carried out on a continuous basis with respect to compliance with the sanctions.

The Group's exported products are transported through Russia which creates risks associated with both transit through the territory of Russia and the delivery of cargo by sea vessels, logistical constraints could also increase import costs. The Group constantly monitors the potential impact of sanctions on the transportation of finished products. At the date of Financial Statements, there are no restrictions on the Group's activities related to the supply of the Group's products to end customers. Kazatomprom also has permission to transit uranium through the Trans-Caspian International Transport Route (TITR), which Kazatomprom has successfully used as an alternative route since 2018 to help mitigate the risk of the primary route being unavailable, for any reason.

As part of its ongoing risk assessment program, management is reviewing the impact of anti-Russian sanctions on the Group's operations. To date, the sanctions have not had a significant impact on the Group's operations, although the resulting market uncertainty caused by the conflict between Russia and Ukraine has led to significant volatility in the spot uranium price, the exchange rate of the national currency and the quotations of the Company's securities. During 2022, the Company experienced some difficulties with certain bank payments, as described in Section 9.3 Working capital and 9.4.1 Cash Flows from Operating Activities, which were resolved in January 2023.

2.0 ENVIRONMENTAL, SOCIAL AND CORPORATE GOVERNANCE (ESG)

2.1 Industry ESG

The uranium mining industry is largely open pit mine-based and is therefore often perceived as an antagonist in the context of environmental sustainability. However, it is now being acknowledged as an essential part to climate change solution. Following the inclusion of nuclear power as a sustainable economic activity to the taxonomy of the European Union, investors and customers are increasingly recognizing the industry as a critical raw materials supplier needed for the global energy transition.

Inspired by such Global initiatives as the Paris Agreement, the annual Conference of the Parties to the UN Framework Convention on Climate Change (COP), the UN Global Compact, corporations and governments are now more willing to demonstrate their commitment to fiduciary obligations, including those ESG-related — from climate change issues to human rights due diligence and preventing social unrest.

Over the next decade, decisions made by uranium mining companies and the way they prepare themselves for the energy transition, given the increasing energy scarcity, will determine their resilience and create or abolish their competitive advantage in the global market. Companies need to find new ways to advance existing environmental, social and governance (ESG) frameworks, ensuring they are future-proofed for and resilient to economic realities of tomorrow. Integrating ESG into long-term business strategies as a tool to add value, rather than a discretionary cost that is frequently cut, will be critical for achieving this goal.

Requirements for ESG reporting are progressing every year. In order to keep up with demands, companies need to not only allocate resources to train employees in non-financial reporting standards, but also take actions to foster environmental consciousness, promote sustainable development principles along the entire value chain. ESG-focused standards and regulations shall continue their prompt development and transformation in 2023, including, but not limited to, further implementation of the GRI, SASB, ISSB and TCFD requirements. Thus, in 2022 Integrated Annual Report, Kazatomprom plans to disclose non-financial data in line with SASB and TCFD requirements. One of the priority goals set for Kazatomprom in 2023 is obtaining a CDP (Carbon Disclosure Project) rating. In addition, during the current year, Kazatomprom shall submit its first Communication on Progress to the UN Global Compact, to which the Company has been a party since March of last year.

2.2 ESG at Kazatomprom

As the largest global uranium mining company and industry leader, Kazatomprom recognizes its role in the development of society and its potential impact on the environment, population and people in the areas of presence. Therefore, sustainable development represents a crucial part of the Group's Development Strategy and by extension, ESG-related targets and objectives are integral to the Company's plans, including:

- Reducing the environmental impact of subsidiaries, associates and joint ventures;
- Environmental protection, including effective water and land resources management, ecosystem and biodiversity conservation, and the reduction of emissions;
- Ensuring resources are extracted in a way and at a rate that minimizes subsoil impact;
- Progress in production, energy and resource efficiency;
- Growth of socio-economic prosperity in the regions where the Company operates; and
- Facilitation of access to affordable, reliable, sustainable and modern energy sources, and enhancement of energy security.

Kazatomprom continually fosters and advances its management of sustainable development and integration of ESG principles in core business areas and processes. As part of the Corporate Policy on sustainable development, the Company is focused on nine key sustainable development areas, delineated based on an analysis of core ESG risks facing the business. Active engagement with stakeholders aims to define and prioritize the various ecological, social and government issues that are most impacted by the Company's activities.

Kazatomprom recognizes and accepts responsibility in designing the foundations for a sustainable future and support the Global 2030 Sustainable Development agenda.

2.3 ESG updates in 2022

In December 2022, the international rating agency S&P Global Ratings (“the Agency”) assigned Kazatomprom its first independent ESG rating at a score of 51 (the global average score for the mining sector is 50). Of note, the current global maximum ESG evaluation score among Metal & Mining sector companies is 68 (of 100) with

a global Metal & Mining sector average of 50 (of 100). The Agency's assessment was based upon an in-depth analysis of Kazatomprom's exposure to mining, environmental and social risks. The Agency noted Kazatomprom's contribution to the global efforts in achieving decarbonization, highlighted the effective management of ESG-related risks. Moreover, according to Agency's assessment, compared to global peers Kazatomprom is relatively better positioned due to the environmentally friendly and progressive uranium mining method (ISR) and KAP's HSE risk management practice is in line with the world's leading practices. Noteworthy, Kazatomprom's disclosure practices are rated as "strong" by the Agency.

The current ESG assessment is the result of dedicated joint efforts performed by both Kazatomprom and its subsidiaries, aiming at maturing their practices, including sustainable development-oriented practices.

2.4 Occupational health and safety

Health, safety, and environmental protection, including nuclear and radiation safety, are priorities for the Company. The Company is continuously improving the management system of its industrial HSE programs as it strives to a goal of zero injuries.

None of the Company's plans and objectives can be achieved without its most important resource: a team of over 20,000 dedicated employees. Kazatomprom ensures they have the skills, training and equipment needed to work safely. The Company's business culture is built on a foundation of personal and group responsibility where people are empowered to make safe choices, voice any safety concerns, and report both actual incidents and near misses, to ensure continual improvement. Kazatomprom's commitment to safety and wellbeing is demonstrated by its membership of the International Social Security Association's Vision Zero initiative to reduce workplace injuries and promote comfortable and safe working conditions guided by the Vision Zero program's "Seven Golden rules". These rules apply to all employees of the Company's enterprises and their contractors, the main goal of which is to achieve the goal of zero injuries:

- Take leadership – demonstrate commitment;
- Identify hazards – control risks;
- Define targets – develop programs;
- Ensure a safe and healthy system – be well-organized;
- Ensure safety and health in machines, equipment and workplaces;
- Improve qualifications – develop competence;
- Invest in people – motivate by participation.

The Company conducts its production activities in compliance with both Kazakh and international requirements for labour protection and industrial safety, implementing comprehensive measures to prevent incidents and accidents. Health and safety management systems that meet international standards (ISO 45001) have been implemented and annually confirmed by results of external audit, and the Company carries out systematic work to improve the safety culture among employees and managers at all levels.

The measures undertaken in 2022 to enhance the focus on safety awareness helped to prevent major industrial accidents (including uncontrolled explosions, emissions of dangerous substances or destruction of buildings) at the Holding's enterprises. In 2022, the Holding spent more than KZT 8.08 billion (in 2021: KZT 8.29 billion) within its occupational health and safety programs. The table below reflects the safety results of 2022 and 2021:

Indicator	2022	2021	Change
Industrial accidents ¹	–	–	–
LTIFR (per million man-hours) ²	0.11	0.55	(80%)
Unsafe conditions, unsafe actions, near-miss reporting	36,913	44,271	(17%)
Number of accidents ³	3	9	(67%)
Fatalities	1	2	(50%)

¹ Defined as uncontrolled explosions, emissions of dangerous substances, or destruction of buildings.

² Lost-Time Injury Frequency Rate (LTIFR) per million hours.

³ Defined as impact on the employee of a harmful and (or) dangerous production factor in performance of his work (job) duties or tasks of the employer, which resulted in an industrial accident, sudden deterioration of health, or poisoning of the employee that led to temporary or persistent disability, or death.

Notwithstanding the continuing actions taken to improve workplace health and safety, three accidents occurred in 2022. The accidents included: one case of cut injury on hand, one case of road accident and one case resulting from the impact of a moving object. The fatal case occurred as a result of a road accident.

Following each accident, thorough investigations were completed, the main causes were identified, preventative measures were developed and procedures were changed to prevent similar incidents in the future. The investigation results were reported to other Group entities to ensure all operations could learn from the event and adjust their processes accordingly. The Company will continue working to increase the involvement and awareness of employees in industrial safety.

As part of the continuing work to improve the system for ensuring industrial safety and implementing the 2018 – 2028 development strategy, in 2022 the Company completed following:

- HSE management training “NEBOSH HSE Certificate in Health and Safety Leadership Excellence” was conducted for the employees, responsible for HSE;
- analysis of the frequency and nature of detected hazardous conditions, hazardous actions, potentially hazardous situations, and Near Misses to determine the adequacy of the corrective measures taken;
- improvement of the survey methods used to gauge the level of conscious observance of industrial safety requirements by employees and managers at all levels;
- the Company’s internal policy on HSE has been updated;
- the Company was certified by TUV International Certification (Germany) for compliance with international standards ISO 45001 (HSE management systems) and ISO 14001 (environmental management systems);
- implementation of activities under the Environmental and Social Action Plan (ESAP) continued, aimed at improving environmental and social stability in the regions of the Company presence;
- an assessment of the level of freedom of expression of personal opinion by the Company’s employees was carried out by analysing employees’ appeals using internal communication channels, the practice of using STOP cards and conducting behavioural safety audits;
- quarterly reports on health and safety were updated, including sections for contractor safety;
- comprehensive measures were taken to combat COVID-19 at the Company’s enterprises.

Related activities under the 2018-2028 Development Strategy are continuing into 2023:

- assistance to Samruk-Kazyna JSC in the development of unified HSE processes, according to the best world practices and in accordance with the requirements of the HSE Management System Guidelines;
- control over the implementation of the Lock out/Tag out system (equipment blocking with warning labels posted);
- automation of production industrial safety reporting processes;
- development and implementation of a methodology for continuous identification of hazards and risks in the workplace – five safety steps;
- continued implementation of the ESAP roadmap;

These activities are focused on implementation of preventative measures, risk-based approach to the organization of the production process and improving the safety culture among the Group’s employees.

2.5 Environmental Sustainability

An internationally recognized benefit of the ISR mining method is its low environment and radiological impact. In contrast to underground and open-pit mining, ISR mining does not generate significant waste rock piles, nor are major tailings dams required. All of the Company’s uranium is mined using the ISR method and as a result, its operations inherently have a minimal impact on land, atmosphere and water supply. Minimizing and mitigating the impact of the Company’s activities is a central part of its business strategy with continual research, development and deployment of new eco-friendly technologies and processes. Kazatomprom has been working to establish the baseline impact of its operations on local ecosystems and biodiversity through widespread long-term surveys and conducting dedicated training courses in Biodiversity Assessment at Uranium Deposits for team members across the organisation.

In November 2022, the Company approved a Strategy for decarbonization and achieving carbon neutrality until 2060. The Company employs reliable systems for monitoring the environment and radiation safety at all of its uranium mines and production facilities (ISO 14001 compliant). In 2022 there were no environmental or radiation-related incidents although the Holding paid the fines for violations of environmental legislation, totalling KZT 1.65 billion (“Baiken-U” LLP, “Semizbay-U” LLP, “Kyzylkum” LLP, “RU-6” LLP, “JV “Inkai” LLP, “JV “Katco” LLP, “SKZ-U” LLP) (in 2021 KZT 12.44 million: “Ulba Metallurgical Plant” JSC (“UMP” JSC), “Baiken-U” LLP,

“Kyzylkum” LLP, “RU-6” LLP, “SKZ-U” LLP). Administrative fines were imposed by the authorized state body for violation of environmental norms and requirements, namely for land pollution due to the spill of technological solutions and excess of pollutants in wastewater (“Baiken-U” LLP, “Kyzylkum” LLP, “RU-6” LLP, JV “Inkai” LLP, JV “Katco” LLP and “SKZ-U” LLP). JV “Inkai” LLP paid KZT 1.64 billion fine out of total abovementioned amount. During 2022, litigations were held and at the date of this document the fine is being challenged in the Supreme Court of the Republic of Kazakhstan. However, the total limits allowed by the state bodies for the generation of waste, emissions, and discharges were not exceeded. For all violations, the root causes were identified, eliminated in a timely manner, and measures are being taken to prevent similar events in the future.

Radiation exposure and nuclear safety remained stable in 2022 with no exceedances or radiation accidents. All work was carried out in accordance with the requirements of regulatory legal acts and internal documentation on radiation and nuclear safety.

As part of the implementation within the ESAP Roadmap approved by the Board of Directors of Kazatomprom, the following activities were underway in 2022:

- research on the environmental and local social impacts of the Company’s production facilities;
- creation of a system for environmental regulation and environmental monitoring of uranium mining enterprises.

In 2022, Kazatomprom developed and implemented the following significant Group standards:

- an approach to calculate the estimated cost of decommissioning and procedures for the ongoing analysis of the current costs for decommissioning of assets (assessment of Asset retirement obligations – ARO);
- a rating of the Company’s environmental performance has, taking into account industry specific attributes;
- "Guidelines for the assessment of biodiversity at uranium deposits, production facilities and adjacent territories";
- "Methodological guidelines for monitoring the impact of in-situ recovery of uranium on surface water and underground waters".

Indicator*		2022	2021
Energy consumption	thousand GJ	3,910	4,132**
The volume of waste per produced unit of production of uranium mining and processing enterprises	Tonnes	6.2	5.2
Expenses for carrying out measures to protect the environment	KZT mln	1,074	964.6

* Detailed ESG indicators will be disclosed in the Company’s integrated annual report.

** Updated after disclosure in integrated annual report for 2021

In 2022, decrease in the consumption of energy compared to 2021 was due to implementation of new equipment reducing energy consumption. The volume of waste per production unit of uranium mining and processing enterprises increased due to the increase in drilling works in 2022.

In 2022, the total cost of environment protection measures amounted to KZT 1,074 million (in 2021: KZT 964.6 million), an increase in comparison to 2021 due to additional trainings of employees on decarbonisation project, as well as the implementation of other environmental projects.

2.6 Human rights and fundamental freedoms

The Company understands that its responsibilities go beyond the workplace, which is why it supports the development and growth in Kazakh communities through the promotion of health and wellbeing across the regions in which it operates. Kazatomprom has funded children's playgrounds, sports facilities, community centres and contributed to the redevelopment of the city of Turkistan, a historical and cultural jewel in Kazakhstan's crown. The Company has also implemented real-time radiation monitoring in communities surrounding its extraction and processing facilities, ensuring an immediate response to any unusual conditions. Caring for employees and the wider community across the areas of operation will always remain a key aspect of Kazatomprom's business.

Indicator*	2022		2021	
	m	w	m	w
Headcount	17,511	3,742	16,942	3,701
Composition of governing bodies and personnel, %	82%	18%	82%	18%
Share of employees covered by collective agreements, %	99%		94%	
Expenses for training, KZT million	1,898.9		1,476.2	
The ratio of the minimum wage among men and women	m / f 1:1		m / f 1:1	
Social stability index (SRS), %	76%		73%	
Transfers to the budget for the socio-economic development of the regions of presence, KZT mln.	2,625.0		1,608.6	

* Detailed ESG indicators will be disclosed in the Company's integrated annual report.

The employment of women in the total number of employees in 2022 was 17.6%, which is in line with the figures for 2021. The ratio of the minimum wage among men and women in the reporting period, compared to 2021, remains stable at a ratio of 1:1.

In 2022, the "Center for Social Interaction and Communications" PI conducted research to determine the level of social stability (Samruk Research Service (SRS)) at 19 entities of the Group. SRS is calculated based on the assessments of employees and their personal perception of the components of the index. SRS includes three components:

- Index of involvement: the level of satisfaction with working conditions and safety, relationships and communications in the company, as well as the level of employee loyalty.
- The index of social well-being: captures the mood of employees, determined mainly by external factors and the social environment.
- Index of social tranquillity: reflects the level of social tension of the team, the assessment of the protest potential and the motives of the hypothetical readiness for civil unrests.

According to the results of the study, the level of SRS was 76%, which corresponds to a favourable level, and increased by 3% compared to 2021.

In 2022, contributions to the socio-economic development of the regions where the Company operates and the development of area infrastructure under the terms of subsoil use contracts amounted to KZT 2.6 billion (2021: KZT 1.6 billion). The largest transfers were made to the budgets of Turkestan and Kyzylorda regions (KZT 2.2 billion and KZT 351.1 million respectively, in 2021 KZT 1.2 billion and KZT 341.6 million).

3.0 MARKETING

3.1 The uranium market

The sale of natural uranium and uranium products is Kazatomprom's primary source of revenue and profit. Market prices for uranium have a significant impact on the Company's financial results and like any commodity, the balance of supply and demand determines the market price for uranium products. The sales prices realized for U₃O₈ by any primary uranium producer are highly dependent upon the specific types of contracts they deliver into and the structure of their sales portfolio (including terms, price formulae used in each contract, proportion of spot and term contracts).

Kazatomprom expects that in the years to come, nuclear power, as a reliable source of carbon-free, base-load electricity, will maintain and strengthen its position in the broader energy market, resulting in increased demand for uranium. Accordingly, uranium prices should rise from current levels, which represents a significant opportunity for Kazatomprom as a low-cost producer with a high degree of leverage to market prices.

3.2 Sales

As at 31 December 2022, there are over 70 utility companies globally, operating 442 nuclear power reactors. As part of the Company's strategic goal to create value by expanding sales channels, its marketing and sales departments are constantly working to grow the Company's customer base, with ongoing negotiations in Europe, North and South America and the Middle East.

In 2022, the Company sold its uranium products, directly and through its Swiss marketing subsidiary "Trade House KazakAtom" AG ("THK"), to 24 customers in 11 countries (2021: 21 customers in 8 countries). Kazatomprom delivers U₃O₈ and finished uranium products to various destinations based upon customer requirements:

- **Converters:** The Group transports U₃O₈ to licensed conversion facilities owned by companies such as ConverDyn (US), Cameco (Canada) and Comurhex (France), first by rail from the Company's operations in Kazakhstan, generally to the port of St. Petersburg in Russia (see Section 1.2 Geopolitical events), then by sea to various ports in the US, Canada and Europe. The material then moves by rail or road to the processing facilities and is transferred to the customer's accounts. In some cases, the Group enters into swap (exchange) agreements at the conversion facility to reduce risks and transportation costs. This can include the exchange of U₃O₈ with partners of the Group at the conversion facility.
- **China.** When transporting material to China, the Company delivers its cargo to the Alashankou railway station near the Kazakhstan-China border.
- **Russia.** When shipping to the Russian Federation — recipients include "Siberian Chemical Combine" JSC (SCC) — the Group delivers its cargo by rail from its operations to the Russian railway station, depending on the final destination of the products.
- **India.** The Company generally delivers U₃O₈ to destinations in India by rail to the port in St. Petersburg, Russia (see Section 1.2 Geopolitical events), then by sea to the port of Mumbai, India.
- **Others.** The transportation methods and routes to other countries may differ depending on the terms of delivery agreed with customers.

The following table provides the geographical distribution of uranium segment sales over the past three years:

Consolidated sales* of U₃O₈ products by region**

(% of consolidated U₃O₈ sales volume)

Region	2022	2021	2020
Americas	28%	32%	24%
Asia	46%	41%	43%
Europe	26%	27%	33%

*Includes sales of uranium to JV partners.

** The breakdown by region was made not on the basis of the counterparty's domicile, but on the basis of the domicile of the counterparty's ultimate beneficiary or the domicile of the decision-maker's office.

Source: Internal company data. Percentages have been rounded.

KAP & THK sales of U₃O₈ products by region**

(% of U₃O₈ sales volume*)

Region	2022	2021	2020
Americas	23%	23%	16%
Asia	50%	48%	49%
Europe	27%	29%	35%

*KAP U₃O₈ sales volume (incl. in Group): includes only the total external sales of KAP HQ and THK. Intercompany transactions between KAP HQ and THK are not included.

** The breakdown by region was made not on the basis of the counterparty's domicile, but on the basis of the domicile of the counterparty's ultimate beneficiary or the domicile of the decision-maker's office.

Source: Internal company data. Percentages have been rounded.

4.0 PRESENTATION OF FINANCIAL INFORMATION

4.1 Segments

During the year, the Group operated through three principal business segments:

- **Uranium segment** includes uranium mining and processing operations from the Group's mines, the Group's purchases of uranium from the Group's JVs and associates engaged in uranium production, and external sales and marketing of uranium products. The Uranium segment includes the Group's share in net results of its JVs and associates engaged in uranium production and sale, as well as results of the Company as the head office of the Group. This segment does not include production and sales of UO₂ powder and fuel pellets.
- **"Ulba Metallurgical Plant" JSC ("UMP") segment** includes production and sales of products containing beryllium, tantalum and niobium, hydrofluoric acid and by-products. This segment is also engaged in the processing of uranium raw materials under tolling arrangements, and the production of UO₂ powder, fuel pellets and production of fuel assemblies and their components.
- **Other segment** includes revenue and expenses of the Group's subsidiaries that are primarily engaged in providing supporting services to the Uranium segment, such as drilling, transportation, R&D, IT and security services. These businesses are not included within reportable operating segments, as their financial results do not meet the materiality threshold. This segment is not disclosed in this report due to immateriality.

4.2 Consolidation

In addition to the operations of the Company and its consolidated subsidiaries, the Group has a number of joint operations, joint ventures and associates.

- **Subsidiaries** are entities that the Group controls because the Group (i) has power to direct the relevant activities of the investees that significantly affect their returns, (ii) has exposure, or rights, to variable returns from its involvement with the investees, and (iii) has the ability to use its power over the investees to affect the amount of the investor's returns. The existence and effect of substantive rights, including substantive potential voting rights, are considered when assessing whether the Group has power over another entity.
- **Joint operations ("JOs")** are entities in respect of which the Group has joint control and has rights to their assets and revenues and has obligations relating to their expenses, as well as financial obligations in proportion to the Group's interests. The Group's JOs, being JV "Akbastau" JSC and "Karatau" LLP, are consolidated as JOs from 1 January 2018. The Group's interests in JOs are accounted for on a proportional consolidation basis.
- **Joint ventures ("JVs")** are entities that are under the joint control of the Group acting collectively with other parties, and decisions over the relevant activities of such entity require unanimous consent of all parties sharing control. The Group's interests in JVs are accounted for using the equity method of accounting.
- **Associates** are entities over which the Group has, directly or indirectly, significant influence, but not sole or joint control, which is typical for a shareholding of between 20% and 50% of the voting rights. The Group's investments in associates are accounted for using the equity method of accounting.
- **Equity investments** are entities in which the Group has less than 20% of the voting rights. Equity investments are recognised at fair value as "other investments" in the Company's consolidated IFRS financial statements.

The following table lists the Group's subsidiaries, JVs, JOs and associates, as of 31 December 2022. In all cases, the share percentage shown is equal to the Group's voting rights, with the exception of "Ulba Metallurgical Plant" JSC and "Volkovgeologia" JSC, where the Group has 100% voting rights in each entity. In ANU Energy OJSC Ltd (ANU Energy) the Group does not have representation in the Board of Directors, has no voting rights and does not take part in decision-making on key strategic issues of the ANU Energy.

Treatment	Name	Share (%)
Uranium Mining and Processing		
Subsidiaries	"Kazatomprom-SaUran" LLP	100.00%
	"RU-6" LLP	100.00%
	"Appak" LLP	65.00%
	"JV "Inkai" LLP	60.00%
	"Baiken-U" LLP ⁽¹⁾	52.50%
	"Ortalyk" LLP ⁽²⁾	51.00%
Joint Ventures	"JV "Khorassan-U" LLP	50.00%
	"JV "Budenovskoye" LLP	51.00%
Joint Operations	"Semizbay-U" LLP	51.00%
	"JV "Akbastau" JSC	50.00%
	"Karatau" LLP	50.00%
Associates	Energy Asia (BVI) Limited ⁽¹⁾	50.00%
	"JV "Katco" LLP	49.00%
	"JV "South Mining Chemical Company" LLP	30.00%
	"JV "Zarechnoye" JSC	49.98%
	"Kyzylkum" LLP ⁽¹⁾	50.00%
	"Zhanakorgan-Transit" LLP ⁽³⁾	60.00%
Nuclear Fuel Cycle and Metallurgy		
Subsidiaries	"Ulba Metallurgical Plant" JSC ("UMP" JSC)	94.33%
	"ULBA-CHINA Co" Ltd ⁽³⁾	100.00%
	"Mashzavod" LLP ⁽³⁾	100.00%
	"Ulba-FA" LLP ⁽³⁾	51.00%
Nuclear Fuel Cycle		
Investments ⁽⁴⁾	"International Uranium Enrichment Centre" JSC	10.00%
Ancillary Operations		
Subsidiaries ⁽⁶⁾	"High Technology Institute" LLP	100.00%
	"KazakAtom TH" AG or "THK"	100.00%
	"KAP Technology" LLP	100.00%
	"KAP Logistics" LLP ⁽⁵⁾	99.99%
	"Volkovgeologia" JSC	98.96%
	"Rusburmash-Kazakhstan" LLP ⁽³⁾	49.00%
	"Qorǵan-Security" LLP ⁽⁷⁾	100.00%
Joint Ventures	"SKZ-U" LLP	49.00%
	"Uranenergo" LLP	79.17%
Associates	"SSAP" LLP ⁽⁸⁾	9.89%

The following assets are currently for sale or subject to restructuring:

Treatment	Name	Share (%)
Nuclear Fuel Cycle		
Joint Ventures	"JV "UKR TVS" Closed Joint Stock Company ⁽⁹⁾	33.33%
Ancillary Operations		
Associates	"Caustic" JSC ⁽¹⁰⁾	28.00%

¹ The Company holds 50% (direct ownership) in Energy Asia (BVI) Limited. Energy Asia (BVI) Limited holds 40% (direct ownership) in "Kyzylkum" LLP and 95% (direct ownership) in "Baiken-U" LLP.

² Under the terms of several agreements between Kazatomprom and China General Nuclear Power Corporation ("CGNPC"), the parties agreed to construct a fuel assembly plant ("Ulba-FA") at the Ulba Metallurgical Plant. CGNPC provided a guarantee that Ulba-FA's production will be purchased by CGNPC in exchange for Kazatomprom agreeing to sell a 49% interest in the Company's wholly owned subsidiary, "Ortalyk" LLP, to a subsidiary of CGNPC (the "Transaction"). In April 2021, a Sale and Purchase agreement was signed and the parties agreed to the valuation determined by one of the four major international advisory and professional services firms, whereby a 49% share of the operation was assessed a value of approximately US Dollar 435 million. On 22 July 2021, the sale of the interest in "Ortalyk" LLP was completed following receipt of all government approvals, satisfaction of all contract pre-conditions are fulfilled by the end of 2021. Re-registration of the entity has been completed and CGNM UK Limited (a CGNPC subsidiary) is now a participant in "Ortalyk" LLP. Kazatomprom retains a 51% interest and CGNM UK Limited holds a 49% interest, with each partner purchasing a proportionate share of uranium production from the operation according to its interest. The consideration received was US Dollar 435 million (equivalent to KZT 185,858 million).

³ These companies are 3rd level entities for the Company indirectly through the interests in subsidiaries, JVs and associates presented above these companies in the table. The corresponding interests belongs to the 2nd tier entities, not the Company.

⁴ As at the reporting date, the Group classifies JSC Uranium Enrichment Center (TsOU) with 1 share as other investment. The Group made an investment of USD 24.25 million in March 2022 (equivalent to KZT 12,368 million), which constitutes 32.7% of the entity's equity. The Group does not have a significant influence on the management operations of the entity, and the Group therefore recognizes this investment at fair value through profit or loss and does not increase the number of entities within the Holding. As at the December 31, 2022, the Group classifies ANU Energy as "other investments" within other financial assets in the consolidated financial statements.

⁵ On September 20, 2022 "Trading and Transportation Company" LLP was re-registered as "KAP Logistics" LLP.

⁶ On April 30, 2021, the liquidation procedure of "Kazatomprom-Damu" LLP was completed.

⁷ On July 23, 2021, the procedure of re-registration of Korgan-KAP LLP into Qorǵan-Security LLP was carried out.

⁸ In accordance with decree of the Government of the Republic of Kazakhstan dated August 2, 2022 No. 523, SSAP LLP was excluded from the list of assets subject to privatisation and transfer into a competitive environment.

⁹ On June 22, 2022, Kyiv Economic Court declared JV UKR TVS JSC bankrupt and a liquidation procedure was introduced.

¹⁰ In accordance with the privatisation plan of non-core assets as presented in the Company's IPO Prospectus, Kazatomprom and "United Chemical Technologies Trading House" LLP entered into an Agreement on 30 December 2021, for the sale of the Company's 40% share in "Caustic" JSC. On 31 January 2022, partial payment was made for 30% of the Company's total interest in "Caustic" JSC, therefore "United Chemical Technologies Trading House" LLP's interest in "Caustic" JSC increased by 12% (30% of the Company's 40% share). The remaining portion of the Company's shares were transferred to trust management of "United Chemical Technologies Trading House" LLP until full payment for the Company's remaining interest is completed, expected till the end of 2023.

5.0 SIGNIFICANT FACTORS AFFECTING THE GROUP'S RESULTS OF OPERATIONS

The significant factors that affected the Group's results of operations during 2022 and 2021, and which the Company expects to continue to affect the Group's results of operations in the future, include:

- the price received for the sale of natural uranium and changes in natural uranium product prices;
- changes in the Group structure;
- the impact of changes in foreign exchange rates;
- taxation, including mineral extraction tax;
- the cost and availability of sulfuric acid;
- pandemic-related costs, as well as availability of critical operating materials caused by supply-chain disruption;
- impact of changes in ore reserves estimates; and
- transactions with subsidiaries, JVs, JOs and associates.

5.1 Price received for the sale of natural uranium and changes in natural uranium product prices

Spot market prices for U₃O₈, which is the main marketable product of the Group, have the most significant effect on the Group's revenue. The majority of the Group's revenue is derived from sales of U₃O₈ under contracts with price formulae containing a reference to spot price. In addition to spot prices, the Group's effective realized price depends on the proportion of contracts in the portfolio with a fixed price component in a given period. The average realized price for each period can therefore deviate from the prevailing spot market price. More information regarding the impact of spot market prices on average realized price is provided in section 12.1 Uranium sales price sensitivity analysis.

The following table provides the average spot price and average realized price per pound of U₃O₈ for the periods indicated:

		2022	2021	Change
Average weekly spot price (per lb U ₃ O ₈) ¹	USD	49.61	35.05	42%
	KZT	22,863	14,932	53%
Average realized price of the Group (per lb U ₃ O ₈)	USD	43.44	33.11	31%
	KZT	20,021	14,108	42%
Average realized price of Kazatomprom (per lb U ₃ O ₈)	USD	42.50	32.33	31%
	KZT	19,587	13,776	42%

¹ Prices per UxC LLC.

The Company's current overall contract portfolio price correlates to current uranium spot prices (see Section 12.1 Uranium sales price sensitivity analysis). However, the increase in average realized prices in 2022 was lower than the increase in the spot market price for uranium due to the significant spot price volatility in the uranium market in 2021-2022; during 2022, many deliveries were based on contract price mechanisms that established a contract price for the delivery, set earlier in the year when the market price was lower and prior to the sharp increase in the market price in September 2021.

For additional details related to specific market developments that influenced the pricing of uranium in 2022, please see the *Kazatomprom 4Q2022 Operations and Trading Update*, available on the corporate website.

5.2 Changes in the Group structure

In 2022 and 2021 the Group completed several transactions including:

In 2022:

- According to the Framework Agreement signed on November 22, 2021, the Group and Genchi Global Limited, agreed to establish ANU Energy. The purpose of ANU Energy is to store physical uranium as a long-term investment. The Group made an investment of USD 24.25 million in March 2022 (equivalent to KZT 12,368 million), which constitutes 32.7% of the entity's equity. The Group does not have representation in the governing body of the entity and does not take part in decision-making of the entity. Accordingly, the Group does not have a significant influence on the management operations of the entity, and the Group therefore recognizes this investment at fair value through profit or loss. As at 31 December 2022, the Group classifies ANU Energy as "other investments" within other financial assets in the consolidated financial statements. In accordance with the Framework Agreement, the

Group and ANU Energy signed a short-term contract for the sale and purchase of natural uranium concentrates, under which the Group delivered natural uranium concentrates on 12 May 2022.

In 2021:

- Under the terms of several cooperation agreements between Kazatomprom and China General Nuclear Power Corporation (“CGNPC”), the parties agreed to construct a fuel assembly plant (“Ulba-FA”) at the Ulba Metallurgical Plant. CGNPC provided a guarantee that Ulba-FA’s production will be purchased by CGNPC in exchange for Kazatomprom agreeing to sell a 49% interest in the Company’s wholly owned subsidiary, “Ortalyk” LLP, to a subsidiary of CGNPC (the “Transaction”). In April 2021, a Sale and Purchase agreement was signed and the parties agreed to the valuation determined by one of the four major international advisory and professional services firms, whereby a 49% share of the operation was assessed a value of approximately USD 435 million (equivalent to KZT 185,858 million). The transaction has closed, with government approvals in place and all conditions being met. Re-registration of the entity has been completed and CGN Mining UK Limited (a CGNPC subsidiary) is now a full participant in “Ortalyk” LLP. Kazatomprom retains a controlling 51% interest and CGN Mining UK Limited holds a 49% interest, with each partner purchasing a proportionate share of uranium production from the operation according to its interest.
- In accordance with Comprehensive Privatization Plan for 2021–2025, approved by the Government of the Republic of Kazakhstan, the Company had planned to divest its interest in a number of non-core assets, as presented in the Company’s 2018 IPO Prospectus. This included entities of the KazPV project: “Astana Solar” LLP, “Kazakhstan Solar Silicon” LLP and “MK KazSilicon” LLP. In 2021, the Group sold its 100% interest in each of the following entities: “Kazakhstan Solar Silicon” LLP for KZT 323 million (completed 12 July 2021), Astana Solar LLP for KZT 380 million (completed 23 August 2021) and “MK KazSilicon LLP” for KZT 652 million (completed 19 November 2021).
- In accordance with the privatisation plan of non-core assets as presented in the Company’s IPO Prospectus, Kazatomprom and “United Chemical Technologies Trading House” LLP entered into an Agreement on 30 December 2021, for the sale of the Company’s 40% share in “Caustic” JSC. On 31 January 2022, partial payment was made for 30% of the Company’s total interest in “Caustic” JSC, therefore “United Chemical Technologies Trading House” LLP’s interest in “Caustic” JSC increased by 12% (30% of the Company’s 40% share). The remaining portion of the Company’s shares were transferred to trust management of “United Chemical Technologies Trading House” LLP until full payment for the Company’s remaining interest is completed, expected till the end of 2023.

In total, the number of the Group’s subsidiaries, JVs, JOs, associates and other equity investments remained 35 as at 31 December 2022.

5.3 Impact of Changes in Exchange Rates

The Group’s exposure to currency fluctuations is associated with sales, purchases and loans in foreign currencies. Significant cash flows of the Group are in USD due to:

- uranium is generally priced in USD, therefore most of the Group’s consolidated sales revenue is generated in USD (90% in 2022, 94% in 2021);
- the Company purchases uranium and uranium products from its JVs and associates pursuant to KZT-denominated contracts, with the prices determined by reference to prevailing spot market prices of U_3O_8 , which are in USD;
- most of the Group’s borrowings are denominated in USD (95% in 2022, 88% in 2021), which is the principal currency of the Group’s revenue.

A significant portion of the Group’s expenses, including its operating, production and capital expenditures, are denominated in KZT. Accordingly, as most of the Group’s revenue is denominated in USD, while a significant share of its costs are KZT-denominated, the Group generally benefits from appreciation of USD against KZT which subsequently has a positive effect on the Group’s financial performance. However, the positive effect of an appreciating USD may be fully or partially offset given that the Group has outstanding USD-denominated liabilities, although the amounts of such liabilities at 31 December 2022 and 2021 are not significant. In addition, the Company purchases uranium and uranium products from its JVs and associates pursuant to KZT-denominated contracts, with the prices determined by reference to prevailing spot market prices of U_3O_8 , which are denominated in USD. Accordingly, a significant appreciation of USD would result in a corresponding increase in the KZT-denominated price of such contracts.

The Group attempts to mitigate the risk of fluctuations in exchange rate, where possible, by matching the currency denomination of its payments with the currency denomination of its cash flows. Through this matching, the Group achieves natural hedging without the use of derivatives.

In 2022, the KZT/USD exchange rate fluctuated between KZT 414.67 and KZT 512.19. Changes in exchange rates had material impact on the Group's financial performance in 2022. The Group's net foreign exchange gain in 2022 amounted KZT 17,304 million (2021: KZT 3,345 million).

The following table provides annual average and year-end closing KZT/USD exchange rates, as reported by the National Bank of the Republic of Kazakhstan (NBK), as of 31 December 2022 and 2021:

		2022	2021	Change
Average exchange rate for the period ¹	KZT / USD	460.85	426.03	8%
Closing exchange rate for the period	KZT / USD	462.65	431.67	7%

¹ The average rates are calculated as the average of the daily exchange rates on each calendar day.

5.4 Taxation and Mineral Extraction Tax ("MET")

Before 01 January 2023, MET was determined by applying a 29% tax charge to the taxable base related to mining production costs (see footnote under the table below). Taxable expenditures were made up of all direct expenditures associated with mining operations, including wellfield development depreciation charges and any other depreciation charges allocated to direct mining activities, but excluded processing and general and administrative expenses. The MET is calculated separately for each subsoil use license. The resulting MET paid was therefore directly dependent upon the cost of mining operations.

In January 2022, the Government of the Republic of Kazakhstan announced that it intended to update the country's tax code. On 11 July 2022, additions and amendments to the Kazakh tax code were adopted (Laws of the Republic of Kazakhstan "On the Enactment of the Code of the Republic of Kazakhstan "On Taxes and Other Mandatory Payments to the Budget" No. 135-VII LRK), which introduced changes in the MET base and rate for tax calculation. The amended tax code came into force beginning 01 January 2023 and it did not impact 2022 results of the Company. In accordance with the introduced changes, the tax base for MET on uranium is determined as the weighted average price of uranium from public sources for the specific reporting period, multiplied by the amount of uranium mined and a MET rate of 6%. It is expected that the changes in MET calculation will lead to an increase in mineral tax expense due to the incorporation of the spot price into the formula.

The following table provides a summary of taxes accrued by the Group for the years shown:

(KZT million)	2022	2021	Change
Corporate income tax ¹	118,853	85,345	39%
Mineral extraction tax ²	29,616	23,659	25%
Other taxes and payments to budget ³	111,051	62,572	77%
Total tax accrued	259,520	171,576	51%

¹ Applicable rate: 20%; calculation: taxable income (based on tax reporting accounts) multiplied by corporate income tax rate.

² Applicable rate and calculation from 2023 and further: 6% × (average month-end spot price for period) × (volume of uranium mined). Previously applicable rate: 18.5% for uranium cost in pregnant solution; calculation: the tax charge is a cost of mining and is based on a deemed 20% profit margin on certain expenditures, and a MET rate of 18.5%. The tax charge of 29% is determined by the following formula: $(1 + 20\%) \times 18.5\% \div (1 - (1 + 20\%) \times 18.5\%)$.

³ Includes: VAT, property tax, land tax, transport tax, social tax, other payments to budget and PIT (on PIT Company acts as a tax agent).

Total tax accrued increased by 51% in 2022 compared to 2021, mainly due to increases in other taxes and payments to budget and corporate income tax. Corporate income tax expenses increased due to the increase in profit before tax, which was mainly due to growth in the average realized price associated with an increase in the market spot price for U₃O₈ and weakening of the KZT against the USD in 2022 (see Sections 6.2 Consolidated revenue and other financial metrics and 6.9 Profit before tax and tax expense). The increase in MET is related to the increase of the mining costs, which was a tax base for the MET in 2022. The increase in other taxes and payments to budget is mostly driven by the increase in VAT expense arising from increased volume of intra-group sales in Kazakhstan.

5.5 Cost and availability of sulfuric acid

Extraction of uranium using the ISR mining method requires substantial amounts of sulfuric acid. If sulfuric acid is unavailable, it could impact the Group's production schedule, while higher prices for sulfuric acid could adversely impact the Group's profits.

The Group's weighted average cost of sulfuric acid increased by 33% to KZT 30,263 per tonne in 2022 (2021: from KZT 22,740 per tonne) due to the increase in the price of raw materials and temporary shortages on the Kazakhstan market and the cost is expected to continue increasing in 2023. On average in 2022, expenses on sulfuric acid represented about 12% of the Group's uranium production costs (2021: 13%).

The Group is evaluating sulfuric acid supply options and a potential investment in a new sulfuric acid plant to be constructed to minimize future cost increases and ensure an additional, reliable, long-term source of acid supply is available.

5.6 Pandemic-related costs, as well as availability of critical operating materials caused by supply-chain disruption

The extraction of uranium using the ISR mining method requires the import of certain key operating materials and components. These items are either imported into Kazakhstan directly by the Group, or they are imported by local suppliers from whom the Group procures such materials. Due to global pandemic-related shipping constraints and export restrictions imposed by some countries, the Group has encountered delays and/or limited access to some key materials & equipment, such as certain types of pipes and pumps, specialised equipment and drilling rigs.

In some cases, shipping and availability constraints have resulted in a higher cost to acquire the necessary operating materials, including inflationary pressure as a result of commodity price changes, driving an increase in production costs and a negative impact on profitability. In other cases, there has been a near-complete loss of access to certain materials. Pandemic-related supply chain challenges have resulted in limited access to certain key operating materials and equipment, which had a material impact on the Company's wellfield development and production schedules in 2021 and 2022 (see Section 6.3.2 Uranium segment production and sales metrics). Supply chain challenges are expected to continue in 2023, adding additional risk to production in 2023 (see Section 12.0 GUIDANCE FOR 2023). While Kazatomprom will make every effort to meet its uranium production plan, final production volumes for 2023 may still fall short of the target level.

5.7 Impact of changes in Ore Reserves estimates

The Group reviews its JORC-compliant estimates of Ore Reserves and Mineral Resources on an annual basis, including a review of the estimates by a qualified third-party. As a result, certain Ore Reserves and Mineral Resources may be reclassified annually in accordance with applicable standards. Such reclassifications may have an impact on the Group's financial statements. For example, if a reclassification results in a change to the Group's life of mine plans, there may be a corresponding impact on depreciation and amortization expenses, impairment charges, as well as mine closure charges incurred at the end of the life of mine.

5.8 Transactions with Subsidiaries, JVs, JOs and Associates

The Company purchases U₃O₈ from its subsidiaries, JOs, JVs and associates, principally at spot price with market-based discounts, which may vary by operation. Purchased volumes generally correspond to the Company's interest in the respective selling entities.

The Group's Uranium segment revenue is primarily composed of two streams:

- the sale of U₃O₈ purchased from operations (JVs and associates), third parties, and
- the sale of U₃O₈ produced by the Company and by its consolidated subsidiaries and JOs.

Cost of sales of purchased uranium is equal to the purchase price from JVs and associates, which in most cases is the prevailing spot price with certain applicable discounts. The share of results of JVs and associates represents a significant part of the Group's profits and should be considered in the assessment of the Group's financial results. In 2022, U₃O₈ was purchased at a weighted average discount of 3.73% (2021: 4.09%) on the prevailing spot price.

When uranium produced by the Company, consolidated subsidiaries and JOs, is sold, the cost of sales is predominantly represented by the cost of production. For those sales, the full margin for uranium products including uranium for export is captured in the consolidated results of the Group.

The following table provides the volumes purchased by the Company for the periods indicated.

(tU)	2022	2021	Change
U ₃ O ₈ purchased from JVs and associates	2,805	2,910	(4%)
U ₃ O ₈ purchased from JOs and subsidiaries	9,533	9,211	3%
Total	12,338	12,121	2%

In 2022 the volume of U₃O₈ purchased from JVs and associates, JOs and Subsidiaries was comparable to 2021 and comprised 12,338 tonnes (2021: 12,121 tonnes).

In addition to the above volumes, the Company (including its trading subsidiary THK) also purchases volumes from third parties at variable prices.

6.0 KEY PERFORMANCE INDICATORS ANALYSIS

6.1 Consolidated financial metrics

The analysis in this section of the report is based on 12 months ended 31 December 2022 compared to 12 months ended 31 December 2021. The table below provides financial information related to the consolidated results of the Group for 2022 and 2021.

(KZT million)	2022	2021	Change
Revenue	1,001,171	691,011	45%
Cost of sales	(475,097)	(402,967)	18%
Gross profit	526,074	288,044	83%
Selling expenses	(25,605)	(15,706)	63%
G&A expenses	(44,507)	(34,105)	30%
Operating profit	455,962	238,233	91%
Other income/(loss), including the following one-time effects:	38,667	(8,172)	>100%
Income from an associate development agreement ¹	7,671	-	100%
Share of results of associates	75,736	47,294	60%
Share of results of joint ventures (JVs)	13,340	4,289	211%
Pre-tax income	583,705	281,644	107%
Corporate income tax	(110,742)	(61,618)	80%
Net profit, attributable to:	472,963	220,026	115%
- Owners of the Company	348,048	140,773	147%
- Non-controlling interest	124,915	79,253	58%
Earnings per share attributable to owners (basic and diluted), KZT/share ²	1,342	543	147%
Adjusted Net profit (net of one-time effects)	465,292	220,026	111%
Adjusted EBITDA ³	630,898	350,294	80%
Attributable EBITDA ⁴	495,357	276,510	79%

¹ The "JV "Katco" LLP participants made amendments to the Partnership Agreement on further development of "JV "Katco" LLP dated 11 August 2022, under which the Group became entitled to compensation in the amount of KZT 7,671 million from the second participant of "JV "Katco" LLP, which was recognized as other income in 2022 and other receivables.

² Calculated as: Profit for the year attributable to owners of the Company divided by Total share capital from Section 11.0 OUTSTANDING SHARES, rounded to the nearest KZT.

³ Adjusted EBITDA is calculated by excluding from EBITDA items not related to the main business and having a one-time effect. Calculation: Profit before tax - finance income + finance expense +/- Net FX loss/(gain) + Depreciation and amortisation + Impairment losses - reversal of impairment +/- one-off or unusual transactions.

⁴ Attributable EBITDA (previously "Adjusted Attributable EBITDA") is calculated as: Adjusted EBITDA less the share of the results in the net profit in JVs and associates, plus the share of Adjusted EBITDA of JVs and associates engaged in the uranium segment (except JV "Budenovskoye" LLP's EBITDA due to minor effect it has during each reporting period), less non-controlling share of adjusted EBITDA of "Appak" LLP, JV "Inkai" LLP, "Baiken-U" LLP, "Ortalyk" LLP and JV "Khorasan-U" LLP, less any changes in the unrealized gain in the Group.

6.2 Consolidated revenue and other financial metrics

The Group's consolidated revenue was KZT 1,001,171 million in 2022, an increase of 45% compared to 2021, primarily due to an increase in the average realized price associated with an increase in the spot price for U₃O₈ and the weakening of KZT against USD in 2022, whereas sales volume were comparable to 2021 (see Section 6.3.2 Uranium segment production and sales metrics). An increase in overall revenue includes an increase in revenues from UMP segment (see Section 6.4 UMP Segment and Note 7 "Segment Information" in Financial Statements) by KZT 61,179 million including revenues from external segments.

The main revenues by source in 2022 compared to 2021, are presented below.

(KZT million)	2022	2021	Change	Proportion	
				2022	2021
Uranium ¹ (only U ₃ O ₈)	851,427	606,109	40%	85%	88%
Uranium products ²	57,806	18,939	205%	6%	3%
Beryllium products	31,986	26,119	22%	3%	4%
Tantalum products	23,171	15,777	47%	2%	2%
Others	36,781	24,067	53%	4%	3%
Total Revenue	1,001,171	691,011	45%	100%	100%

¹ Includes only U₃O₈ sales proceeds (across the Group).

² Includes, but is not limited to production and sales of UO₂ powder and fuel pellets by “UMP” JSC.

Operating profit in 2022 was KZT 455,962 million, an increase of 91% compared to 2021. The increase was mainly due to an increase in average realized price of uranium sold.

Net profit in 2022 was KZT 472,963 million, an increase of 115% compared to 2021 and the percentage increase is consistent with the increase in the operating profit in 2022. Adjusted net profit for 2022 was KZT 465,292 million, an increase of 111% compared to 2021, which is also due to the increase in the operating profit in 2022. In 2022 the “JV “Katco” LLP participants made amendments to the Partnership Agreement on further development of “JV “Katco” LLP dated 11 August 2022, under which the Group became entitled to compensation in the amount of KZT 7,671 million from the second participant of “JV “Katco” LLP, which was recognized as other income, which is considered as a one-time effect.

Profit for the period attributable to non-controlling interest increased significantly in 2022 compared to 2021, impacted by the sale of a 49% share of “Ortalyk” LLP in July 2021 in addition to the explanations stated above. In 2021, the Company sold 49% of its interest in “Ortalyk” LLP, while Kazatomprom retains a controlling 51% interest, according to which, under IFRS, the financial effect of this transaction is reflected in the Financial Statements in cash flows (see Section 9.4.3 Cash Flows from financing activities) and equity.

Adjusted EBITDA comprised KZT 630,898 million in 2022, an increase of 80% compared to 2021 due to a higher operating profit. Attributable EBITDA was KZT 495,357 million in 2022, an increase of 79% compared to 2021 mainly due to the higher operating profit, as well as an increase in the EBITDA of JVs and associates. Also, starting from 2022 and until the end of “JV “Katco” LLP operations, according to amendments to the Partnership Agreement of the entity, the Group also became entitled to an additional 11% of the “JV “Katco’s” LLP annual profit allocation, with the ownership interest being unchanged. This additional 11% impacts the allocation of “JV “Katco” LLP dividends, therefore, in the financial statements the Group recognized a share in the results of the “JV “Katco” LLP for 2022 in the amount of 60%. Net assets are still recognized as 49% in accordance with the participants initial agreement.

6.3 Uranium segment

6.3.1 Uranium segment financial metrics

(KZT million unless noted)	2022	2021	Change	
Uranium segment revenue ¹	920,093	621,706	48%	
Including U ₃ O ₈ sales proceeds (across the Group) ²	851,427	606,109	40%	
Average exchange rate for the period	KZT/USD	460.85	426.03	8%
Share of a revenue from uranium products	%	85%	88%	(3%)

¹ Calculated from Financial Statements Note 7 “Segment Information” as a sum of external revenue and revenues from other segments for uranium segment.

² Includes only U₃O₈ sales proceeds (across the Group).

Consolidated U₃O₈ sales were KZT 851,427 million in 2022, an increase of 40% compared to 2021, mainly due to a higher spot price for U₃O₈ and weakening of the KZT against the USD in 2022, which resulted in a higher average realized price, while sales volume in 2022 were comparable with 2021.

6.3.2 Uranium segment production and sales metrics

		2022	2021	Change
Production volume of U ₃ O ₈ (100% basis)	tU	21,227	21,819	(3%)
Production volume of U ₃ O ₈ (attributable basis) ¹	tU	11,373	11,858	(4%)
U ₃ O ₈ sales volume (consolidated)	tU	16,358	16,526	(1%)
Including KAP U ₃ O ₈ sales volume ^{2, 3}	tU	13,572	13,586	(0%)
Group inventory of finished goods (U ₃ O ₈)	tU	9,352	8,824	6%
Including KAP inventory of finished goods (U ₃ O ₈) ⁴	tU	7,749	7,724	0%
Group average realized price	KZT/kg	52,051	36,677	42%
Group average realized price	USD/lb	43.44	33.11	31%
KAP average realized price ⁵	USD/lb	42.50	32.33	31%
Average weekly spot price	USD/lb	49.61	35.05	42%
Average month-end spot price ⁶	USD/lb	49.81	35.28	41%

¹ The Production volumes of U₃O₈ (attributable basis) is not equal to the volumes purchased by Company and THK in the Section 5.8 Transactions with Subsidiaries, JVs, JOs and Associates.

² KAP U₃O₈ sales volume (incl. in Group): includes only the total external sales of KAP HQ and THK. Intercompany transactions between KAP HQ and THK are not included.

³ Group sales volume and KAP sales volume (incl. in Group) does not include approximately 32 tU equivalent sold as UF₆ in 2Q22 and 225 tU equivalent sold as UF₆ in 4Q21.

⁴ KAP inventory of finished goods (incl. in Group): includes the inventories of KAP HQ and THK.

⁵ KAP average realized price: the weighted average price per pound for the total external sales of KAP and THK. The pricing of intercompany transactions between KAP and THK are not included.

⁶ Source: UxC, TradeTech. Values provided represent the average of the uranium spot prices quoted at month end, and not the average of each weekly quoted spot price, as contract price terms generally refer to a month-end price.

All annual operational and sales results in the uranium segment were in line with the updated guidance provided for 2022, which was adjusted in the Company's Third Quarter 2022 Operations and Trading Update.

Production volumes on a 100% basis and attributable basis for both fourth quarter of 2022 and throughout 2022 were slightly lower compared to 2021, as the COVID-19 pandemic had an impact on wellfield development in 2021. This had a lagged effect on production in 2022, it usually takes from eight to ten months between wellfield development and the resulting uranium extraction by in-situ recovery. As a consequence, delays and/or limited access to certain materials and equipment in 2021, resulted in lower production in 2022 compared to the same period in 2021. Additionally, attributable production was impacted by the sale of a 49% share of "Ortalyk" LLP to CGN Mining UK Limited in July 2021.

Uranium sales at the Group and KAP levels in 2022 were on the same level as in 2021. Shipments through the TITR (that included the JV Inkai-owned portion of material) were successfully delivered in 2022.

Consolidated Group inventory of finished U₃O₈ products amounted to 9,352 tonnes as at 31 December 2022, which was 6% higher than at 31 December 2021. At the Company level, inventory of finished U₃O₈ products was 7,749 tonnes and were comparable to 2021. Consistent with the Company's value strategy, Kazatomprom's inventory levels vary based on the timing of customer requirements and the resulting differences in the timing of deliveries and mining and sales volumes, in alignment with changing market conditions.

The Group's average realized price in KZT in the 2022 was KZT 52,051 per kg (43.44 USD/lb), an increase of 42% compared to 2021 due to an increase in the average spot price for uranium products, and the weakening of the KZT against the USD. The average sales prices at the KAP level were also higher and for the same reasons.

The Company's current overall contract portfolio price is correlated to uranium spot prices (see Section 12.1 Uranium sales price sensitivity analysis). However, the increase in average realized prices in 2022 was lower than the increase in the spot market price for uranium due to the spot price volatility in the uranium market in 2022 and 2021: low of 42.48 USD/lb and high of 63.75 USD/lb (2021: low of 27.35 USD/lb and high of 50.38 USD/lb). For short-term deliveries to end-user utilities, the spot price can vary between the time contract pricing is established according to Kazakh transfer pricing regulations, and the spot price in the general market when the actual delivery takes place. The impact of market volatility during the time lag between price-setting and delivery becomes more pronounced as volatility increases, in both rising and falling market conditions. In addition, some long-term contracts incorporated a proportion of fixed pricing negotiated prior to the sharp increase in spot price in the second half of 2021. As a result, increases in both the Group and KAP's average realised prices in 2022 compared to 2021 were lower than the increases in the spot market price for uranium

over the same intervals.

6.3.3 Uranium segment production by operation

The information presented in the table below provides the total uranium production level at each asset (100% basis). The impact of delays and/or limited access to some key materials & equipment in 2021 and 2022 (see Section 5.6 Pandemic-related costs, as well as availability of critical operating materials caused by supply-chain disruption) and the reduction in wellfield development activity due to the COVID-19 pandemic in 2020-2021 (see Section 6.3.2 Uranium segment production and sales metrics), were not equal across all operations due to the nature of the ISR mining process, and differences in the mine plans and development phase at each operation.

(tU as U ₃ O ₈)	Ownership	2022	2021	Change
Kazatomprom-SaUran LLP	100%	1,273	1,493	(15%)
RU-6 LLP	100%	830	800	4%
Appak LLP	65%	803	805	(0%)
JV Inkai LLP ¹	60%	3,201	3,449	(7%)
Baiken-U LLP	52.5%	1,315	1,230	7%
Ortalyk LLP ²	51%	1,650	1,579	4%
Semizbay-U LLP	51%	940	962	(2%)
Karatau LLP	50%	2,560	2,561	(0%)
JV Akbastau JSC	50%	1,545	1,545	0%
JV Khorassan-U LLP	50%	1,580	1,579	0%
JV Zarechnoye JSC	49.98%	741	655	13%
JV Katco LLP	49%	2,564	2,840	(10%)
JV SMCC LLP	30%	2,225	2,321	(4%)
Total		21,227	21,819	(3%)

¹ For JV "Inkai" LLP annual share of production on attributable basis is determined as per Implementation Agreement as disclosed in IPO Prospectus. Company's annual attributable share of production in 2022 comprised 1,600 tU (2021: 1,400 tU).

² 2021: ownership changed due to the sale of 49% share of "Ortalyk" LLP to CGN Mining UK Limited in July 2021; Company's annual attributable share of production in 2021 comprised 1,247 tU.

6.4 UMP Segment

6.4.1 UMP segment uranium product sales

UO ₂ powder and Fuel pellets		2022	2021	Change
Fuel pellets	Sales, tonnes	198.2	43.5	>100%
Ceramic powder	Sales, tonnes	88.9	10.7	>100%
Dioxide from scraps	Sales, tonnes	22.8	50.6	(55%)

Sales of fuel pellets significantly increased to 198.2 tonnes and ceramic powder to 88.9 tonnes in 2022, higher than in 2021 as per increased contracted sales volumes due to expansion of customer demand. Decrease in sales of dioxide from scraps by 55% to 22.8 tonnes in 2022 was due to lower demand from customers.

6.4.2 UMP segment rare metal product sales

Rare metals products		2022	2021	Change
Beryllium products	Sales, tonnes	1,332.46	1,529.31	(13%)
	KZT/kg	24,005	17,074	41%
Tantalum products	Sales, tonnes	165.52	165.40	0%
	KZT/kg	139,990	95,351	47%
Niobium products	Sales, tonnes	13.45	8.24	63%
	KZT/kg	24,572	20,655	19%

Sales volume of beryllium products decreased by 13% in 2022 compared to 2021, due to a decrease in the number of orders from customers. Realized price increased by 41% in 2022 mainly related to the product mix changing to highly refined products, higher price in the non-ferrous metal market as well as the weakening of KZT against USD.

Realized prices for tantalum products were higher in 2022 compared to 2021, mainly related to product mix that

changed to more highly refined products at higher prices, higher price in the non-ferrous metal market and the weakening of KZT against USD.

Sales volumes and prices for niobium products in 2022 increased compared to 2021 due to an increase in the quantity of orders for niobium hydroxide, also in 2022 higher prices in the non-ferrous metal products market resulted in a higher selling price.

6.5 Cost of sales

The table below illustrates the components of the Group's cost of sales for 2022 and 2021:

(KZT million)	2022	2021	Change	Proportion	
				2022	2021
Materials and supplies	261,825	241,695	8%	55%	60%
Depreciation and amortization	79,037	66,429	19%	17%	17%
Payroll costs	49,348	33,294	48%	10%	8%
Taxes other than income tax	32,216	25,474	26%	7%	6%
Processing and other services	31,361	17,404	80%	7%	4%
Other	21,310	18,671	14%	4%	5%
Cost of Sales	475,097	402,967	18%	100%	100%

Cost of sales totalled KZT 475,097 million in 2022, an increase of 18% compared to 2021.

The cost of materials and supplies was KZT 261,825 million in 2022, an increase of 8% compared to 2021 due to increase in the purchase price of materials and supplies as a result of an increased inflationary pressure. In 2022 the purchase price of uranium from JVs and associates, as well as from third parties was higher than in 2021 caused by an increase in the spot price for U₃O₈ and the weakening of KZT against USD in 2022. When such uranium is sold, the cost of sales is predominantly represented by the cost of purchased uranium (accounted in materials and supplies) at the prevailing spot price with certain applicable discounts.

Depreciation and amortisation totalled KZT 79,037 million in 2022, an increase of 19% compared to 2021, mainly due to an increase in the costs of repayment of the PGR and increased number of wells commissioned in 2022 (see Section 7.0 CAPITAL EXPENDITURES REVIEW).

Payroll costs totalled KZT 49,348 million in 2022, an increase of 48% compared to 2021, mainly due to an increase in the payroll of main production personnel and introduced standardisation of remuneration packages across the Group as well as an increase in the proportion of sales in 2022 of uranium produced by consolidated subsidiaries.

The taxes other than income tax totalled KZT 32,216 million, which is comprised mostly of MET, increased by 26% compared to 2021 due to an increase in cost of production as well as an increase in the proportion of sales of uranium produced by consolidated subsidiaries.

The cost of processing and other services was KZT 31,361 million in 2022, an increase of 80% compared to 2021, mainly due to a significant increase in volumes of processed U₃O₈ required for production of fuel pellets from KAP's U₃O₈.

The other categories of costs totalled KZT 21,310 million in 2021, an increase of 14% compared to 2021 due to an increase in maintenance and repair and other overheads.

6.5.1 Uranium segment C1 cash cost, all-in sustaining cash cost, and capital expenditures

(KZT million unless noted)		2022	2021	Change
C1 Cash cost (attributable basis)	USD/lb	10.25	8.80	16%
Capital cost (attributable basis)	USD/lb	5.94	3.83	55%
All-in sustaining cash cost (attributable C1 + capital cost)	USD/lb	16.19	12.63	28%
Capital expenditures of mining companies (100% basis) ¹		146,499	91,087	61%

¹ Excludes liquidation funds and closure costs

Compared to 2021, in 2022 C1 Cash cost (attributable) increased by 16% mainly due to an increase in the cost of materials driven by inflationary pressure and increase in payroll of production personnel. All-in-sustaining cash costs (“AISC”) (attributable C1 + capital cost) increased by 28% in USD equivalent in 2022 due to an increase in capital expenditures of mining companies (see section 7.0 CAPITAL EXPENDITURES REVIEW). The results were within the guidance ranges provided for 2022 (guidance of US\$9.50 – 11.00 for attributable C1 cash cost, US\$16.00 – 17.50 for AISC).

Capital expenditures of mining companies (100% basis) comprised KZT 146,499 million, an increase of 61% compared to 2021, primarily due to a shift in wellfield development activities, as well as higher purchase prices for materials, supplies, equipment and cost of drilling.

Kazatomprom’s attributable C1 cash cost categories are generally broken down as follows (proportions vary year-to-year, and vary between operations, deposits and regions):

General Attributable Cash cost (C1) Categories	2022	2021
Material and supplies	24%	22%
MET	22%	21%
Processing and other services	15%	17%
Payroll costs	19%	17%
General and administrative expenses	7%	8%
Selling expenses	3%	3%
Others	10%	12%
Total	100%	100%

6.6 Distribution expenses

(KZT million)	2022	2021	Change	Proportion	
				2022	2021
Shipping, transportation and storing	20,331	11,110	83%	79%	71%
Payroll costs	1,744	1,456	20%	7%	9%
Materials	199	306	(35%)	1%	2%
Rent	214	105	104%	1%	1%
Depreciation and amortisation	56	65	(14%)	0%	0%
Others	3,061	2,664	15%	12%	17%
Selling expenses	25,605	15,706	63%	100%	100%

Selling expenses totalled KZT 25,605 million in 2022 and significantly increased compared to 2021. The increase was mainly due to changes in the delivery destination points for uranium products (see Section 3.2 Sales), an increase in transportation tariffs as well as by using the TITR and the weakening of the KZT against the USD, as a significant portion of shipping, transportation and storing expenses are denominated in foreign currency.

6.7 General & Administrative expenses (G&A)

(KZT million)	2022	2021	Change	Proportion	
				2022	2021
G&A expenses	44,507	34,105	30%	100%	100%
Incl. Depreciation and amortisation	2,110	2,493	(15%)	5%	7%

In comparison to 2021 G&A expenses increased due in part to a compensation liability to tax authority of Republic of Kazakhstan in the amount of KZT 7,310 million for overproduction by JV Akbastau JSC compared to its approved subsoil use agreement for 249 tonnes of uranium, as well as an increase in wages and salaries.

6.8 The share of associates' and JVs' results

The share of results of associates and JVs in 2022 was KZT 89,076 million, an increase of 73% compared to 2021. The increase was related to an increase in uranium spot prices and weakening of the KZT in 2022, which positively impacted the operating results of the associates and JVs and their resulting contributions to the Group.

6.9 Profit before tax and tax expense

(KZT million)	2022	2021	Change
Profit before tax	583,705	281,644	107%
Total income tax expense, including:	110,742	61,618	80%
Current income tax	118,853	85,345	39%
Deferred income tax	(8,111)	(23,727)	(66%)

The Group's profit before tax was KZT 583,705 million in 2022, significantly higher than in 2021 which is mainly due to increase in operating income driven by the growth in the average realized price with an increase in the market spot price for U₃O₈, and weakening of the KZT against the USD.

In 2022, corporate income tax expense was KZT 110,742 million, a significant increase compared to 2021 related to the increased current income tax and increase in profit before tax in 2022.

The corporate tax rate applicable to the Group's profits was 20% in 2022 and 2021. Effective income tax rates were 19% and 20% for 2022 and 2021, respectively. The effective tax rate differs from corporate income tax rate primarily due to certain elements of reported income and expenses that are not recognised in tax accounting. In general, difference between effective tax rate and applicable Kazakhstani corporate tax rate of 20% is insignificant.

7.0 CAPITAL EXPENDITURES REVIEW

Most capital expenditures of the Group are incurred by subsidiaries, JO's, JVs and associates engaged in the mining of natural uranium. Such expenditures are comprised of the following key components:

- uranium well construction costs;
- expansion costs, which typically include expansion of processing facilities, extension of services and transport routes to new wellfield areas, implementation of new systems and processes;
- sustaining capital, largely reflecting recurring, infrastructure, maintenance and equipment replacement related costs, which typically to cease three years prior to the end of production at the asset; and
- liquidation fund contributions and mine closure costs (not included in the calculation of AISC).

The following table provides the capital expenditures for the Group's subsidiaries, JOs, JVs and associates engaged in uranium mining for the periods indicated. Capital expenditure amounts shown were derived from stand-alone management information of certain entities within the Group on an unconsolidated basis, and they are therefore not comparable with or reconciled to the amounts of additions to property, plant and equipment as presented in the Financial Statements. Investors and analysts are strongly cautioned to not place undue reliance on capital expenditure information, as it represents unaudited, unconsolidated financial information on an accounting basis that is not in compliance with IFRS. In 2022 most of the Group's entities have their internal policies and increased their contributions to the liquidation funds to match increase in liabilities and site rehabilitation costs.

(KZT million)	Owner-ship	2022							2021
		WC ¹	S&E ²	LF/C ³	Total	WC ¹	S ²	LF/C ³	Total
Kazatomprom-SaUran LLP	100%	11,286	2,249	1,857	15,392	6,094	865	542	7,501
RU-6 LLP	100%	5,050	1,165	382	6,597	3,392	657	260	4,309
Appak LLP	65%	7,260	630	2,009	9,899	6,769	495	1,331	8,595
JV Inkai LLP	60%	10,637	1,385	18	12,040	4,815	3,925	6	8,746
Baiken-U LLP	52.5%	5,161	847	246	6,254	2,679	590	167	3,436
Ortalyk LLP	51%	12,246	453	1,427	14,126	4,487	594	219	5,300
Semizbay-U LLP	51%	6,399	1,699	1,987	10,085	4,231	561	177	4,969
JV Budenovskoye LLP	51%	1,143	1,610	71	2,824	1,599	320	(4)	1,915
Karatau LLP	50%	2,571	1,122	1,478	5,171	4,667	579	112	5,358
JV Akbastau JSC	50%	6,750	638	742	8,130	4,648	291	222	5,161
JV Khorassan-U LLP	50%	11,364	1,222	1,362	13,948	7,645	1,781	171	9,597
JV Zarechnoye JSC	49.98%	6,426	135	913	7,474	3,878	291	1,281	5,450
JV Katco LLP	49%	20,150	18,068	2,879	41,097	14,391	5,037	1,467	20,895
JV SMCC LLP	30%	6,458	2,376	1,040	9,874	3,927	1,879	374	6,180
Total of mining assets		112,901	33,599	16,411	162,911	73,222	17,865	6,325	97,412

¹ Well construction.

² Sustaining and expansion.

³ Liquidation fund / closure.

In order to achieve the planned levels of production, the Group's mining companies assess the required level of wellfield and mining preparation based on the availability of reserves. These costs relate to the capitalised costs of maintaining the sites, with the main component being wellfield construction.

(KZT million)	2022	2021	Change
Well construction	112,901	73,222	54%
Sustaining	22,735	13,427	69%
Total wellfield construction and sustaining costs	135,636	86,649	57%
Expansion	10,863	4,438	>100%
Capital expenditures of mining companies (100% basis)¹	146,499	91,087	61%

¹ Excludes liquidation funds and closure costs.

Capital expenditures of mining companies (100% basis) for the 14 mining entities in 2022 comprised KZT 146,499 million, which is significantly higher than in 2021 due to:

- Increase in well construction by 54% compared to 2021 as a result of a shift of wellfield development activities from 2021 to 2022, an increase in required volumes of drilling and piping to meet the production plan for 2022 and preparatory works for reserves extraction in 2023; as well as increase in price for materials, supplies, equipment and cost of drilling;
- Sustaining and expansion costs increased compared to 2021 and include investments for new construction, reconstruction, technical re-equipment, acquisition of fixed assets, overhauls, as well as other construction projects to maintain production assets and other fixed assets directly involved in the production process.

Total capital expenditures of mining companies in 2022 were slightly below the updated guidance range provided for 2022 (KZT 150 – 160 billion) due to the shift in schedule of drilling works, piping and acidification as a result of limited access to certain key operating materials and equipment, including sulfuric acid and pipes (see Section 5.6 Pandemic-related costs, as well as availability of critical operating materials caused by supply-chain disruption).

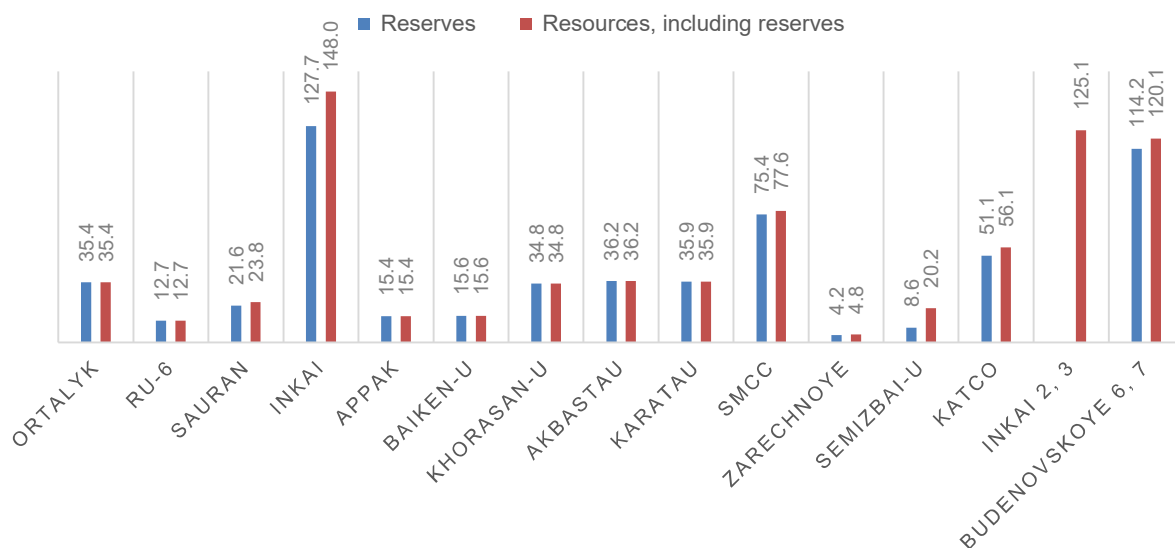
The information presented in the table below reflects the wellfield development depreciation (commonly known as PGR), property, plant and equipment, and depreciation and amortization data for each mining asset in 2022.

(KZT million unless noted)	PGR volumes (tU)	PGR at the end of period	Exploration value at the end of period	Historical cost of PPE (excl. wellstock) at the end of period	Carrying amount of PPE (excl. wellstock) at the end of period	D&A (excl. wellstock)
Kazatomprom-SaUran LLP	2,765	17,987	2,433	23,056	11,714	1,198
RU-6 LLP	2,595	8,175	-	10,765	7,064	580
Appak LLP	1,682	11,366	1,787	10,684	5,680	387
JV Inkai LLP	4,400	25,420	16,380	103,985	59,951	2,363
Baiken-U LLP	1,914	8,219	5,219	21,264	9,669	966
Ortalyk LLP	2,809	16,405	1,106	20,165	11,281	897
Semizbay-U LLP	1,877	8,764	36	18,012	8,237	916
JV Budenovskoye LLP	-	1,465	11,935	2,020	1,827	125
Karatau LLP	1,702	6,340	2,461	30,019	14,685	1,328
JV Akbastau JSC	2,114	10,819	5,888	11,146	6,556	452
JV Khorassan-U LLP*	3,149	13,423	8,253	18,115	10,879	782
JV Katco LLP	4,374	35,456	3,147	73,818	36,201	2,215
JV Zarechnoye JSC	1,702	8,451	2,838	9,054	1,908	441
JV SMCC LLP	4,082	11,937	5,743	24,692	11,544	1,480

* includes the fixed assets of "Kyzylkum" LLP

8.0 RESERVES AND GEOLOGICAL SURVEYS

RESERVES AND RESOURCES, ('000 TU)



In accordance with the SRK Consulting (UK) Limited letter (dated 16 January 2023), the Ore reserves of all mining assets at 31 December 2022 (including annual depletion) totalled 588.8 thousand tU, (100% basis), with 312.9 thousand tU attributable to the Company (2021: 625.4 thousand tU on 100% basis, 332.6 thousand tU attributable). Total mineral resources (including ore reserves) were estimated at 761.6 thousand tU (100% basis), with 464.8 thousand tU attributable to the Company (2021: 784.4 thousand tU on 100% basis, 477.5 thousand tU attributable). In comparison to 2021, total mineral resources decreased by about 22.8 thousand tU mainly due to 2022 mining activities of 21.2 thousand tU on 100% basis. Please see the CPR for further details, available in the Investor section of the Company's website.

9.0 LIQUIDITY AND CAPITAL RESOURCES

Kazatomprom's management aims to preserve financial stability in a constantly changing market environment. The Group's financial management policy is intended to maintain a strong capital base to support existing operations and business development.

The Group's liquidity requirements primarily relate to funding working capital, capital expenditures, service of debt, and payment of dividends. The Group has historically relied primarily on cash flow from operating activities to fund its working capital and long-term capital requirements, and it expects to continue to do so, although it maintains the option to use external financial resources when required. It is expected that there will be no significant change in the sources of the Group's liquidity in the foreseeable future. If required, the Company will consider entering into project financing arrangements to fund certain investment projects.

9.1 Cash and available source of financing

The Group manages its liquidity requirements to ensure the continued availability of cash sufficient to meet its obligations on time, avoid unacceptable losses, and settle its financial obligations without jeopardizing its reputation.

(KZT million)	2022	2021	Change
Cash and cash equivalents	169,536	161,190	5%
Term deposit	930	43,220	(98%)
Total cash	170,466	204,410	(17%)
Undrawn borrowing facilities	84,665	177,902	(52%)

Total cash at 31 December 2022 comprised KZT 170,466 million, compared to KZT 204,410 million at 31 December 2021, due to explanations that are presented below in the Section 9.4 Cash Flows.

Undrawn borrowing facilities are the revolving corporate credit lines available to the Group and are considered as an additional short-term liquidity source to cover temporary cash deficit related to uneven receipts of trade receivables.

As of December 31, 2022, the Group's fully available revolving credit lines comprised a total of USD 235 million, out of which USD 183 million were available for use (as at 31 December 2021 available credit lines totalled USD 412 million). The decrease is primarily related to the closure of unused credit lines.

In October 2022, the Company's Board of Directors approved four issues of the unsecured commercial bonds totalling USD 200 million on the Kazakhstan Stock Exchange JSC (KASE). The interest rate (coupon) is fixed for each bond issue and determined as the Secured Overnight Financing Rate (SOFR) published on the official website of Federal Reserve Bank of New York five business days prior to the date of the first auction.

Subsequently, in December 2022 the Company placed the first out of four issues of commercial bonds with nominal value of USD 50 million, interest rate (coupon) of 4.32% and maturity of 30 calendar days. The bonds were redeemed on 23 January 2023 with a payment in the amount USD 50.18 million, including a coupon amount of USD 0.18 million. Yield to maturity of the bonds comprised 4.6%.

9.2 Dividends received and paid

The Company is the parent for the Group, and in addition to revenue from its business operations, it receives dividends from JVs and associates, and from other investments. In 2022 and 2021, the Group received dividends of KZT 45,346 million and KZT 17,108 million, respectively, from its JVs and associates, and from other investments. The increase in 2022 is mainly due to a growth in the operating results of joint ventures and associates, and other investments. The Company balances dividend maximisation and sustainable development goals at subsidiaries, JVs and associates. Dividends received by the Company from investees domiciled in the Republic of Kazakhstan are exempt from dividend tax.

In the first half of 2022, the Company accrued a dividend of KZT 227,388 million which was paid to its shareholders in July 2022 based on the results of 2021 operations. This dividend represented an increase of 52% compared to 2021, when dividends of KZT 150,082 million were paid to shareholders in July 2021 based on 2020 financial results. The increase was mainly due to higher operating cash flow and the inclusion of proceeds from the sale of the Group's 49% interest in "Ortalyk" LLP in the Free Cash Flow (FCF) calculation methodology in accordance with the Company's dividend policy.

9.3 Working capital

The table below provides a breakdown of the Group's working capital in 2022 and 2021.

(KZT million)	2022	2021	Change
Inventory	392,621	275,856	42%
Receivables	270,921	220,138	23%
Recoverable VAT	62,389	46,447	34%
Other financial assets ¹	19,748	9,029	119%
Other non-financial assets	19,274	7,137	170%
CIT prepayment	11,451	7,526	52%
Payables	(98,809)	(66,014)	50%
Employee remuneration liabilities	(325)	(215)	51%
Income tax liabilities	(4,221)	(5,096)	(17%)
Other taxes and compulsory payments liabilities	(24,688)	(17,973)	37%
Other current liabilities	(83,883)	(57,338)	46%
Net working capital	564,478	419,497	35%

¹ Excludes term deposits in amount of KZT 930 million in 2022 (2021: KZT 43,220 million) as these deemed as equivalent to cash (see Section 9.1 Cash and available source of financing).

An increase in receivables was mainly due to the growth of revenues in 2022.

As per Section 1.2 Geopolitical events the Company has been managing the risk of financial sanctions by implementing mitigation measures to ensure mutual settlements do not face restrictions. However, other current financial assets as at 31 December 2022 includes short-term restricted cash payments of USD 32.3 million, adjusted for foreign exchange gains as at 31 December 2022, amounting to KZT 14,956 million, made by the Group in March 2022 to a uranium enrichment service provider whose Russian bank was subsequently included in the list of legal entities that fell under the sanctions of the Office of Foreign Assets Control of the US Department of the Treasury (OFAC). Later OFAC issued a license to return blocked funds. The correspondent bank, which initially erroneously blocked the payment funds, returned the amount to the Group (including interest) in January 2023.

Other current liabilities as at 31 December 2022 include:

- current contract liabilities including advances for uranium pellets for KZT 35,082 million under contracts with Ulba-FA LLP (2021: KZT 16,420 million). During 2022, the Group has recognized revenue, which was included in the balance of advances received as at 31 December 2021 in the amount of KZT 16,420 million (2021: none);
- liabilities under inventory loan agreements for KZT 19,147 million, initially recognised in 2020 in amount totalling USD 21.9 million. As of 31 December 2022, the Group reclassified inventory loans from long-term to short-term, as the repayment period is up to May and June 2023. The Group intends to extend the repayment period. Uranium loans are part of the Group's normal inventory management policy, required to mitigate logistical risks that could affect the timely delivery of Kazakhstani uranium to Western conversion enterprises due to the current unstable geopolitical situation.

On 19 May 2022 the Group obtained a uranium loan totalling USD 113.5 million from ANU Energy that was concluded under the Framework Agreement between the Group and Genchi Global Limited. On 20 December 2022 the Group returned the inventory, the fair value of which amounted to KZT 53,802 million on the date of return.

The Group's net working capital remained positive during all periods under review.

The following table sets forth the components of the Group's inventories in 2022 and 2021:

(KZT million)	2022	2021	Change
Finished goods and goods for resale	309,950	223,750	39%
<i>Including uranium products</i>	<i>308,168</i>	<i>222,195</i>	<i>39%</i>
Work-in-process	40,899	30,409	34%
Raw materials	19,633	14,879	32%
Materials in processing	15,198	3,091	>100%
Spare parts	989	789	25%
Fuel	1,488	479	211%
Other materials	7,486	5,709	>100%
Provision for obsolescence and write-down to net realizable value	(3,022)	(3,250)	(7%)
Total inventories	392,621	275,856	42%

The Group constantly monitors the uranium market and may pursue a strategy of increasing its inventories in certain market conditions.

The Group's largest inventory item is finished goods and goods for resale, which primarily consists of U₃O₈. The Group's work-in-process and raw materials increased by 34% and 32% respectively.

An increase in the inventory balance was mainly due to an increase in spot price of U₃O₈ and weakening of KZT against USD during 2022, which increased the cost of purchased uranium from JVs, associates and third parties and an increase in inventory volume (see Section 6.3.2 Uranium segment production and sales metrics). Consistent with the Company's value strategy, Kazatomprom's inventory levels vary based upon timing of customer requirements and the resulting differences in the timing of deliveries, and mining and sales volumes, in alignment with changing market conditions.

9.4 Cash Flows

The following cash flow discussion is based on, and should be read in conjunction with the Financial Statements and related notes.

The following table provides the Group's consolidated cash flows in 2022 and 2021:

(KZT million)	2022	2021
Cash flows from operating activities ¹	283,859	118,729
Cash flows from/(used in) investing activities	(10,893)	(71,241)
Cash flows (used in) financing activities	(268,877)	(1,843)
Net increase/(decrease) in cash and cash equivalents	4,089	45,645

¹ Includes income tax and interest paid.

9.4.1 Cash Flows from Operating Activities

Operating cash flows in 2022 totalled KZT 283,859 million, a significant increase compared to 2021 mainly due to:

- a KZT 433,508 million increase in cash receipts from customers during 2022 compared to 2021, mainly due to growth in the average realized price associated with an increase in the market spot price for U₃O₈ and the weakening of the KZT against the USD;
- offset by a KZT 188,775 million increase in payments for accounts payable to suppliers during 2022, mostly due to the weakening of the KZT against the USD and an increase in the market spot price for U₃O₈;
- a KZT 29,706 million increase in 2022 inflows from VAT refunds from the budget.
- a KZT 38,377 million increase in other taxes paid mostly due to the increase in VAT expense arising from increased volume of intra-group sales in Kazakhstan (see Section 5.4 Taxation and Mineral Extraction Tax ("MET"));
- a KZT 28,167 million increase in income tax paid due to the increase in profit before tax (see Section 6.9 Profit before tax and tax expense);
- payments as part of operating cash flows include: payment held as restricted funds in amount

KZT 14,812 million paid to a supplier earlier in the year whose bank account was subsequently included in the list of legal entities that fell under U.S. Department of the Treasury Office of Foreign Assets Control (OFAC) sanctions, the correspondent bank which initially erroneously blocked the payment returned funds in January, 2023 in full with interest; compensation paid under subsoil use agreement by JV Akbastau JSC in amount KZT 7,310 million for 249 tonnes of overproduced uranium based on current uranium spot prices.

9.4.2 Cash Flows from Investing Activities

Net cash outflows from investing activities were KZT 10,893 million in 2022 compared to outflows KZT 71,241 million in 2021.

Changes in investing cash flows in 2022 were due to:

- a KZT 28,238 million increase in 2022 in dividends received from associates, joint ventures and other investments (see Section 9.2 Dividends received and paid);
- an increase in 2022 in acquisition of property, plant and equipment, acquisition of mine development assets and acquisition of exploration and evaluation assets in sum for KZT 26,924 million primarily due to a shift in wellfield development activities, as well as higher purchase prices for equipment (see Section 7.0 CAPITAL EXPENDITURES REVIEW);
- acquisition of equity investments for KZT 12,368 million which is investing in the ANU Energy.

As part of normal investment activities, the Group also invests in term deposits, government and corporate bonds held to maturity, a change in net movement of which in sum comprises KZT 72,983 million in 2022 compared to 2021.

9.4.3 Cash Flows from financing activities

Net cash outflows from financing activities were KZT 268,877 million in 2022 and KZT 1,843 million in 2021. The increase in outflow was primarily due to a growth of dividends paid to shareholders of KZT 77,306 million (see Section 9.2 Dividends received and paid), as well as an increase in dividends paid to non-controlling interest of KZT 59,083 million. Also, in 2021 Group received cash from the sale of a non-controlling 49% interest in "Ortalyk" LLP of KZT 185,858 million (a one-time effect occurred in July 2021). Cash outflows were partially covered by a change in the net movement of loans and borrowings balances in 2022 of KZT 54,933 million compared to 2021.

10.0 INDEBTEDNESS

The total debt and guarantees of the Group as of 31 December 2022 were KZT 157,381 million (KZT 110,462 million in 2021).

(KZT million)	2022	2021	Change
Bank loans	23,953	-	>100%
Non-bank loans	114,491	89,308	28%
Off-balance sheet guarantees	18,937	21,154	(10%)
Total debt and guarantees	157,381	110,462	42%

The following table summarises the Group's debt for the years ended 31 December 2022 and 2021:

(KZT million)	2022	2021	Change
Non-current	83,441	77,850	7%
Bank loans	-	-	
Non-bank loans, including:	83,441	77,850	
<i>Bonds issued</i>	83,300	77,700	
<i>Lease liabilities</i>	141	150	
Current	55,003	11,458	>100%
Bank loans	23,953	-	
Non-bank loans, including:	31,050	11,458	
<i>Promissory note issued</i>	7,002	10,514	
<i>Lease liabilities</i>	32	141	
<i>Bonds issued</i>	24,016	803	
Total debt	138,444	89,308	55%

As of 31 December, 2022, the Group has no long-term bank loans.

The amount of current bank loans was KZT 23,953 million and mainly include debt repayable for up to 12 months under short-term revolving credit lines. As of December 31, 2022, the total limit on the Group's revolving credit lines was USD 235 million, of which USD 52 million were borrowed (USD 183 million were available for use).

The amount of non-bank loans as of 31 December 2022 comprised KZT 114,491 million and includes:

- long-term USD-indexed Company coupon bonds with a nominal amount of KZT 70 billion and maturity in October 2024, issued in September 2019 on the Kazakhstan Stock Exchange (KASE);
- short-term commercial bonds of the Company in the amount of USD 50 million, issued in December 2022 on the KASE and maturity in January 2023;
- promissory notes owned by JV "Khorasan-U" LLP are with maturity "on demand". As of 31 December 2022, the right to claim under the promissory notes belongs to "Kyzylkum" LLP. In 2022, the notes were partially redeemed.

Guarantees represent off-balance sheet irrevocable obligations of the Group to effect payment in the event that another cannot meet its obligations.

Other liabilities of the Group are finance leases, other debt and leases.

According to its loan and guarantee agreements, the Group is required to comply with certain financial covenants based upon the Group's consolidated information, such as debt to equity ratio, and debt to EBITDA ratio. The Group complied with all applicable covenants during the year and as at 31 December 2022.

The following table summarises the Group's weighted average interest rate for bank loans in 2022 and 2021:

(%)	2022	2021
Weighted average interest rate, including:	3.62	3.37
Fixed interest rate	3.62	3.52
Floating interest rate	-	0.97

As of 31 December 2022, the weighted average interest rate was 3.62%, which was higher compared to the prior year. The Group's weighted average interest rate on loans and borrowings in 2022 was mainly influenced by the Group's long-term fixed interest rate liabilities (bonds with a coupon of 4% per annum).

As of the end of 2022, the Group's debt is fully comprised of fixed interest rate loans.

The Company has credit ratings assigned and affirmed by international agencies:

- Baa2 with a stable outlook by Moody's Investors Service (confirmed December 28, 2022);
- BBB- with a stable outlook by Fitch Ratings (confirmed December 15, 2022).

10.1 Net debt / Adjusted EBITDA

The following table summarises the key ratios used by the Company's management to measure financial stability in 2022 and 2021. Management targets a net debt to adjusted EBITDA of less than 1.0.

(KZT million)	2022	2021	Change
Total debt (excluding guarantees)	138,444	89,308	55%
Total cash balances (see Section 9.1)	(170,466)	(204,410)	(17%)
Net debt	(32,022)	(115,102)	(72%)
Adjusted EBITDA* (see Section 6.0)	630,898	350,294	80%
Net debt / Adjusted EBITDA (coefficient)	(0.05)	(0.33)	(85%)

*Adjusted EBITDA is calculated by excluding from EBITDA items not related to the main business and having a one-time effect. Calculation: Profit before tax - finance income + finance expense +/- Net FX loss/(gain) + Depreciation and amortisation + Impairment losses - reversal of impairment +/- one-off or unusual transactions.

11.0 OUTSTANDING SHARES

There were no changes to Kazatomprom's share capital structure during 2022. As of 31 December 2022, the number of outstanding ordinary shares of the Company was 259,356,608 (same in 2021), of which 75% was held by Samruk-Kazyna JSC and 25% of shares/global depository receipts listed on the Astana International Exchange (AIX) and the London Stock Exchange (LSE) were free floated. One global depository receipt represents one ordinary share. Each ordinary share grants the right to one vote.

(at Dec 31, 2021)	Shares and GDRs	%
Samruk-Kazyna	194,517,456	75
Public free-float	64,839,152	25
Total share capital	259,356,608	100

12.0 GUIDANCE FOR 2023

	Guidance for 2023	Actual for 2022
	470 KZT/1USD	460.85 KZT/1USD*
Production volume U ₃ O ₈ , (tU) (100% basis) ^{1, 2}	20,500 – 21,500 ²	21,227
Production volume U ₃ O ₈ , (tU) (attributable basis) ³	10,600 – 11,200 ²	11,373
Group sales volume, (tU) (consolidated) ⁴	15,400 – 15,900	16,358
Incl. KAP sales volume (included in Group sales volume), (tU) ⁵	12,100 – 12,600	13,572
Revenue – consolidated, (KZT billions) ⁶	1,080 – 1,090	1,001
Revenue from Group U ₃ O ₈ sales, (KZT billions) ⁶	820 – 840	851
C1 cash cost (attributable basis) (USD/lb) **	\$12.00 – \$13.50	\$10.25
All-in sustaining cash cost (attributable C1 + capital cost) (USD/lb)**	\$20.00 – \$21.50	\$16.19
Total capital expenditures (KZT billions) (100% basis) ⁷	240 – 250	146

¹ Production volume (100% basis): Amounts represent the entirety of production of an entity in which the Company has an interest; it disregards that some portion of production may be attributable to the Group's JV partners or other third-party shareholders.

² The duration and full impact of the Russian-Ukrainian conflict and the COVID-19 pandemic are not yet known. Annual production volumes could therefore vary from internal expectations.

³ Production volume (attributable basis): Amounts represent the portion of production of an entity in which the Company has an interest, corresponding only to the size of such interest; it excludes the portion attributable to the JV partners or other third-party shareholders, except for JV "Inkai" LLP, where the annual share of production is determined as per Implementation Agreement as disclosed in IPO Prospectus. Actual drummed production volumes remain subject to converter adjustments and adjustments for in-process material.

⁴ Group sales volume: includes Kazatomprom's sales and those of its consolidated subsidiaries (according to the definition of the Group provided on page one of this document). Group U₃O₈ sales volumes do not include other forms of uranium products (including, but not limited to, the sales of fuel pellets).

⁵ KAP sales volume: includes only the total external sales of KAP HQ and THK. Intercompany transactions between KAP HQ and THK are not included.

⁶ Revenue expectations are based on uranium prices taken at a single point in time from third-party sources. The prices used do not reflect any internal estimate from Kazatomprom, and 2023 revenue could be materially impacted by how actual uranium prices and exchange rates vary from the third-party estimates.

⁷ Total capital expenditures (100% basis): includes only capital expenditures of the mining entities, includes significant CAPEX for investment and expansion projects. Excludes liquidation funds and closure costs. For 2023 includes well construction and mine development costs of JV Budenovskoye LLP and JV Katco LLP (South Torkuduk) for a total amount of approximately KZT 70 billion.

* The average exchange rate for 2022.

** Note that the conversion of kgU to pounds U₃O₈ is 2.5998.

Kazatomprom's production expectations for 2023 remain consistent with its market-centric strategy and the intention to flex down planned production volumes by 20% for 2018 through 2023 (versus planned production levels under Subsoil Use Agreements). Production volume in 2023 is expected to be between 20,500 tU and 21,500 tU on a 100% basis and between 10,900 tU to 11,500 tU on an attributable basis. The decrease in production guidance for 2023 in comparison to 2022 actuals is mainly due to continued delays and/or limited access to certain key materials, including sulfuric acid, and equipment impacting the wellfield commissioning schedule in 2022.

Sales volume guidance for 2023 is aligned with the Company's market-centric strategy as well. The Group expects to sell between 15,400 tU and 15,900 tU, which includes KAP sales of between 12,100 tU and 12,600 tU. The decrease in U₃O₈ sales volume guidance for 2023 in comparison to 2022 both at the Group and KAP levels is due to the expected lower production and increased sales in forms other than U₃O₈, including but not limited to fuel pellets produced from KAP's U₃O₈.

Revenue, C1 cash cost (attributable basis) and All-in Sustaining cash cost (attributable C1 + capital cost) may vary from the guidance provided if the KZT to USD exchange rate fluctuates significantly during 2023. Ranges for C1 cash cost (attributable basis) and All-in Sustaining cash cost (attributable C1 + capital cost) remained flat to reflect the uncertainty in the current geopolitical situation and widening offsetting effects of current KZT devaluation and potential inflationary impacts (see Section 1.2 Geopolitical events). Guidance will be updated if the recent fluctuations and geopolitical uncertainties persist throughout 2023.

Wellfield development, procurement and supply chain issues, including inflationary pressure on production materials and reagents, are expected to continue throughout 2023, impacting the Company's financial metrics and giving rise to an expectation that C1 cash cost and All-in Sustaining cash cost will be higher in 2023 than in 2022. Changes to the tax code of the Republic of Kazakhstan on Mineral Extraction Tax, which came into effect in 2023, will have an additional impact on the Company's financial performance.

Total capital expenditures on 100% basis guidance for 2023 increased significantly in comparison to 2022

results to cover the shift in wellfield development activities (see Section 7.0 CAPITAL EXPENDITURES REVIEW), increase in purchase prices for materials, supplies, equipment and cost of drilling, as well as increasing of well construction and mine development costs of JV Budenovskoye LLP and JV Katco LLP (South Tortkuduk) for a total amount of approximately KZT 70 billion.

The Company continues to target an ongoing inventory level of approximately six to seven months of annual attributable production. The Company may purchase uranium from the spot market, while continuing to monitor market conditions for opportunities to optimise its inventory.

12.1 Uranium sales price sensitivity analysis

The table below indicates how the Group's U₃O₈ annual average sales price may respond to changes in spot prices (shown in the left column), for a given year (shown across the top row). At present, the table clearly indicates that the Group's U₃O₈ average sales prices are closely correlated with the uranium spot market price.

This sensitivity analysis should be used only as a reference, and actual uranium market spot prices may result in different U₃O₈ annual average sales prices than those shown in the table. The table is based upon several key assumptions, including estimates of future business opportunities, which may change and are subject to risks and uncertainties outside the Group's control. Please review the footnotes under that table and refer to the section 13.1 Forward-looking statements for more information.

Average Annual Spot Price (USD)	2023E	2024E	2025E	2026E	2027E
20	33	26	27	25	26
30	37	33	34	33	33
40	42	40	41	41	41
50	47	48	48	49	49
60	52	56	56	58	58
70	57	63	63	66	66

Values are rounded to the nearest dollar. The sensitivity analysis above is based on the following key assumptions:

- Annual inflation is assumed to be 2% in the US based on historic values, for the purposes of this analysis;
- Analysis is as of 31 December 2022 and prepared for 2023–2027 on the basis of minimum average Group annual sales during the specified period of approximately 18.0 thousand tonnes of uranium in the form of U₃O₈, of which the volumes contracted as of 31 December 2022 will be sold per existing contract terms (i.e. contracts with hybrid pricing mechanisms with a fixed price component (calculated in accordance with an agreed price formula) and / or combination of separate spot, mid-term and long-term prices); Kazatomprom's marketing strategy does not target a specific proportion of fixed and market related contracts in its portfolio in order to remain flexible and react appropriately to market signals.
- For the purpose of the table, uncommitted volumes of U₃O₈ are assumed to be sold under short-term contracts negotiated directly with the customers and based on spot prices.

13.0 RISKS AND FORWARD-LOOKING INFORMATION

The Company is exposed to the following key risks that could have a material adverse effect on the Group and its results:

- complex and unquantifiable risks associated with sanctions against Russia, including but not limited to State Atomic Energy Corporation Rosatom (the Russian state atomic enterprise) and its subsidiaries, and risks related to the current situation in Ukraine, which could lead to a deterioration in the financial stability of the Group and an increase in social tension, related, but not limited to restrictions on mutual settlements in US dollars and other currencies and suspension of shipment of goods through the territory of the Russian Federation;
- the Group's profitability is directly related to the market prices of uranium, which are volatile;
- major accidents affecting the nuclear industry may result in a dramatic fall in uranium prices;
- nuclear energy competes with several other sources of energy, and sustained lower prices of such alternative energy sources may result in lower demand for nuclear raw materials and fuel, a reduction in nuclear energy development programs and the construction of nuclear power plants and consequently, in a reduction in demand for uranium which could impact market prices;
- nuclear energy is subject to public opinion risks that could have a material adverse impact on the demand for nuclear power and increase the regulatory burden on the nuclear power industry;
- the Group faces competition and could lose customers to other suppliers of uranium and uranium products;
- the Group is currently dependent on a small number of customers that purchase a significant portion of the Group's uranium, and the loss of a significant customer could have a material impact;
- certain customers and business associates of the Group may be subjected to international sanctions, and such sanctions could have a material impact;
- the Group is a major taxpayer and is exposed to tax risks, the most significant being changes in the mineral extraction tax rate for uranium and transfer pricing within the limitation period;
- the US or other uranium importers could impose tariffs or quotas on uranium imports;
- the Group may continue to hold significant U₃O₈ inventories throughout the U₃O₈ pricing cycle if production exceeds sales;
- the Group's uranium extraction and transportation activities are subject to operational risks, hazards and unexpected disruptions, which could delay the production and delivery of the Group's uranium and uranium products, increase the Group's cost of extraction, or result in accidents at the Group's extraction locations;
- the availability to procure and the cost of sulfuric acid materially affects the continuity and commercial viability of the Group's operations, as the Group uses substantial amounts of sulfuric acid to extract uranium;
- the Group may face difficulty using railroads or other transportation infrastructure connecting Kazakhstan with neighbouring countries;
- the Group may be unsuccessful in maintaining existing ore reserves or discovering new ore reserves, and the reported quantities or classifications of the Group's uranium ore reserves may be lower than estimated because of inherent uncertainties in the estimation process;
- the Group may be unable to obtain, on commercially acceptable terms or at all, the necessary financing for its operations, strategy implementation, and/or expansion of its business and local infrastructure;
- the Group is subject to various financial risks related to certain financial and other restrictive covenants, fluctuations of interest and currency rates, liquidity constraints or fail to obtain the necessary funding, or defaults of counterparties;
- the Group may be affected by arbitration or litigation proceedings to which it is not a party, or by legal consequences of non-compliance / misinterpretation of legislation;
- the Group's insurance coverage may not be adequate to cover losses arising from potential operational hazards and unforeseen interruptions;
- failures of the Group's IT systems or cyber-attacks could negatively influence the results of operations;

- failure to achieve planned uranium production or products (U₃O₈) output volumes, sales, or production costs of products and services;
- failure to successfully improve corporate governance systems and health, safety, and environmental programs;
- failure to fulfil the plan for production and sale of fuel assemblies in the Republic of Kazakhstan;
- the Group is impacted by the macroeconomic, social and political conditions in Kazakhstan, and the Group may be exposed to risks related to adverse sovereign action by local government, or subject to extensive government regulation and legislation;
- the Group may be affected by labour unrest or increased social tension in Kazakhstan;
- the Group's results of operations are subject to economic, political and legal developments in China, India and South-East Asia;
- unexpected catastrophic events, including acts of vandalism and terrorism;
- the spread of the COVID-19 pandemic on the territory of Kazakhstan and in other countries may lead to a deterioration in the financial stability of the Group, an increase in social tension, and an inability to procure key operating materials.

13.1 Forward-looking statements

This document contains statements that are considered as “forward-looking statements”. The terminology used for describing the future, including, inter alia, such words as “believes”, “according to preliminary estimates”, “expects”, “forecasts”, “intends”, “plans”, “suggests”, “will” or “should” or, in each case, similar or comparable terminology, or references to discussions, plans, objectives, goals, future events or intentions, is used to denote forward-looking statements. These forward-looking statements include all statements that are not historical facts. These statements include, without limitation, statements regarding intentions, opinions and announcements on the Company's expectations concerning, among other things, the results of operations, financial state, liquidity, prospects, growth, potential acquisitions, strategies and sectors, in which the Company operates. In their nature, forward-looking statements involve risks and uncertainties because they relate to future events and circumstances that may or may not occur. Forward-looking statements do not guarantee future or actual performance. The Company's financial position and liquidity, as well as the development of the country and industries, in which the Company operates, may significantly differ from the options described herein or assumed pursuant to the forward-looking statements contained herein. The company does not plan and does not assume obligations to update any information regarding the industry or any forward-looking statements contained herein, whether as a result of obtaining new information or occurrence of future events or any other circumstances. The Company makes no representations, provides no assurances and publishes no forecasts as to whether the outcomes described in such forward-looking statements will be achieved.