SAMRUK-ENERGY JSC

International Financial Reporting Standards Consolidated Financial Statements and Independent Auditor's Report

31 December 2022

Contents

Independent Auditor's Report

To the Shareholder and Board of Directors of Samruk-Energy JSC

Our opinion

In our opinion, the consolidated financial statements present fairly, in all material respects, the consolidated financial position of Samruk-Energy JSC (the "Company") and its subsidiaries (together – the "Group") as at 31 December 2022, and the Group's consolidated financial performance and consolidated cash flows for the year then ended in accordance with International Financial Reporting Standards.

What we have audited

The Group's consolidated financial statements comprise:

- the consolidated statement of financial position as at 31 December 2022;
- the consolidated statement of profit or loss and other comprehensive income for the year then ended;
- the consolidated statement of changes in equity for the year then ended;
- the consolidated statement of cash flows for the year then ended; and
- the notes to the consolidated financial statements, which include significant accounting policies and other explanatory information.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (ISAs). Our responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the consolidated financial statements section of our report.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Independence

We are independent of the Group in accordance with the International Code of Ethics for Professional Accountants (including International Independence Standards) issued by the International Ethics Standards Board for Accountants (IESBA Code) and the ethical requirements that are relevant to our audit of the consolidated financial statements in the Republic of Kazakhstan. We have fulfilled our other ethical responsibilities in accordance with the IESBA Code and the ethical requirements of the Republic of Kazakhstan that are relevant to our audit of the consolidated financial statements.

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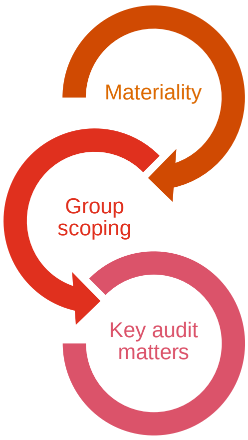
Our audit approach

Overview



- Overall Group materiality: 3,430,000 thousand Tenge, which represents approximately 0.9% of the Group's revenue for the year ended 31 December 2022.

- We conducted audit work at five subsidiaries and two joint ventures located in the Republic of Kazakhstan.
- The Group engagement team visited all locations of the entities subject to audit procedures.
- Our audit scope addressed 98% of total assets, 99% of total revenue and 95% of absolute value of profit before tax of the Group.

- Impairment of property, plant and equipment and intangible assets.
- Provision for asset retirement obligations.

As part of designing our audit, we determined materiality and assessed the risks of material misstatement in the consolidated financial statements. In particular, we considered where management made subjective judgements; for example, in respect of significant accounting estimates that involved making assumptions and considering future events that are inherently uncertain. As in all of our audits, we also addressed the risk of management override of internal controls including, among other matters, consideration of whether there was evidence of bias that represented a risk of material misstatement due to fraud.

Materiality

The scope of our audit was influenced by our application of materiality. An audit is designed to obtain reasonable assurance whether the consolidated financial statements are free from material misstatement. Misstatements may arise due to fraud or error. They are considered material if individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the consolidated financial statements.

Based on our professional judgement, we determined certain quantitative thresholds for materiality, including the overall Group materiality for the consolidated financial statements as a whole as set out in the table below. These, together with qualitative considerations, helped us to determine the scope of our audit and the nature, timing and extent of our audit procedures and to evaluate the effect of misstatements, if any, both individually and in aggregate on the consolidated financial statements as a whole.

Overall Group materiality	3,430,000 thousand Tenge
How we determined it	approximately 0.9 % of total revenue
Rationale for the materiality benchmark applied	We chose revenue as the benchmark for materiality determination. We did not use profit before tax due to its fluctuation. Instead, we used revenue, which is less volatile and is also used by the Shareholder to assess the Group's performance. We believe that revenue aligns with the principal considerations of the users of consolidated financial statements. We determined materiality as approximately 0.9% of total revenue, which based on our professional judgment, is within the range of acceptable quantitative materiality thresholds.

Key audit matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Key audit matter	How our audit addressed the key audit matter
Impairment of property, plant and equipment and intangible assets *See Note 4 of the consolidated financial statements.* The Group performed impairment indicator analysis of property, plant and equipment and intangible assets as at 31 December 2022. Based on the assessment performed, the management has not identified any indicators of impairment for traditional power generating and transmission companies. Based on the analysis of indicators of impairment of property, plant and equipment and intangible assets and fair value assessment of renewable energy entities of the Group, management identified indicators of impairment for non-financial assets of Samruk-Green Energy LLP, Ereymentau Wind Power LLP and share in Semirechya Energy LLP.	Our procedures in respect of management's assessment of the impairment indicators of property, plant and equipment and intangible assets included: • verification of accuracy and relevance of key assumptions used by management to perform the impairment indicator analysis; • consideration of economic and market trends in the energy sector. We received, inspected and evaluated the model used by management's experts to assess the impairment of assets of Samruk-Green Energy LLP, Ereymentau Wind Power LLP and share in Semirechya Energy LLP and assessed the methodology and the main assumptions used in the model, and their consistency with the budgets and business plans, external information and our expertise, taking into account the specifics of the industry. We engaged our valuation experts to form our conclusion in relation to the assumptions and methodology used for impairment assessment.

We paid special attention to the issue of impairment due to significance of their carrying value, as well as due to the fact that process of assessing by management of impairment indicators and estimating values in use is complex as it is based on the use of significant estimates and judgments with respect to future market and economic conditions and the results of operations of the Group. As a result of the analyses, impairment test was carried out and impairment losses of Tenge 10,470,300 thousand has been recorded in the statement of profit or loss and other comprehensive income.	Our procedures in respect of management's assessment of the impairment test included: • analysis of determining identifiable groups of assets that generate cash inflows independently from the cash flows generated by other assets; • verification of accuracy and relevance of key assumptions used by management to perform the test; • making a series of inquiries with management on the assumptions to assess the impairment tests; • consideration of other input data for the models and reconciliation of them with supporting documents, such as the Development plan and comparison of the Development plan with actual results, where relevant; • consideration of the potential impact of reasonably possible changes in key assumptions. We also paid attention to the adequacy of disclosures in Note 4 to the consolidated financial statements in accordance with the requirements of IAS 36 "Impairment of Assets".
Provision for asset retirement obligations *See Note 3, 4, 7, 16 of the consolidated financial statements.* In 2022 the Group received explanations and clarification from government authorities on the requirements of the Environmental Code of the Republic of Kazakhstan which allow to quantify a present obligation to liquidate the consequences of operation of the facilities. Accordingly, the Group conducted an analysis of the requirements, determined the approach and method of evaluation and, based on the Group's interpretation per the provisions of the Environmental Code of the Republic of Kazakhstan, the legislation on electric power industry of the Republic of Kazakhstan, as well as the Group's accounting policy, recognized provisions on obligations related to the liquidation of the consequences of operations of the facilities at 31 December 2022 for the Group's subsidiaries Ekibastuzskaya GRES-1 named after Bulat Nurzhanov	Our procedures in respect of management's assessment of the asset retirement obligation included: • assessment of competence, qualifications, experience and objectivity of the experts involved by management to calculate nominal cost of provision; • verification of accuracy and relevance of key assumptions used by management to perform the calculation; • making a series of inquiries with management to assess the calculation of provision; • comparison of estimated amount using SANA software with the calculations using other available alternative tool to identify and investigate any significant differences. • reconciliation of objects per PPE register subject to demolition to the list of object included in the provision's calculation to verify the completeness. We tested technical passports of the objects on a sample basis to verify the volume of liquidation works;

LLP, Almaty Electric Stations JSC, First Wind Power Plant LLP and Samruk Green Energy LLP, as well as the joint venture Station Ekibastuzskaya GRES-2 JSC. The calculation of nominal cost of obligation to liquidate the consequences of operation of the facilities was performed by the Group's experts in the environmental and construction areas using construction estimating software – SANA. The present value of asset retirement obligation for the Group's subsidiaries as at 31 December 2022 amounted to Tenge 19,146,405 thousand, and for the joint venture Station Ekibastuzskaya GRES-2 JSC amounted to Tenge 4,218,679 thousand. This matter has required significant audit attention due to significant judgements involved.	• consideration of the potential impact of reasonably possible changes in key assumptions. • we engaged our legal experts in environmental area to clarify the impact of the legislation on current obligations of the Group with regards to decommissioning process of the objects which have a negative impact on the environment, as well as explanations and clarifications received by the Group from government authorities in 2022; • we involved our accounting technical specialists to verify the management's accounting treatment for recognition of provision for asset retirement obligation in accordance with the Environmental Code effective from July 2021; • we engaged our valuation experts to form our own conclusion in relation to the assumptions and methodology used for calculation of asset retirement obligation and compare those assumptions with one of the managements and investigate those discrepancies. We also paid attention to the adequacy of disclosures in Note 4 to the consolidated financial statements in accordance with the requirements of IAS 37 "Provisions, Contingent liabilities and Contingent assets".

How we tailored our Group audit scope

We tailored the scope of our audit in order to perform sufficient work to enable us to provide an opinion on the consolidated financial statements as a whole, taking into account the structure of the Group, the accounting processes and controls, and the industry in which the Group operates.

In establishing the overall approach to the group audit, we determined the type of work that needed to be performed by us, as the group engagement team, or component auditors, including other audit firms operating under our instructions. Where the work was performed by component auditors, we determined the level of involvement we needed to have in the audit work at those components to be able to conclude whether sufficient appropriate audit evidence had been obtained as a basis for our opinion on the Group consolidated financial statements as a whole.

The assets and operations of the Group are spread amongst 20 subjects (components), including associated companies and jointly controlled entities. Out of these, we have identified eight components as material components, including the Company, its five subsidiaries and two joint ventures.

For seven material components we or other independent auditors, carried out a full scope audit of the financial information of the components, which the Group uses for the preparation of the consolidated financial statements. We have reviewed the working documents of other independent auditors, and discussed with them the key assumptions and methodology, received independence and compliance with IESBA Code requirements confirmations. We also discussed the key audit matters with management and the Audit Committee.

We have identified other companies of the Group as not material components, for which we carried out audit procedures for the most material line items of the financial information and general analytical procedures.

In general, the scope of our audit covered 98% of total assets, 99% of total revenue and 95% of the absolute value of net profit of the Group. The procedures performed have enabled us to obtain sufficient appropriate audit evidence in relation to the consolidated financial statements of the Group and provide a basis for our audit opinion on it.

Other information

Management is responsible for the other information. The other information comprises annual report but does not include the consolidated financial statements and our auditor's report thereon. The annual report is expected to be made available to us after our audit report date.

Our opinion on the consolidated financial statements does not cover the other information and we do not and will not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information identified above and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated.

When we read the other information not yet received described above, if we conclude that there is a material misstatement therein, we are required to communicate the matter to those charged with governance.

Responsibilities of management and those charged with governance for the consolidated financial statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with International Financial Reporting Standards, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Group's financial reporting process.

Auditor's responsibilities for the audit of the consolidated financial statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with ISAs, we exercise professional judgment and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the Group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, actions taken to eliminate threats or safeguards applied.

Independent auditor's report (Continued)

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

The engagement partner on the audit resulting in this independent auditor's report is Dana Inkarbekova.

On behalf of PricewaterhouseCoopers LLP

PricewaterhouseCoopers LLP

Approved and signed by:

Dana Inkarbekova
Managing Director
PricewaterhouseCoopers LLP
(General State License of the Ministry of
Finance of the Republic of Kazakhstan
#0000005 dated 21 October 1999)

Executive auditor
(Qualification certificate
No. 0000492 dated 18 January 2000)

13 March 2023
Almaty, Kazakhstan

In thousands of Kazakhstani Tenge	Note	31 December 2022	31 December 2021
ASSETS			
Non-current assets			
Property, plant and equipment	7	720,275,568	702,709,108
Investment property		104,999	110,160
Intangible assets	8	3,726,203	4,165,145
Right-of-use assets		2,652,394	2,881,775
Investments in joint ventures and associates	9	88,567,345	73,993,321
Other non-current assets	10	40,566,491	77,960,833
Total non-current assets		**855,893,000**	**861,820,342**
Current assets			
Inventories	11	15,432,827	13,587,164
Trade and other receivables	12	39,619,591	32,437,068
Other current assets	13	16,273,052	18,452,057
Income tax prepaid		4,010,796	1,385,209
Cash and cash equivalents	14	34,616,760	12,138,171
Total current assets		**109,953,026**	**77,999,669**
TOTAL ASSETS		**965,846,026**	**939,820,011**

Signed on behalf of management on 13 March 2023.

Aidar K. Ryskulov
Managing Director on Economics and Finance

Saule B. Tulekova
Head of Accounting and Tax Department – Chief Accountant

«САМРУК-ЭНЕРГО» АКЦИОНЕРЛІК ҚОҒАМЫ * АКЦИОНЕРНОЕ ОБЩЕСТВО «САМРУК-ЭНЕРГО» * ҚАЗАҚСТАН РЕСПУБЛИКАСЫ
БСН/БИН 070540008194

In thousands of Kazakhstani Tenge	Note	31 December 2022	31 December 2021
EQUITY			
Share capital	15	378,531,570	376,045,927
Other reserves	15	124,850,717	125,128,459
Retained earnings/(accumulated deficit)		28,012,639	(78,038)
Equity attributable to the Group's shareholders		531,394,926	501,096,348
Non-controlling interest	30	1,718,695	1,544,103
TOTAL EQUITY		**533,113,621**	**502,640,451**
LIABILITIES			
Non-current liabilities			
Asset restoration provision	16	21,561,994	2,752,778
Employee benefit obligations		2,139,845	1,595,996
Borrowings	17	147,794,163	190,537,037
Other non-current liabilities		376,922	2,407,609
Non-current lease liabilities		1,132,295	1,495,895
Deferred income tax liabilities	27	67,254,045	72,198,561
Total non-current liabilities		**240,259,264**	**270,987,876**
Current liabilities			
Asset restoration provision	16	66,400	73,814
Borrowings	17	118,132,815	104,357,629
Employee benefit obligations		187,295	189,304
Trade and other payables	18	57,497,678	50,157,039
Taxes payable and other payables to budget	19	11,311,801	7,850,505
Current lease liabilities		925,658	927,267
Income tax payable		4,351,494	2,636,126
Total current liabilities		**192,473,141**	**166,191,684**
TOTAL LIABILITIES		**432,732,405**	**437,179,560**
TOTAL LIABILITIES AND EQUITY		**965,846,026**	**939,820,011**
Carrying amount of an ordinary share (in Tenge)	35	93,987	88,985

Signed on behalf of management on 13 March 2023.

ҚАЗАҚСТАН РЕСПУБЛИКАСЫ НҰР-СҰЛТАН ҚАЛАСЫ «САМҰРЫҚ-ЭНЕРГО» АКЦИОНЕРЛІК ҚОҒАМЫ * РЕСПУБЛИКА КАЗАХСТАН Г. НУР-СУЛТАН АКЦИОНЕРНОЕ ОБЩЕСТВО «САМРУК-ЭНЕРГО» *
«САМҰРЫҚ-ЭНЕРГО»
БСН/БИН 070540008194

Aidar K. Ryskulov
Managing Director on Economics and Finance

Saule B. Tulekova
Head of Accounting and Tax Department – Chief Accountant

In thousands of Kazakhstani Tenge	**Note**	**2022**	**2021**
Revenue	20	381,464,992	332,537,144
Cost of sales	21	(288,928,586)	(254,847,439)
Gross profit		**92,536,406**	**77,689,705**
Selling expense	22	(9,110,402)	(9,029,370)
General and administrative expenses	23	(18,851,978)	(14,632,138)
Share of results of joint ventures and associates	9	16,103,114	13,454,577
Impairment losses on non-financial assets	4	(10,448,192)	(20,760,920)
Reversal of impairment losses on financial assets		593,668	829,129
Other income	24	3,941,056	4,391,933
Other expense		(610,716)	(514,174)
Finance income	25	2,747,376	2,613,005
Finance cost	26	(29,747,698)	(29,986,911)
Profit before tax		**47,152,634**	**24,054,836**
Income tax expense	27	(16,110,545)	(8,376,434)
Profit for the year from continuing operations		**31,042,089**	**15,678,402**
Loss for the year from discontinued operations	28	(735,820)	(331,856)
Profit for the year		**30,306,269**	**15,346,546**
Other comprehensive loss *(Items that will not be reclassified to profit or loss)*			
Remeasurements of post-employment benefit obligations		(277,742)	(39,588)
Total comprehensive income for the year		**30,028,527**	**15,306,958**
Profit attributable to:			
Shareholders of the Group		30,131,677	15,046,311
Non-controlling interest	30	174,592	300,235
Profit for the year		**30,306,269**	**15,346,546**
Total comprehensive income attributable to:			
Shareholders of the Group		29,853,935	15,006,723
Non-controlling interest	30	174,592	300,235
Total comprehensive income for the year		**30,028,527**	**15,306,958**
Earnings per ordinary share for the year from continuing operations (in Tenge per share)	35	5,509	2,745
Loss per ordinary share for the year from discontinued operations (in Tenge per share)	35	(131)	(59)

		Attributable to the shareholders of the Group					
In thousands of Kazakhstani Tenge	**Note**	**Share capital**	**Other reserves**	**Retained earnings/ (accumulated deficit)**	**Total**	**Non-controlling interest**	**Total Equity**
Balance at 1 January 2021		376,045,927	125,168,047	(11,882,206)	489,331,768	1,243,868	490,575,636
Profit for the year		-	-	15,046,311	15,046,311	300,235	15,346,546
Other comprehensive loss		-	(39,588)	-	(39,588)	-	(39,588)
Total comprehensive income/(loss)		**-**	**(39,588)**	**15,046,311**	**15,006,723**	**300,235**	**15,306,958**
Dividends	15	-	-	(3,242,143)	(3,242,143)	-	(3,242,143)
Balance at 31 December 2021		**376,045,927**	**125,128,459**	**(78,038)**	**501,096,348**	**1,544,103**	**502,640,451**
Profit for the year		-	-	30,131,677	30,131,677	174,592	30,306,269
Other comprehensive loss		-	(277,742)	-	(277,742)	-	(277,742)
Total comprehensive income/(loss)		-	**(277,742)**	**30,131,677**	**29,853,935**	**174,592**	**30,028,527**
Emission of shares	15	2,485,643	-	-	2,485,643	-	2,485,643
Dividends	15	-	-	(2,041,000)	(2,041,000)	-	(2,041,000)
Balance at 31 December 2022		**378,531,570**	**124,850,717**	**28,012,639**	**531,394,926**	**1,718,695**	**533,113,621**

In thousands of Kazakhstani Tenge	Note	2022	2021
Cash flows from operating activities			
Profit before income from continuing operations		47,152,634	24,054,836
Profit before income from discontinued operations		(735,820)	(331,537)
Adjustments for:			
Depreciation and amortisation		60,804,491	56,202,182
Loss on disposal of property, plant and equipment and intangible assets		146,214	317,376
Losses on impairment of nonfinancial assets		10,448,192	20,760,920
Reversal of impairment of financial assets		(593,668)	(828,769)
Finance costs		29,903,128	30,138,966
Finance income		(2,748,608)	(2,616,175)
Share in profit of joint ventures and associates	9	(16,103,114)	(13,454,577)
Income on property, plant and equipment received free of charge		(400,659)	(660,324)
Provision for quotes	19	2,180,157	2,438,179
Other provisions and adjustments		(105,978)	446,497
Operating cash flows before working capital changes		**129,946,969**	**116,467,574**
Change in trade and other receivables and other current assets		(1,354,374)	4,546,894
Change in inventories		(1,166,191)	(208,416)
Change in trade and other payables and other non-current liabilities		(369,302)	(5,946,327)
Change in employee benefits payable		89,791	(88,856)
Change in taxes payable		3,814,547	(33,916)
Cash flows from operating activities		**130,961,440**	**114,736,953**
Income tax paid		(21,940,332)	(12,614,526)
Interest paid		(21,684,136)	(23,108,855)
Dividends received		-	72,455
Net cash from operating activities, including		**87,336,972**	**79,086,027**
Net cash used in operating activities from discontinued operations		(54,790)	(154,856)
Cash flows from investing activities			
Purchase of property, plant and equipment		(52,482,365)	(92,723,889)
Purchase of intangible assets		(423,837)	(881,827)
Purchase of bonds		-	(9,131,800)
Proceeds from sale of debt instruments (bonds)		9,584,600	2,672,102
Interest income received		1,887,792	1,230,331
Proceeds from sale of subsidiaries, excluding cash and cash equivalents transferred		14,447,066	1,357,524
Decrease in bank deposits and cash with a restriction in the use of the balance of bank deposits, net		(1,365,080)	(86,855)
Financial aid paid to Shareholder		(518,700)	-
Financial aid returned from Shareholder		518,700	-
Other proceeds		190,630	543,425
Net cash used in investing activities, including		**(28,161,194)**	**(97,020,989)**
Net cash from investing activities from discontinued operations		5,515	-
Cash flows from financing activities			
Proceeds from borrowings	17	97,623,873	141,598,976
Proceeds from issuance of shares		2,485,643	-
Repayment of borrowings and payment of principal on bonds	17	(134,108,186)	(135,670,371)
Issue of bonds	17	-	18,400,000
Payment of principal on financial lease		(674,019)	(723,203)
Dividends paid to shareholders	15	(2,041,000)	(3,242,143)
Dividends paid to non-controlling interest holders		-	(98,238)
Other receipts/(payments)		35,000	(2,516)
Net cash used in financing activities, including		**(36,678,689)**	**20,262,505**
Net cash from financing activities from discontinued operations		53,833	151,566
Foreign exchange effect on cash and cash equivalents		(7,352)	(83,769)
Less provision for cash impairment		(5,120)	519
Net change in cash and cash equivalents		**22,484,617**	**2,244,293**
Including from discontinued operations		4,558	(3,290)
Cash and cash equivalents at the beginning of the year		**12,138,171**	**9,893,878**
Including from discontinued operations		1,470	-
Cash and cash equivalents at the end of the year	**14**	**34,616,760**	**12,138,171**
Cash and cash equivalents at the end of the year of discontinued operations		6,028	-

Cash outflows for purchase of property, plant and equipment include capitalised interest paid in the amount of Tenge 6,610,277 thousand (2021: Tenge 2,332,453 thousand).

1 Samruk-Energy Group and Its Operations

These consolidated financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRS") for the year ended 31 December 2022 for Samruk-Energy JSC (the "Company") and its subsidiaries (together referred to as the "Group").

The Company was incorporated on 18 April 2007 and registered on 10 May 2007. The Company is a joint stock company and was set up in accordance with regulations of the Republic of Kazakhstan. The Group was established for the purpose of consolidation of entities in energy industry of the Republic of Kazakhstan ("RoK").

As at 31 December 2022 and 2021 the Company's sole shareholder is Samruk-Kazyna National Welfare Fund JSC ("Samruk-Kazyna"). The Company's ultimate controlling party is the Government of the RoK.

Principal activity

The Group's principal activities are production of electricity, heating energy, hot water on the basis of coal, hydrocarbons and water resources, and renewable energy sources ('RES"), and then subsequently the sale to households and industrial enterprises, the transmission of electricity and technical distribution of electricity within the network, as well as leasing of property of hydro power plants.

The operations of the Group's subsidiaries and joint ventures are regulated by the Law of the Republic of Kazakhstan *On Electric Power Industry*, the Law *On Natural Monopolies,* the Law *On Support of the Use of Renewable Energy Sources*, and the Commercial Code of the RoK. Tariffs, based on the type of activities of a company, are regulated by the Committee on Regulation of Natural Monopolies of the Ministry of National Economy of the Republic of Kazakhstan ("Committee") or by the relevant ministry – Ministry of Energy of the Republic of Kazakhstan ("ME").

Electricity tariffs for energy producers are approved by order of the Minister of Energy of the Republic of Kazakhstan No.160 *On Approval of Cap Tariffs for Electricity for a Group of Energy Producing Organizations* dated 27 February 2015 and subsequent amendments to it. Tariffs for the supply of electricity produced by renewable energy sources are fixed and approved by the Decree of the Government of the Republic of Kazakhstan dated 12 June 2014 No.645 *On Approval of Fixed Tariffs*, according to the Renewable Energy technology used (separately for wind, solar and other sources), and are subject to annual indexation. In addition, the financial settlement centre of RE acts as a buyer, and the power producer acts as a seller. Tariffs for electric power transmission and distribution for energy transmission companies, heating energy production and power supply ("PSE") are regulated by the Committee. Regulation and control by the Committee are performed strictly in accordance with the legislation and regulations of the Republic of Kazakhstan.

The tariff related decisions are significantly exposed to social and political issues. Economic, social and other policies of the Government of the Republic of Kazakhstan may have a significant effect on the Group's operations.

Registered address and place of business

The registered address and place of Company's Head Office is: Block B, 15A, Kabanbay Batyr Avenue, Astana, Republic of Kazakhstan.

2 Basis of Preparation and Significant Accounting Policies

Basis of preparation of the consolidated financial statements

These consolidated financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRS") under the historical cost convention. The principal accounting policies applied in the preparation of these consolidated financial statements are set out below. These policies have been consistently applied to all the periods presented, unless otherwise stated.

The preparation of consolidated financial statements in conformity with IFRS requires the use of certain critical accounting estimates. It also requires management to exercise its judgement in the process of applying the Group's accounting policies. The areas involving a higher degree of judgement or complexity, or areas where assumptions and estimates are significant to the consolidated financial statements are disclosed in Note 4.

Going concern

Management prepared these consolidated financial statements on a going concern basis. Management decision is based on the financial position of the Group, its current intentions, profitability of operations and access to financial resources and support of the Government of RoK.

2 Basis of Preparation and Significant Accounting Policies (continued)

As of 31 December 2022, the Group's current liabilities exceed its current assets by 29,011,658 thousand Tenge (2021: the Group's current liabilities exceeded its current assets by Tenge 68,880,793 thousand). The main factor in increasing current liabilities was the attraction of short-term bank loans, associated with the Group's policy to reduce the level of long-term loans with a higher interest rate. In addition, in the reporting period, the Group made early repayments on long-term loans.

The following factors were considered in assessing the Group's ability to continue in the foreseeable future:

- The Group is of strategic importance for ensuring the reliability of the energy system of RoK. The management and shareholders of the Group have neither the intention nor the need to dissolve the Group.
- The Group's current liabilities of Tenge 5,841,514 thousand represent payable to the Akimat of Almaty city and, by agreement, do not require cash outflows.
- In 2022, the Group expects positive net cash flows from operating activities in the amount of more than Tenge 97.1 billion.

As of 31 December 2022, the Group has available funds on revolving credit facilities in banks of Kazakhstan totaling more than 80 billion Tenge.

These consolidated financial statements do not include any adjustments to the carrying amount of assets and liabilities, income and expenses, or classification of the consolidated statement of financial position that would be necessary if it was not possible to continue operations, such adjustments may be significant.

Consolidated financial statements

(i) Subsidiaries

Subsidiaries are those investees, including structured entities, that the Group controls because the Group (i) has power to direct 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 investor's returns. The existence and effect of existing rights, including existing potential voting rights, are considered when assessing whether the Group has power over another entity. For a right to be existing, the holder must have practical ability to exercise that right when decisions about the direction of the relevant activities of the investee need to be made. The Group may have power over an investee even when it holds less than majority of voting power in an investee. In such a case, the Group assesses the size of its voting rights relative to the size and dispersion of holdings of the other vote holders to determine if it has de-facto power over the investee. Protective rights of other investors, such as those that relate to fundamental changes of investee's activities or apply only in exceptional circumstances, do not prevent the Group from controlling an investee.

Subsidiaries are consolidated from the date on which control is transferred to the Company (acquisition date) and are de-consolidated from the date that control ceases.

The acquisition method of accounting is used to account for the acquisition of subsidiaries. Identifiable assets acquired and liabilities and contingent liabilities assumed in a business combination are measured at their fair values at the acquisition date, irrespective of the extent of any non-controlling interest.

The Group measures non-controlling interest that represents present ownership interest and entitles the holder to a proportionate share of net assets in the event of liquidation on a transaction by transaction basis, either at: (a) fair value, or (b) the non-controlling interest's proportionate share of net assets of the acquiree.

Non-controlling interests that are not present ownership interests are measured at fair value.

Goodwill is measured by deducting the net assets of the acquiree from the aggregate of the consideration transferred for the acquiree, the amount of non-controlling interest in the acquiree and fair value of an interest in the acquiree held immediately before the acquisition date. Any negative amount ("negative goodwill") is recognised in profit or loss, after management reassesses whether it identified all the assets acquired and all liabilities and contingent liabilities assumed and reviews appropriateness of their measurement.

The consideration transferred for the acquiree is measured at the fair value of the assets given up, equity instruments issued, and liabilities incurred or assumed, including the fair value of assets or liabilities from contingent consideration arrangements, but excludes acquisition related costs such as advisory, legal, valuation and similar professional services. Transaction costs related to the acquisition of and incurred for issuing equity instruments are deducted from equity; transaction costs incurred for issuing debt as part of the business combination are deducted from the carrying amount of the debt and all other transaction costs associated with the acquisition are expensed.

2 Basis of Preparation and Significant Accounting Policies (continued)

Intercompany transactions, balances and unrealised gains on transactions between group companies are eliminated. Unrealised losses are also eliminated unless the cost cannot be recovered. The Company and all of its subsidiaries use uniform accounting policies consistent with the Group's policies.

Non-controlling interest is that part of the net results and of the equity of a subsidiary attributable to interests which are not owned, directly or indirectly, by the Company. Non-controlling interest forms a separate component of the Group's equity.

(ii) Purchases of subsidiaries from parties under common control

Purchases of subsidiaries from parties under common control are accounted for using the predecessor values method. Under this method the consolidated financial statements of the combined entity are presented as if the businesses had been combined from the beginning of the earliest period presented or, if later, the date when the combining entities were first brought under common control. The assets and liabilities of the subsidiary transferred under common control are at the predecessor entity's carrying amounts. The predecessor entity is considered to be the highest reporting entity in which the subsidiary's IFRS financial information was consolidated. Related goodwill inherent in the predecessor entity's original acquisitions is also recorded in these consolidated financial statements. Any difference between the carrying amount of net assets, including the predecessor entity's goodwill, and the consideration for the acquisition is accounted for in these consolidated financial statements as an adjustment to other reserves within equity.

(iii) Purchases and sales of non-controlling interests

The Group applies the economic entity model to account for transactions with owners of non-controlling interest in transactions that do not result in a loss of control. Any difference between the purchase consideration and the carrying amount of non-controlling interest acquired is recorded as a capital transaction directly in equity. The Group recognises the difference between sales consideration and the carrying amount of non-controlling interest sold as a capital transaction in the statement of changes in equity.

(iv) Joint arrangements

Under IFRS 11 investments in joint arrangements are classified as either joint operations or joint ventures depending on the contractual rights and obligations of each investor. The Group has assessed the nature of its joint arrangements and determined them to be joint ventures. Joint ventures are accounted for using the equity method.

Under the equity method of accounting, interests in joint ventures are initially recognised at cost and adjusted thereafter to recognise the Group's share of the post-acquisition profits or losses and movements in other comprehensive income.

Dividends received from joint ventures reduce the carrying value of the investment in joint ventures.

When the Group's share of losses in a joint venture equals or exceeds its interests in the joint ventures (which includes any long-term interests that, in substance, form part of the Group's net investment in the joint ventures), the Group does not recognise further losses, unless it has incurred obligations or made payments on behalf of the joint ventures.

Unrealised gains on transactions between the Group and its joint ventures are eliminated to the extent of the Group's interest in the joint ventures. Unrealised losses are also eliminated unless the transaction provides evidence of an impairment of the asset transferred. Accounting policies of the joint ventures have been changed where necessary to ensure consistency with the policies adopted by the Group.

(v) Investments in associates

Associates are entities over which the Group has significant influence (directly or indirectly), but not control, generally accompanying a shareholding of between 20 and 50 percent of the voting rights. Investments in associates are accounted for using the equity method of accounting and are initially recognised at cost, and the carrying amount is increased or decreased to recognise the investor's share of the profit or loss of the investee after the date of acquisition. Dividends received from associates reduce the carrying value of the investment in associates. Other post-acquisition changes in the Group's share of net assets of an associate are recognised as follows: (i) the Group's share of profits or losses of associates is recorded in the consolidated profit or loss for the year as the share of results of associates, (ii) the Group's share of other comprehensive income is recognised in other comprehensive income and presented separately, (iii); all other changes in the Group's share of the carrying value of net assets of associates are recognised in profit or loss within the share of results of associates.

However, when the Group's share of losses in an associate equal or exceeds its interest in the associate, including any other unsecured receivables, the Group does not recognise further losses, unless it has incurred obligations or made payments on behalf of the associate.

2 Basis of Preparation and Significant Accounting Policies (continued)

Unrealised gains on transactions between the Group and its associates are eliminated to the extent of the Group's interest in the associates; unrealised losses are also eliminated unless the transaction provides evidence of an impairment of the asset transferred.

(vi) Disposals of subsidiaries, associates or joint ventures

When the Group ceases to have control or significant influence, any retained interest in the entity is remeasured to its fair value at the date when control is lost, with the change in carrying amount recognised in profit or loss. The fair value is the initial carrying amount for the purposes of subsequently accounting for the retained interest as an associate, joint venture or financial asset. In addition, any amounts previously recognised in other comprehensive income in respect of that entity, are accounted for as if the Group had directly disposed of the related assets or liabilities. This may mean that amounts previously recognised in other comprehensive income are reclassified to profit or loss.

If the ownership interest in an associate is reduced but significant influence is retained, only a proportionate share of the amounts previously recognised in other comprehensive income are reclassified to profit or loss where appropriate.

Foreign currency translation

(i) Functional and presentation currency

All amounts in these consolidated financial statements are presented in thousands Tenge, unless otherwise stated.

Functional currency is the currency of the primary economic environment in which the entity operates. The functional currency of subsidiaries, joint ventures, associates and the parent is Tenge.

(ii) Transactions and balances in foreign currency

Foreign currency transactions are translated into the functional currency using the exchange rate prevailing at the dates of transactions.

Foreign exchange gains and losses resulting from the settlement of such transactions or from the translation at year-end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognised in profit or loss.

At 31 December 2022, the principal rate of exchange used for translating foreign currency balances was US Dollar per Tenge 462.65 (31 December 2021: US Dollar per Tenge 431.67). Exchange restrictions and currency controls exist relating to converting the Tenge into other currencies. Currently, Tenge is not freely convertible in most countries outside of the Republic of Kazakhstan.

Financial instruments

(i) Key measurement terms

Fair value is price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The best evidence of fair value is price in an active market. An active market is one in which transactions for the asset or liability take place with sufficient frequency and volume to provide pricing information on an ongoing basis.

Fair value of financial instruments traded in an active market is measured as the product of the quoted price for the individual asset or liability and the number of instruments held by the entity. This is the case even if a market's normal daily trading volume is not sufficient to absorb the quantity held and placing orders to sell the position in a single transaction might affect the quoted price.

Valuation techniques such as discounted cash flow models or models based on recent arm's length transactions or consideration of financial data of the investees are used to measure fair value of certain financial instruments for which external market pricing information is not available.

Fair value measurements are analysed by level in the fair value hierarchy as follows: (i) level one are measurements at quoted prices (unadjusted) in active markets for identical assets or liabilities, (ii) level two measurements are valuations techniques with all material inputs observable for the asset or liability, either directly (that is, as prices) or indirectly (that is, derived from prices), and (iii) level three measurements are valuations not based on solely observable market data (that is, the measurement requires significant unobservable inputs). Transfers between levels of the fair value hierarchy are deemed to have occurred at the end of the reporting period (Note 33).

2 Basis of Preparation and Significant Accounting Policies (continued)

Cost is the amount of cash or cash equivalents paid or the fair value of the other consideration given to acquire an asset at the time of its acquisition and includes transaction costs. Measurement at cost is only applicable to investments in equity instruments that do not have a quoted market price and whose fair value cannot be reliably measured and derivatives that are linked to, and must be settled by, delivery of such unquoted equity instruments.

Transaction costs are incremental costs that are directly attributable to the acquisition, issue or disposal of a financial instrument. An incremental cost is one that would not have been incurred if the transaction had not taken place. Transaction costs include fees and commissions paid to agents (including employees acting as selling agents), advisors, brokers and dealers, levies by regulatory agencies and securities exchanges, and transfer taxes and duties.

Transaction costs do not include debt premiums or discounts, financing costs or internal administrative or holding costs.

Amortised cost ("AC") is the amount at which the financial instrument was recognised at initial recognition less any principal repayments, plus accrued interest, and for financial assets less any allowance for expected credit losses *("ECL")*. Accrued interest includes amortisation of transaction costs deferred at initial recognition and of any premium or discount to the maturity amount using the effective interest method. Accrued interest income and accrued interest expense, including both accrued coupon and amortised discount or premium (including fees deferred at origination, if any), are not presented separately and are included in the carrying values of the related items in the statement of financial position.

The effective interest method is a method of allocating interest income or interest expense over the relevant period, so as to achieve a constant periodic rate of interest (effective interest rate) on the carrying amount. The effective interest rate is the rate that exactly discounts estimated future cash payments or receipts (excluding future credit losses) through the expected life of the financial instrument or a shorter period, if appropriate, to the net carrying amount of the financial instrument. The effective interest rate discounts cash flows of variable interest instruments to the next interest repricing date, except for the premium or discount which reflects the credit spread over the floating rate specified in the instrument, or other variables that are not reset to market rates. Such premiums or discounts are amortised over the whole expected life of the instrument. The present value calculation includes all fees paid or received between parties to the contract that are an integral part of the effective interest rate.

For assets that are purchased or originated credit impaired ("POCI") at initial recognition, the effective interest rate is adjusted for credit risk, i.e. it is calculated based on the expected cash flows on initial recognition instead of contractual payments.

(ii) Financial assets

Measurement categories. The Group classifies financial assets in the following measurement categories: i) carried at fair value through profit or loss (FVTPL), ii) carried at fair value through other comprehensive income (FVOCI), iii) carried at amortised cost (AC). The classification and subsequent measurement of debt financial assets depends on: (i) the Group's business model for managing the related assets portfolio and (ii) the cash flow characteristics of the asset.

As at 31 December 2022 and 31 December 2021 the Group's financial assets were carried at amortised cost.

Business model

The business model reflects how the Group manages the assets in order to generate cash flows – whether the Group's objective is: (i) solely to collect the contractual cash flows from the assets ("hold to collect contractual cash flows",) or (ii) to collect both the contractual cash flows and the cash flows arising from the sale of assets ("hold to collect contractual cash flows and sell") or, if neither of (i) and (ii) is applicable, the financial assets are classified as part of "other" business model and measured at FVTPL. Business model is determined for a group of assets (on a portfolio level) based on all relevant evidence about the activities that the Group undertakes to achieve the objective set out for the portfolio available at the date of the assessment.

Cash flow characteristics

Where the business model is to hold assets to collect contractual cash flows or to hold contractual cash flows and sell, the Group assesses whether the cash flows represent solely payments of principal and interest ("SPPI"). Financial assets with embedded derivatives are considered in their entirety when determining whether their cash flows are consistent with the SPPI feature. In making this assessment, the Group considers whether the contractual cash flows are consistent with a basic lending arrangement, i.e. interest includes only consideration for credit risk, time value of money, other basic lending risks and profit margin. Where the contractual terms introduce exposure to risk or volatility that is inconsistent with a basic lending arrangement, the financial asset is classified and measured at FVTPL. The SPPI assessment is performed on initial recognition of an asset and it is not subsequently reassessed.

2 Basis of Preparation and Significant Accounting Policies (continued)

Financial assets – reclassification

Financial instruments are reclassified only when the business model for managing the portfolio as a whole changes.

The reclassification has a prospective effect and takes place from the beginning of the first reporting period that follows after the change in the business model. The Group did not change its business model during the current and comparative period and did not make any reclassifications.

Financial assets impairment – credit loss allowance for ECL

The Group assesses, on a forward-looking basis, the ECL for debt instruments measured at AC and for the exposures arising from loan commitments and financial guarantee contracts, for contract assets. The Group measures ECL and recognises Net impairment losses on financial and contract assets at each reporting date. The measurement of ECL reflects: (i) an unbiased and probability weighted amount that is determined by evaluating a range of possible outcomes, (ii) time value of money and (iii) all reasonable and supportable information that is available without undue cost and effort at the end of each reporting period about past events, current conditions and forecasts of future conditions.

Debt instruments measured at AC are presented in the consolidated statement of financial position net of the allowance for ECL.

The Group applies a three stage model for impairment, based on changes in credit quality since initial recognition. A financial instrument that is not credit-impaired on initial recognition is classified in Stage 1. Financial assets in Stage 1 have their ECL measured at an amount equal to the portion of lifetime ECL that results from default events possible within the next 12 months or until contractual maturity, if shorter (“12 Months ECL”). If the Group identifies a significant increase in credit risk (“SICR”) since initial recognition, the asset is transferred to Stage 2 and its ECL is measured based on ECL on a lifetime basis, that is, up until contractual maturity but considering expected prepayments, if any (“Lifetime ECL”). If the Group determines that a financial asset is credit-impaired, the asset is transferred to Stage 3 and its ECL is measured as a Lifetime ECL. For financial assets that are purchased or originated credit-impaired (“POCI Assets”), the ECL is always measured as a Lifetime ECL.

Financial assets – write-off

Financial assets are written-off, in whole or in part, when the Group exhausted all practical recovery efforts and has concluded that there is no reasonable expectation of recovery. The write-off represents a derecognition event.

Financial assets – derecognition

The Group derecognises financial assets when (a) the assets are redeemed or the rights to cash flows from the assets otherwise expire or (b) the Group has transferred the rights to the cash flows from the financial assets or entered into a qualifying pass-through arrangement whilst (i) also transferring substantially all the risks and rewards of ownership of the assets or (ii) neither transferring nor retaining substantially all the risks and rewards of ownership but not retaining control. Control is retained if the counterparty does not have the practical ability to sell the asset in its entirety to an unrelated third party without needing to impose additional restrictions on the sale.

Financial assets – modification

The Group sometimes renegotiates or otherwise modifies the contractual terms of the financial assets. The Group assesses whether the modification of contractual cash flows is substantial.

If the modified terms are substantially different, the rights to cash flows from the original asset expire and the Group derecognises the original financial asset and recognises a new asset at its fair value. The date of renegotiation is considered to be the date of initial recognition for subsequent impairment calculation purposes, including determining whether a SICR has occurred. The Group also assesses whether the new loan or debt instrument meets the SPPI criterion. Any difference between the carrying amount of the original asset derecognised and fair value of the new substantially modified asset is recognised in profit or loss, unless the substance of the difference is attributed to a capital transaction with owners.

In a situation where the renegotiation was driven by financial difficulties of the counterparty and inability to make the originally agreed payments, the Group compares the original and revised expected cash flows to assets whether the risks and rewards of the asset are substantially different as a result of the contractual modification. If the risks and rewards do not change, the modified asset is not substantially different from the original asset and the modification does not result in derecognition.

2 Basis of Preparation and Significant Accounting Policies (continued)

The Group recalculates the gross carrying amount by discounting the modified contractual cash flows by the original effective interest rate (or credit-adjusted effective interest rate for POCI financial assets), and recognises a modification gain or loss in profit or loss.

(iii) Financial liabilities

Measurement categories

Financial liabilities are classified as subsequently measured at AC, except for (i) financial liabilities at FVTPL: this classification is applied to derivatives, financial liabilities held for trading (e.g. short positions in securities), contingent consideration recognised by an acquirer in a business combination and other financial liabilities designated as such at initial recognition and (ii) financial guarantee contracts and loan commitments.

Financial liabilities – derecognition

Financial liabilities are derecognised when they are extinguished (i.e. when the obligation specified in the contract is discharged, cancelled or expires).

An exchange between the Group and its original lenders of debt instruments with substantially different terms, as well as substantial modifications of the terms and conditions of existing financial liabilities, are accounted for as an extinguishment of the original financial liability and the recognition of a new financial liability. The terms are substantially different if the discounted present value of the cash flows under the new terms, including any fees paid net of any fees received and discounted using the original effective interest rate, is at least 10% different from the discounted present value of the remaining cash flows of the original financial liability. In addition, other qualitative factors are also considered. If an exchange of debt instruments or modification of terms is accounted for as an extinguishment, any costs or fees incurred are recognised as part of the gain or loss on the extinguishment. If the exchange or modification is not accounted for as an extinguishment, any costs or fees incurred adjust the carrying amount of the liability and are amortised over the remaining term of the modified liability.

Modifications of liabilities that do not result in extinguishment are accounted for as a change in estimate using a cumulative catch up method, with any gain or loss recognised in profit or loss, unless the economic substance of the difference in carrying values is attributed to a capital transaction with owners.

Financial liabilities designated at FVTPL

The Group may designate certain liabilities at FVTPL at initial recognition. Gains and losses on such liabilities are presented in profit or loss except for the amount of change in the fair value that is attributable to changes in the credit risk of that liability (determined as the amount that is not attributable to changes in market conditions that give rise to market risk), which is recorded in OCI and is not subsequently reclassified to profit or loss. This is unless such a presentation would create, or enlarge, an accounting mismatch, in which case the gains and losses attributable to changes in credit risk of the liability are also presented in profit or loss

(iv) Offsetting

Financial assets and liabilities are offset, and the net amount reported in the statement of financial position only when there is a legally enforceable right to offset the recognised amounts, and there is an intention to either settle on a net basis, or to realise the asset and settle the liability simultaneously. Such a right of set off (a) must not be contingent on a future event and (b) must be legally enforceable in all of the following circumstances: (i) in the normal course of business, (ii) in the event of default and (iii) in the event of insolvency or bankruptcy.

Property, plant and equipment

(i) Recognition and subsequent measurement

Property, plant and equipment are stated at cost less accumulated depreciation and provision for impairment, where required. Cost comprises purchase price, including import duties and non-refundable purchase taxes, after deducting trade discounts and rebates, and any costs directly attributable to bringing the asset to the location and condition necessary for its intended use. The cost of self-constructed assets includes the cost of materials, direct labour and part of production overhead costs.

Subsequent costs are included in the asset's carrying amount or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Group and the cost of the item can be measured reliably. Costs of minor repairs and day-to-day maintenance are expensed when incurred. Cost of replacing major parts or components of property, plant and equipment items are capitalised and the replaced part is retired. Asset retirement obligation is capitalised to the cost of property, plant and equipment.

2 Basis of Preparation and Significant Accounting Policies (continued)

Gains and losses on disposals are determined by comparing proceeds with carrying amount, and are recognised in profit or loss for the year within other income or expenses.

(ii) Depreciation

Land is not depreciated. Depreciation on other items of property, plant and equipment is calculated using the straight-line method to allocate their cost to their residual values over their estimated useful lives, as follows:

	Useful lives in years
Buildings and constructions	8 - 100
Machinery and equipment and vehicles	2 - 50
Other	3 - 20

The residual value of an asset is the estimated amount that the Group would currently obtain from disposal of the asset less the estimated costs of disposal, if the asset was already of the age and in the condition expected at the end of its useful life. The residual value of an asset set equal to zero, if the Group intends to use the object till the end of its physical useful life. The assets' residual values and useful lives are reviewed, and adjusted if appropriate, at the end of each reporting period.

(iii) Impairment

At the end of each reporting period, management assesses whether there is any indication of impairment of property, plant and equipment. If any such indication exists, management estimates the recoverable amount, which is determined as the higher of: an asset's fair value less costs to sell and its value in use. The carrying amount is reduced to the recoverable amount and the impairment loss is recognised in the profit or loss for the year. An impairment loss recognised for an asset in prior years is reversed if there has been a change in the estimates used to determine the asset's value in use or fair value less costs to sell.

Intangible assets

All of the Group's intangible assets have definite useful lives and primarily include capitalised computer software and licenses. Acquired computer software is capitalised on the basis of the costs incurred to acquire and bring it to use.

All intangible assets are amortised using the straight-line method over their useful lives, estimated by the management as from 2 to 25 years.

If impaired, the carrying amount of intangible assets is written down to the higher of: value in use and fair value less costs to sell.

If the Group acquires a group of assets, which is not a business, it spreads the cost of the group between the individual identifiable assets in the group based on their relative fair values at the acquisition date.

Assets that are subject to depreciation and amortisation are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognised for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs of disposal and value in use. For the purposes of assessing impairment, assets are grouped at the lowest levels for which there are largely independent cash inflows (cash-generating units). Prior impairments of non-financial assets (other than goodwill) are reviewed for possible reversal at each reporting date

Investment property

Investment property is property held by the Group to earn rental income or for capital appreciation and which is not occupied by the Group. Investment property includes construction in progress intended for use as investment property.

Investment properties are stated in the consolidated financial statements at cost less accumulated depreciation and provision for impairment, where required.

If any indication exists that investment properties may be impaired, the Group estimates the recoverable amount as the higher of value in use and fair value less costs to sell. The carrying amount of an investment property is written down to its recoverable amount through profit or loss for the year. An impairment loss recognised in prior years is reversed if there has been a subsequent change in the estimates used to determine the asset's recoverable amount. Subsequent expenditures are capitalised only when it is probable that future economic benefits associated with the investment property will flow to the Group and the cost can be measured reliably. All other repairs and maintenance costs are expensed when incurred.

2 Basis of Preparation and Significant Accounting Policies (continued)

If an investment property becomes owner-occupied, it is reclassified to property, plant and equipment, and its carrying amount at the date of reclassification becomes its deemed cost to be subsequently depreciated. Depreciation on investment property is calculated using the straight-line method to allocate its cost to its residual values over their estimated useful lives, as follows:

	Useful lives in years
Dam and hydraulic constructions	100
Other	5 - 20

Earned rental income is recorded in profit or loss for the year within revenue.

The carrying amount of investment property approximates fair value

Right-of-use assets

The Group leases various offices, equipment and vehicles. Contracts may contain both lease and non-lease components. The Group allocates the consideration in the contract to the lease and non-lease components based on their relative stand-alone prices. However, for leases of real estate for which the Group is a lessee, it has elected not to separate lease and non-lease components and instead accounts for these as a single lease component.

Assets arising from a lease are initially measured on a present value basis.

Right-of-use assets are measured at cost comprising the following:

- the amount of the initial measurement of lease liability,
- any lease payments made at or before the commencement date less any lease incentives received,
- costs to restore the asset to the conditions required by lease agreements,
- any initial direct costs.

Right-of-use assets are generally depreciated over the shorter of the asset's useful life and the lease term on a straight-line basis. If the Group is reasonably certain to exercise a purchase option, the right-of-use asset is depreciated over the underlying assets' useful lives.

Depreciation on the items of the right-of-use assets is calculated using the straight-line method over their estimated useful lives as follows:

	Useful lives in years
Land	34 – 63
Buildings and constructions	5 – 50

Discontinued operations

A discontinued operation is a component of the Group that either has been disposed of, or that is classified as held for sale, and: (a) represents a separate major line of business or geographical area of operations; (b) is part of a single co-ordinated plan to dispose of a separate major line of business or geographical area of operations; or (c) is a subsidiary acquired exclusively with a view to resale. Earnings and cash flows of discontinued operations, if any, are disclosed separately from continuing operations with comparatives being re-presented.

Inventories

Inventories are recorded at the lower of cost and net realisable value. The cost of inventory is determined on the first-in, first-out basis. The cost of finished goods and work in progress comprises raw material, direct labour, other direct costs and related production overheads, but excludes borrowing costs.

Net realisable value is the estimated selling price in the ordinary course of business, less the estimated cost of completion and selling expenses.

Trade and other receivables

Trade and other receivables, except for prepaid taxes and advances to supplies, are initially recognised at fair value and are subsequently measured at amortised cost using the effective interest method.

2 Basis of Preparation and Significant Accounting Policies (continued)

Advances to suppliers are carried at cost less provision for impairment. Advances are classified as non-current when the goods or services relating to the advances are expected to be obtained after one year, or when advances relate to an asset which will itself be classified as non-current upon initial recognition. Advances to acquire assets are transferred to the carrying amount of the asset once the Group has obtained control of the asset and it is probable that future economic benefits associated with the asset will flow to the Group. Other advances are written off to profit or loss when the goods or services relating to the advances are received. If there is an indication that the assets, goods or services relating to advances will not be received, the carrying value of the advances is written down accordingly, and a corresponding impairment loss is recognised in the profit or loss for the year. Prepaid taxes are stated at actual amounts paid less impairment provision.

Cash and cash equivalents

Cash and cash equivalents include cash on hand and cash at current bank accounts and repurchase and reverse repurchase agreements ("reverse repo") with other banks with an original maturity of less than ten days (secured debt instruments). Cash and cash equivalents are carried at AC because: (i) they are held for collection of contractual cash flows until maturity and those cash flows represent SPPI, and (ii) they are not designated at FVTPL.

Restricted balances are excluded from cash and cash equivalents for the purposes of the consolidated cash flow statement.

Balances restricted from being exchanged or used to settle a liability for at least twelve months after the reporting period are included in other non-current assets; balances restricted for more than three months but less than twelve months after the reporting period are included in other current assets.

Non-current assets held for sale (or disposal groups)

Non-current assets or disposal groups (which may include both non-current and current assets) are classified in the statement of financial position as ‘non-current assets held for sale and disposal groups’ if their carrying amount will be recovered principally through a sale transaction within twelve months after the reporting period. Assets are reclassified when all of the following conditions are met: (a) the assets are available for immediate sale in their present condition; (b) the Group’s management approved and initiated an active programme to locate a buyer; (c) the assets are actively marketed for a sale at a reasonable price; (d) the sale is expected within one year; and (e) it is unlikely that significant changes to the plan to sell will be made or that the plan will be withdrawn.

Share capital

Ordinary shares are classified as equity. Incremental costs directly attributable to the issue of new shares are shown in equity as a deduction, net of tax, from the proceeds. The Board of Directors of the Company determines value per share and a number of shares to be issued on each individual share issue based on the statutory rules. Any excess of the fair value of consideration received over the par value of shares issued is recorded as share premium in equity.

Dividends

Dividends are recognised as a liability and deducted from equity at the end of reporting period only if they are declared and approved before or on the end of reporting period.

Dividends are disclosed when they are proposed before the reporting date or proposed or declared after the reporting date but before the financial statements are authorised for issue.

Other reserves

Other reserves is the part of capital whose distribution to owners is restricted by IFRS, regulation or the Group's initiative and is prescribed by the charter documents. Other reserve capital includes business combination reserve, result of transactions with shareholder and other comprehensive income/loss. The accrual of expenses or the distribution of assets at the discretion of the shareholder, including fixed assets, business combinations, interests in other entities and disposal groups, cash and other, are recognised within the equity as "Other reserves". Other reserves also include gain on initial recognition of loans received from the shareholder with non-market terms.

Earnings per share and carrying amount of one share

Basic earnings per share are calculated by dividing the profit or loss attributable to owners of the Group by the weighted average number of ordinary shares in issue during the year. The Group has no dilutive potential ordinary shares; therefore, the diluted earnings per share equals the basic earnings per share (Note 35).

2 Basis of Preparation and Significant Accounting Policies (continued)

Value added tax

Value-added tax ("VAT") related to sales is payable to the tax authorities when goods are shipped, or services are rendered. Input VAT can be offset against output VAT upon the receipt of a tax invoice from a supplier.

Tax legislation allows the settlement of VAT on a net basis. Accordingly, VAT related to sales and purchases is stated in the statement of financial position on a net basis. Recoverable VAT is classified as non-current if its settlement is not expected within one year after the reporting period.

Provisions

Provisions are recognised when the Group has a present legal or constructive obligation as a result of past events, and it is probable that an outflow of resources will be required to settle the obligation, and a reliable estimate of the amount can be made. Provisions are not recognised for future operating losses.

Asset retirement obligation

Asset retirement obligation, including ash dump restoration provision is recognised when there is a high certainty of incurring the costs and those costs can be measured reliably. Estimated restoration costs are added to the cost of an item of property plant and equipment when incurred in the accounting period when the obligation arising from the related disturbance occurs, based on the net present value of estimated future costs. Asset retirement obligation does not include any additional obligations which are expected to arise from future disturbance.

Ash dump restoration costs include dismantling and demolition of ash dump infrastructure, environmental clean-up and discharge monitoring.

The costs are estimated on the basis of a restoration plan. The cost estimates are calculated annually during the operating life to reflect known developments, such as updated cost estimates and revisions to the estimated lives of operation and are subject to formal review at regular intervals.

Although the ultimate cost to be incurred is uncertain, the Group estimates the respective costs based on feasibility and engineering studies using current restoration standards and techniques for conducting works on restoration and remediation of waste polygons. The amortisation or "unwinding" of the discount applied in establishing the net present value of provisions is charged to profit and loss in each accounting period. The amortisation of the discount is shown as finance costs.

Employee benefits

(i) Long-term employee benefits

The Group companies provide the long-term employee benefits to employees before, on and after retirement, in accordance with a Collective Labour Agreement. The agreement provides for one-off retirement payments, financial aid for employees' disability, significant anniversaries and funeral aid to the Group's employees. The entitlement to some benefits is usually conditional on the employee remaining in service up to retirement age and the completion of a minimum service period.

The expected cost of these benefits is accrued over the period of employment using the same accounting methodology as used for the defined post-employment benefit plan. The Group does not have any funded pension plans. The liability recognised for the end of each reporting period represents the present value of defined benefit obligations. Actuarial gains and losses arising in the year are taken to other comprehensive income for the year. For this purpose, actuarial gains and losses comprise both the effects of changes in actuarial assumptions and experience adjustments arising because of differences between the previous actuarial assumptions and what has actually occurred.

Other movements in post-employment benefit obligations when incurred are accounted for as follows: (i) cost of services and net interest costs are included in profit or loss; and (ii) restatements are recorded in other comprehensive income.

The main assumptions used in accounting for defined benefit obligations are the discount rate and the personnel turnover assumptions. The discount rate is used to determine the net present value of future liabilities and each year the unwinding of the discount on those liabilities is charged to the profit or loss for the year as finance costs. The personnel turnover assumption is used to estimate the future stream of benefit payments, which is then discounted to arrive at a net present value of liabilities.

2 Basis of Preparation and Significant Accounting Policies (continued)

These obligations are valued annually by independent qualified actuaries.

(ii) Staff costs and related contributions

Wages, salaries, contributions to pension and social insurance funds, paid annual leave and sick leave, bonuses, and non-monetary benefits are accrued in the year in which the associated services are rendered by the employees of the Group.

On behalf of its employees, the Group withholds and transfer those statutory pension and post-employment benefit amounts prescribed by the legal requirements of the Republic of Kazakhstan to Unified Accumulative Pension Fund JSC ("Fund"). For those employees, not covered by the Collective Labour Agreement payments, upon retirement, the financial obligations of the Group cease and all subsequent payments to retired employees are administered by the Fund.

Lease liabilities

Liabilities arising from a lease are initially measured on a present value basis. Lease liabilities include the net present value of the following lease payments:

- fixed payments (including in-substance fixed payments), less any lease incentives receivable,
- variable lease payment that are based on an index or a rate, initially measured using the index or rate as at the commencement date,
- amounts expected to be payable by the Group under residual value guarantees,
- the exercise price of a purchase option if the Group is reasonably certain to exercise that option, and
- payments of penalties for terminating the lease, if the lease term reflects the Group exercising that option.

Extension and termination options are included in a number of property lease agreements across the Group. These terms are used to maximise operational flexibility in terms of managing the assets used in the Group's operations. The majority of extension and termination options held are exercisable only by the Group and not by the respective lessor. Extension options (or period after termination options) are only included in the lease term if the lease is reasonably certain to be extended (or not terminated). Lease payments to be made under reasonably certain extension options are also included in the measurement of the liability.

The lease payments are discounted using the interest rate implicit in the lease. If that rate cannot be readily determined, which is generally the case for leases of the Group, the Group's incremental borrowing rate is used, being the rate that the Group would have to pay to borrow the funds necessary to obtain an asset of similar value to the right-of-use asset in a similar economic environment with similar terms, collateral and conditions.

To determine the incremental borrowing rate, the Group:

- where possible, uses recent third-party financing received by the individual lessee as a starting point, adjusted to reflect changes in financing conditions since third party financing was received,
- uses a build-up approach that starts with a risk-free interest rate adjusted for credit risk, and
- makes adjustments specific to the lease, e.g. term, country, currency and collateral.

The Group is exposed to potential future increases in variable lease payments based on an index or rate, which are not included in the lease liability until they take effect.

When adjustments to lease payments based on an index or rate take effect, the lease liability is reassessed and adjusted against the right-of-use asset.

Lease payments are allocated between principal and finance costs. The finance costs are charged to profit or loss over the lease period so as to produce a constant periodic rate of interest on the remaining balance of the liability for each period.

Payments associated with short-term leases of equipment and vehicles and all leases of low-value assets are recognised on a straight-line basis as an expense in profit or loss. Short-term leases are leases with a lease term of 12 months or less.

2 Basis of Preparation and Significant Accounting Policies (continued)

Borrowings

Borrowings are recognised initially at fair value, net of transaction costs incurred and are subsequently carried at AC using the effective interest method.

In accounting for loans from the shareholders with off market terms, the Group records gain/(loss) on origination in equity as a capital contribution/(distribution). The method used reflects the transaction's economic substance and is applied consistently to all similar transactions and is disclosed in the consolidated financial statements.

General and specific borrowing costs directly attributable to the acquisition, construction or production of assets that necessarily take a substantial time to get ready for intended use or sale (qualifying assets) are capitalised as part of the costs of those assets.

The commencement date for capitalisation is when (a) the Group incurs expenditures for the qualifying asset; (b) it incurs borrowing costs; and (c) it undertakes activities that are necessary to prepare the asset for its intended use or sale. Capitalisation of borrowing costs continues up to the date when the assets are substantially ready for their use or sale.

The Group capitalises borrowing costs that could have been avoided if it had not made capital expenditure on qualifying assets. Borrowing costs capitalised are calculated at the Group's average funding cost (the weighted average interest cost is applied to the expenditures on the qualifying assets), except to the extent that funds are borrowed specifically for the purpose of obtaining a qualifying asset. Where this occurs, actual borrowing costs incurred on the specific borrowings less any investment income on the temporary investment of these borrowings are capitalised.

Borrowings are classified as current liabilities unless the Group has an unconditional right to defer settlement of the liability for at least twelve months after the reporting period.

Trade and other payables

Trade and other payables are accrued when the counterparty performed its obligations under the contract. Trade and other payables, except for advances received, are initially recognised at fair value and subsequently carried at amortised cost using the effective interest method. Advances received are stated at actual amounts received from the third parties.

Revenue recognition

Revenue is income arising in the course of the Group's ordinary activities.

Revenue is recognised in the amount of transaction price. Transaction price is the amount of consideration to which the Group expects to be entitled in exchange for transferring control over promised goods or services to a customer, excluding the amounts collected on behalf of third parties. Revenue is shown net of value-added tax and discounts. Revenue from sale of energy is recognised over the period.

Consolidated revenue of the Group is mainly attributed to sale and transmission of electric and heating power, and hot water production.

According to the contracts for sale and transmission of electric and heating power of the Group, obligations to be performed are identified when concluding the relevant contract. Contracts for sale and transmission of electric and heating power do not include related and/or additional services.

The Group does not assume concluding contracts which provide for a period between transfer of the promised goods or services to the customer and payment by the customer to be more than one year. Accordingly, the Group does not adjust transaction prices for time value for money.

According to the contracts for sale and transmission of electric and heating power, the contract amount is the price for sold or transmitted amount of electric or heating power, which is a separate performance obligation.

Electric and heating power generation and sale

Revenues are recognised based on the actual amount of electric and heating power sold by the Group's power plants.

Revenue is determined based on tariffs approved by the authorised agency.

2 Basis of Preparation and Significant Accounting Policies (continued)

Sales of electric and heating power are recognised based on readings of metering devices on a monthly basis. These devices installed at connection point of the Group's power plant to the transmission networks.

A receivable is recognised when electric and heating power is delivered at the connection point of the Group's power plant to the transmission networks, as this is the point in time that the consideration is unconditional because only the passage of time is required before the payment is due. Actual volume of electric and heating power transmitted for the accounting period is supported by the act of electric power supply/reconciliation report on heating power. Invoices are issued to customers on a monthly basis.

Electric power transmission and distribution

The Group provides services under fixed-price contracts per 1 kWh of transmitted and distributed power based on the tariffs approved by the authorised agency.

Revenue from providing services is recognised in the accounting period in which the services are rendered. Revenue is recognised based on the actual volume of electric power transmitted over the reporting period because the customer receives and uses the benefits simultaneously.

The actual volume of electric power transmitted and distributed for the reporting period is supported by relevant reconciliation reports to be monthly executed and signed with customers based on readings of metering devices. Customers are billed on a monthly basis on the last day of each month, and consideration is payable within 5 working days after billing.

A receivable is recognised when an invoice is issued, as this is the point in time that the consideration is unconditional because only the passage of time is required before the payment is due.

Revenue from services to maintain the electric power capacity

Also, the Group provides a service to maintain the electric power capacity. Revenues from the provision of services to maintain the electric power capacity are recognized in the reporting period when these services were provided. Revenue is determined on the basis of the actual electric power capacity, on the basis of monthly reports on the available electric power capacity from a single purchaser in accordance with the Rules of the power capacity market.

The contract provides for payment for 1 kW of available power per month, and revenue is recognized in the amount to which the Group has the right to invoice.

Pursuant to the certificate signed for the reporting month, the Group issues invoices to the Single Purchaser on a monthly basis.

Sale of electric power

The Group sells electric power under agreements with individuals and legal entities based on the tariffs approved by the authorised agency.

Sales to legal entities are recognised monthly in the reporting period in which electric power is consumed, according to readings of the metering devices. A legal entity agreement requires payment within 5 working days after billing. An agreement of publicly-funded legal entities provides for payment until 15th day of the month following the billing month.

Sales to individuals are recognised monthly in the reporting period in which electric power is consumed. Revenues from agreements with individuals include revenues for the last few days of the month after reading of the metering devices, which are recognised as a proportion of the total electric power sold for the billing month. An agreement with individuals provides for payment until the 25th day of the month following the billing month, based on the payment document to be issued by the Company. The billing period is one calendar month.

Offsetting

A portion of sales and purchases are settled by offset, barter or other non-cash settlements.

These transactions are settled generally as the exchange of dissimilar goods and services with the industrial and commercial customers in the form of offset.

Sales and purchases that are expected to be settled by mutual settlements, barter or other non-cash settlements are recognised based on the Group entities' management estimate of the fair value to be received or given up in non-cash settlements. The fair value is determined with reference to observable market information.

2 Basis of Preparation and Significant Accounting Policies (continued)

Non-cash transactions have been excluded from the consolidated cash flow statement. Investing and financing activities and the total of operating activities in these consolidated statements represent actual cash flows.

Segment reporting

Segments are reported in a manner consistent with the internal reporting provided to the Group's chief operating decision maker. Segments whose revenue, financial result or assets are ten percent or more of all the segments assets are reported separately.

Income taxes

Income taxes have been provided for in these consolidated financial statements in accordance with legislation of the Republic of Kazakhstan enacted or substantively enacted by the end of the reporting period.

The income tax charge comprises current tax and deferred tax and is recognised in profit or loss for the year except if it is recognised in other comprehensive income or directly in equity because it relates to transactions that are also recognised, in the same or a different period, in other comprehensive income or directly in equity.

Current tax is the amount expected to be paid to or recovered from the state budget in respect of taxable profits or losses for the current and prior periods. Taxable profits or losses are based on estimates if financial statements are authorised prior to filing relevant tax returns. Taxes other than on income are recorded within operating expenses.

Deferred income tax is provided using the balance sheet liability method for tax loss carry forwards and temporary differences arising between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes. In accordance with the exception for initial recognition, the deferred income tax is not accounted for if it arises from initial recognition of an asset or liability in a transaction other than a business combination that at the time of the transaction affects neither accounting nor taxable profit. Deferred tax balances are measured at tax rates, which are expected to apply to the period when the temporary differences will reverse or tax loss carry-forwards will be utilised in accordance with tax rates enacted or substantively enacted at the end of reporting period. Deferred tax assets and liabilities are netted only within the individual companies of the Group. Deferred tax assets for deductible temporary differences and tax loss carry forwards are recorded only to the extent that it is probable that future taxable profit will be available against which the deductions can be utilised.

The Group controls the reversal of temporary differences relating to taxes chargeable on dividends from subsidiaries or on gains upon their disposal. The Group does not recognise deferred tax liabilities on such temporary differences except to the extent that management expects the temporary differences to reverse in the foreseeable future.

In determining the tax bases of the restoration and closure costs are added to the cost of property plant and equipment and provision for asset retirement obligation the Group allocates the future tax deductions to the liability. Under this approach the initial recognition exception does not apply.

Deferred tax liability is recognised in respect of the taxable temporary difference on the restoration and closure costs added to the cost of property plant and equipment and, subject to recognition criteria mentioned above, a deferred tax asset is recognised in respect of the deductible temporary difference on the provision for asset retirement obligation.

The Group's uncertain tax positions are reassessed by management at the end of each reporting period.

Liabilities are recorded for income tax positions that are determined by management (the assessment is based on the interpretation of tax laws that have been enacted or substantively enacted by the end of the reporting period and any known court or other rulings on such issues) as more likely than not to result in additional taxes being levied if the positions were to be challenged by the tax authorities. Liabilities for penalties, interest and taxes other than on income are recognised based on management's best estimate of the expenditure required to settle the obligations at the end of the reporting period. Adjustments for uncertain income tax positions are recorded within the income tax charge.

Uncertain tax positions

Management at the end of each reporting period evaluates the Group's uncertain tax positions. Liabilities reported in respect of income tax positions are taken into account when management believes that the likelihood of emergence of additional tax liabilities, in case the tax authorities challenge the tax position of the Group, is higher than the probability of their absence.

2 Basis of Preparation and Significant Accounting Policies (continued)

Such an assessment is conducted based on the interpretation of tax laws that are in force or in effect at the end of the reporting period, as well as any known court decisions or other decisions on such matters. Liabilities for fines, penalties and taxes, other than income tax, are presented on the basis of management's best estimate of the costs required to settle the obligations at the end of the reporting period. Adjustments to uncertain income tax positions are reported within income tax expense.

Change in presentation: reclassification

As of 31 December 2022, the Group classified a long-term borrowing of JSC Halyk Bank (the "Bank") as current liabilities. These borrowings have a maturity up to 2029. The management made this classification due to a clause in the loan agreement which requires immediate repayment not earlier than 10 months after a written request of the Bank. In February 2023, the management signed an addendum and amended this clause to 13 months (Note 34). As of the date of these consolidated financial statements there was no request from the Bank for early repayment. The management decided to adjust the presentation of the corresponding figures in line with the current year. The effect of reclassifications for presentation purposes was as follows on amounts at 31 December 2021:

In thousands of Kazakhstani Tenge	**As originally presented**	**Reclassification**	**As reclassified at 31 December 2021**
Current borrowings	85,046,407	19,311,222	104,357,629
Non-current borrowings	209,848,259	(19,311,222)	190,537,037

3 New Accounting Pronouncements

The following amended standards and interpretations became effective from 1 January 2022, but did not have any material impact on the Group:

- Proceeds before intended use, Onerous contracts – cost of fulfilling a contract, Reference to the Conceptual Framework – narrow scope amendments to IAS 16, IAS 37 and IFRS 3, and Annual Improvements to IFRSs 2018-2020 – amendments to IFRS 1, IFRS 9, IFRS 16 and IAS 41 (issued on 14 May 2020 and effective for annual periods beginning on or after 1 January 2022).

New standards and interpretations

Certain new standards and interpretations have been issued that are mandatory for the annual periods beginning on or after 1 January 2023 or later, and which the Group has not early adopted.

- Sale or Contribution of Assets between an Investor and its Associate or Joint Venture – Amendments to IFRS 10 and IAS 28 (issued on 11 September 2014 and effective for annual periods beginning on or after a date to be determined by the IASB).
- IFRS 17 "Insurance Contracts" (issued on 18 May 2017 and effective for annual periods beginning on or after 1 January 2021, the effective date subsequently modified to 1 January 2023 by the Amendments to IFRS 17 as discussed below).
- Amendments to IFRS 17 and an amendment to IFRS 4 (issued on 25 June 2020 and effective for annual periods beginning on or after 1 January 2023).
- Amendments to IAS 1 and IFRS Practice Statement 2: Disclosure of Accounting policies (issued on 12 February 2021 and effective for annual periods beginning on or after 1 January 2023).
- Amendments to IAS 8: Definition of Accounting Estimates (issued on 12 February 2021 and effective for annual periods beginning on or after 1 January 2023).
- Deferred tax related to assets and liabilities arising from a single transaction – Amendments to IAS 12 (issued on 7 May 2021 and effective for annual periods beginning on or after 1 January 2023). The Group is currently assessing the impact of the amendments on its financial statements.
- Transition option for insurers applying IFRS 17 – Amendments to IFRS 17 (issued on 9 December 2021 and effective for annual periods beginning on or after 1 January 2023).
- Amendments to IFRS 16 Leases: Lease Liability in a Sale and Leaseback (issued on 22 September 2022 and effective for annual periods beginning on or after 1 January 2024).
- Classification of liabilities as current or non-current – Amendments to IAS 1 (originally issued on 23 January 2020 and subsequently amended on 15 July 2020 and 31 October 2022, ultimately effective for annual periods beginning on or after 1 January 2024).

Unless otherwise described above, the new standards and interpretations are not expected to affect significantly the Group's consolidated financial statements.

4 Critical Accounting Estimates, and Judgements in Applying Accounting Policies

The Group makes estimates and assumptions that affect the amounts recognised in the consolidated financial statements and the carrying amounts of assets and liabilities within the next financial year. Estimates and judgements are continually evaluated and are based on management's experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. Management also makes certain judgements, apart from those involving estimations, in the process of applying the accounting policies. Judgements that have the most significant effect on the amounts recognised in the consolidated financial statements and estimates that can cause a significant adjustment to the carrying amount of assets and liabilities within the next financial year include:

Impairment of non-financial assets

At each reporting date management assesses whether there is any indication of impairment of separate assets or groups of assets, and whether there is any indication that an impairment loss recognised in prior periods for separate assets or groups of assets other than goodwill may no longer exist or may have decreased.

If such indications exist, management estimates the recoverable amount of an asset, which is determined as the higher of an asset's fair value less costs to sell and its value in use. The calculation of value in use requires the application of the management's estimates and judgments, which are deemed appropriate under the current circumstances.

Assessment of impairment indicators also requires the use of judgments and estimates in determining possible technological obsolescence of fixed assets, discontinuing operations, residual useful lives, and other changes in operating conditions.

Under IAS 36, one of the possible impairment indicators is the presence of significant changes that had negative consequences for the Group that occurred during the period or are expected in the near future in the technological, market, economic or legal environment in which the Group operates or in the market for which the asset is used.

In assessing the recoverable amount of assets, the Group makes estimates and judgments. Estimates and judgments are repeatedly evaluated and based on management's experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. Management also makes certain judgments, apart from those involving estimations, in the process of applying the accounting policies.

Analysis of the impairment indicators of property, plant and equipment – production of electricity and heat based on coal, transmission and distribution of electricity

The Group's management performed the analysis of the impairment indicators of property, plant and equipment of subsidiaries JSC "Almaty Electric Stations" ("AlES"), Ekibastuz GRES-1 named after Bulat Nurzhanov LLP ("EGRES-1"), Alatau Zharyk Company JSC ("AZhK") as well as investments in the joint venture JSC "Station Ekibastuzskaya GRES-2" (hereinafter "SEGRES-2") in accordance with IAS 36 "Impairment of Assets".

The principal facts and assumptions used in the analysis of the impairment indicators are:

- Lack of negative changes in the economic efficiency of subsidiaries for the reporting period;
- Increase in marginal tariffs for electricity for energy producing organizations from 1 July 2022 in accordance with Order of the Minister of Energy of the RoK dated 30 June 2022 No. 226, with the possibility of adjusting tariffs with an increase in basic costs, in accordance with the Rules for approving the marginal tariff for electrical energy, approved by Order of the Minister of Energy of the RoK dated 27 February 2015 No. 147;
- A change in interest rates on loans will not have a significant impact on the recoverable amount of assets, since an increase in the debt financing rate will be similarly reflected in the WACC rate when calculating the rate of return, in the next validity period of the cap tariffs, according to the methodology for determining the rate of return taken into account when approving the cap tariffs for electricity, as well as a fixed profit for balancing, taken into account when approving cap tariffs for balancing electricity approved by Order of the Minister of Energy of the RoK dated 22 May 2020 No. 205, the cost part of the tariff also includes interest expenses for the previous period;
- A change in inflation rates will not have a significant impact, since the cost part of the tariff includes costs taking into account actual inflation for the previous year, as well as amendments to the Law "On Natural Monopolies" dated 27 December 2018 No. 204-VI ZRK stipulate additional conditions for adjusting tariffs approved for 5 years for the transmission of electricity before its expiration (change in the approved investment program in connection with the implementation of national projects, receipt on the balance sheet or in trust management of networks, change in the average monthly nominal wage);
- Lack of significant changes having adverse consequences for subsidiaries, which occurred during the period or may presumably occur in the nearest future;

4 Critical Accounting Estimates, and Judgements in Applying Accounting Policies (continued)

- Projected growth in the medium term in demand for electricity in the northern and southern zones of the Republic of Kazakhstan;

Additional facts and assumptions used in the analysis of impairment indicators for AlES:

- Increase in the tariff for heat energy from 1 September 2022 with the possibility of adjusting tariffs when changing the type and cost of strategic goods, according to the Law of RoK “On natural monopolies”;
- It is planned to modernize the two main power plants of AlES (Almaty CHP-2 and CHP-3). The residual value of the existing assets of the coal-fired power units of these plants, subject to conservation or dismantling, by the time the new gas turbine/combined cycle power units are put into operation will be equal to zero;
- No significant changes that have occurred during the period, or are expected to occur in the near future and can have a material effect on the asset's recoverable amount.

Modernisation of Almaty CHP-2 with the minimization of the environmental impact

The project is being implemented as part of the execution of the order of the President of the Republic of Kazakhstan to ensure the construction of a new combined cycle gas plant at the Almaty CHP-2 to reduce emissions of harmful substances into the atmosphere, ensure the reliability and efficiency of energy and heat supply through the use of modern environmentally clean technologies.

The project is included in the national project "Sustainable economic growth aimed at improving the welfare of Kazakhstanis" approved by Decree of the Government of the Republic of Kazakhstan dated 12 October 2021 No. 730.

The conclusion of an investment agreement and the receipt of an individual capacity tariff to finance the project of converting CHP-2 to gas is expected by the end of 2023. The project for the modernization of CHP-2 provides for the conservation of the existing capacities of CHP-2 after the commissioning of a new gas-fired plant. The Group's management plans to complete the project of converting CHP-2 to gas by 31 December 2026. In 2021, the Group recognized a provision for impairment in the amount of KZT 20,737,321 thousand of the core assets of CHP-2, including coal-fired power units subject to conservation or dismantling after commissioning of the combined-cycle gas plant. Accordingly, the residual value of these assets will be zero by the time the new combined-cycle power units are put into operation.

Reconstruction of Almaty CHP-3

AlES developed a feasibility study “Reconstruction of the Almaty CHP-3 (with construction of a CCGT unit with a capacity of at least 450 MW)" (the "Project"). The project implementation period: 2022-2025. The purpose of the Project: Reconstruction of the Almaty CHP-3 provides for the replacement of the existing pulverized coal-fired equipment with modern environmentally friendly combined cycle power units, the construction of a new CHP plant of greater capacity with a cycling service on the existing site, to partially cover the shortage of maneuverable capacities in the southern zone of Kazakhstan.

On 10 October 2022, AlES received a positive opinion of a comprehensive non-departmental expertise No. 02-0158/22 on the feasibility study of the Project. On 14 December 2022, AlES took part in the auction, and per the results, AlES was declared the winner of the auction (Tenge 9,788,700/MW*month excluding VAT). The committed capacity is 480 MW.

On 27 January 2023, AlES sent to “Financial Settlement Centre for Support of Renewable Energy Sources” LLP a signed Agreement on the purchase of a service to maintain the readiness of electric power during the construction of newly commissioned generating plants with a cycle generation mode.

The Almaty CHP-3 reconstruction project provides for the replacement of the existing equipment, the fleet life of which will be exhausted by the time the new plant is commissioned, with modern environmentally friendly combined cycle power units, as well as fully depreciated, so the Group's management did not identify any significant changes having negative consequences for the Group, which are expected in the near future.

4 Critical Accounting Estimates, and Judgements in Applying Accounting Policies (continued)

Additional facts and assumptions used in the analysis of impairment indicators for AZhK:

- Overfulfillment of the plan in terms of key operational and financial performance indicators at 31 December 2022;
- Projected growth in the medium term in demand for electricity in the Almaty city and the Almaty region;
- Increase in the tariff for electricity transmission from 1 September 2022 per joint order of the DCRNM of the Ministry of National Economy of the Republic of Kazakhstan for Almaty and Almaty Region No. 89-OD dated 18 August 2022;
- Law of the Republic of Kazakhstan dated 30 December 2022 No. 177-VII amended Law of RoK "On Natural Monopolies" dated 27 December 2018 No. 204-VI ZRK allowing to adjust the tariffs for electricity transmission approved for 5 years before expiration.

Results of analysis of the impairment indicators of property, plant and equipment – production of electricity and heat based on coal, transmission and distribution of electricity

As a result of the analysis of external and internal impairment indicators, the Group's management concluded that there were no impairment indicators at the date of the analysis. Accordingly, the Group's management has elected not to test for impairment of property, plant and equipment and intangible assets of these subsidiaries and investments in the joint venture at 31 December 2022.

Analysis of indications of impairment of property, plant and equipment - green energy production

In connection with the restructuring of green energy assets associated with the registration of a new subsidiary Qazaq Green Power PLC and the subsequent transfer of a full stake in Moynak HPP JSC, and a stake in First Wind Power Plant LLP, Samruk-Green Energy LLP, the Group carried out a fair value assessment, which revealed that for Samruk-Green Energy LLP the carrying amount of the assets exceeds the fair value at 31 December 2022. For Moynakskaya HPP JSC and First Wind Power Plant LLP, the fair value of the assets was significantly higher than the carrying amount. When analyzing impairment indicators for the remaining groups of green energy assets, the Group identified indicators of impairment for Semirechya Energy LLP and Ereymentau Wind Power LLP and performed an impairment test for property, plant and equipment and intangible assets under IAS 36 Impairment of Assets.

The recoverable amount of property, plant and equipment and intangible assets was determined based on the measurement of estimated future cash inflows and outflows from the use of the assets, the discount rate and other indicators.

Management classifies property, plant and equipment and intangible assets of each subsidiary as a single cash-generating unit as it is the smallest identifiable group of assets that generates cash inflows that are substantially independent of the cash flows generated by other assets and the lowest level at which each the subsidiary controls the recovery of the value of the assets. Management has estimated the recoverable amount of property, plant and equipment based on value in use, defined as the sum of the estimated discounted future cash flows that the Group expects to receive from their use.

Samruk-Green Energy LLP

The cash flows under the Samruk-Green Energy LLP's model were calculated up to 2051 based on the remaining useful life of the assets.

The key assumptions used by management in the financial model in determining value in use are the following:

Forecast volumes and tariffs for the sale of electricity:

The sales price of Samruk-Green Energy LLP is set at fixed tariffs under Law of the Republic of Kazakhstan dated 4 July 2009 No. 165-IV "On supporting the use of renewable energy sources and subject to annual indexation in accordance with the Rules for determining fixed tariffs and maximum auction prices dated 27 March 2014 No. 271.

The sales forecast is based on information from previous years and management's expectations in accordance with the Group's Development Plan for 2023-2027.

	2023	**2024**	**2025**	**2026**	**2027**
Volume of sales of electricity million kWh	19,930	19,887	19,858	19,829	19,800

The volume of sales for 2028-2051 was determined at the level of the volumes of the Group Development Plan for 2023-2027.

4 Critical Accounting Estimates, and Judgements in Applying Accounting Policies (continued)

Discount rate:

The cash flows were discounted using an after-tax interest rate of 17.33% per annum, which was determined based on the weighted average cost of capital of Samruk-Green Energy LLP.

As a result of the test, the Group recognized an impairment loss of Tenge 2,720,934 thousand.

Semirechya Energy LLP

As a result of the test, the investment in Semirechya Energy LLP was completely impaired, as the value in use of the investments was zero. The Group recognized an impairment loss on investments of Tenge 1,529,090 thousand.

Ereymentau Wind Power LLP

The cash flows under Ereymentau Wind Power LLP's model were calculated up to 2044 based on the useful life of assets that are planned to be put into operation in the second half of 2024.

The key assumptions used by management in the financial model in determining value in use are:

Forecast volumes and tariffs for the sale of electricity:

The electricity price was determined as the average of commercial offers received by similar companies of the Group, from a number of potential consumers, taking into account annual indexation for forecast inflation.

Commissioning dates are based on the management's expectations, the volumes and period of electricity generation by wind turbines are based on the technical documentation of the project (design estimates, contract with the contractor, etc.).

	2024	**2025**	**2026**	**2027**	**2044**
Electricity sales volume, thousand kWh	88,688	212,850	212,850	212,850	124,163
Tariffs Tenge/kWh	19.07	20.19	21.27	22.28	38.83

The volume of sales for 2028-2044 was determined at the level of the volumes of the Group Development Plan for 2023-2027.

Discount rate:

The cash flows were discounted using an after-tax interest rate of 16.97% per annum, which was determined based on the weighted average cost of capital of Ereymentau Wind Power LLP.

As a result of the test, the Group recognized an impairment loss of Tenge 6,220,277 thousand.

Sensitivity of impairment test - for Green energy production

In thousands of Tenge	(Decrease)/increase in material assumptions	(Decrease)/increase in value in use
Electricity tariff	-10%	(2,316,504)
	+10%	2,336,474
Sales volume	-10%	(2,790,534)
	+10%	2,790,534
WACC	-1%	1,393,629
	+1%	(1,255,463)

4 Critical Accounting Estimates, and Judgements in Applying Accounting Policies (continued)

Accounting for property, plant and equipment

Property, plant and equipment with a carrying value of Tenge 15,181,721 thousand represent the assets of the First Wind Power Plant (PVES) of Tenge 14,296,747 thousand and Samruk-Green Energy LLP of Tenge 844,974 thousand.

The Settlement and Financial Centre, a governmental organization, acts as an agent that buys the entire volume of electricity generated by RES companies and resells it to stations powered by coal and hydrocarbons. The total volume of electricity is purchased from the power plants at a specified tariff above the market one, which is annually adjusted to the inflation rate.

According to IFRS 16, arrangements of this nature may contain a lease. Upon review of IFRS 16 criteria, management concluded that this arrangement is an operating lease, whereby PVES and Samruk-Green Energy LLP act as lessors. Accordingly, revenue from electricity of these stations was included in rental income from these power plants.

Useful lives of property, plant and equipment

The estimation of the useful lives of items of property, plant and equipment is a matter of judgment based on the experience with similar assets. The future economic benefits embodied in the assets are consumed principally through use. However, other factors, such as technical or commercial obsolescence and wear and tear, often result in the diminution of the economic benefits embodied in the assets. Management assesses the remaining useful lives in accordance with the current technical conditions of the assets and estimated period during which the assets are expected to earn benefits for the Group.

The following primary factors are considered: (a) expected usage of the assets; (b) expected physical wear and tear, which depends on operational factors and maintenance programme; and (c) technical or commercial obsolescence arising from changes in market conditions.

If the estimated useful lives were different by 10% from management's estimates, the depreciation for the year ended 31 December 2022 would have been higher/lower by Tenge 5,952,097 thousand (31 December 2021: higher/lower by Tenge 5,497,703 thousand).

Balkhash Thermal Power Plant

On 29 October 2019, the Group acquired 50% + 1 share of BTPP from Samsung C&T and became the owner of 100% interest in BTPP. As of the acquisition date, BTPP was on the brink of bankruptcy and did not actually perform any significant activities. Since 2017, creditors and suppliers have repeatedly sued due to the insolvency of BTPP, which in turn led to the seizure of property, and also significantly limited the activities of BTPP. On 6 December 2019, a temporary administrator was appointed by the court to control and conduct the bankruptcy process.

On 20 April 2022, following the petition of Bank CenterCredit JSC, the Specialized Interdistrict Court of Almaty Region ("SIEC") initiated a civil case to declare BTPP bankrupt. By the decision of SIEC of the Almaty region dated 27 June 2022, the BTPP was refused to be declared bankrupt. By the decision of the Judicial Chamber for Civil Cases of the Almaty Regional Court, the decision of SIEC was upheld, the appeal of Bank CenterCredit JSC was not satisfied. According to the courts, the recognition of BTPP as a bankrupt is premature due to the absence of a decision on the part of the state on the future fate of the Project and is based on arguments about the presence of assets and property, plant and equipment in BTPP, the cost of which may be the subject of fulfilment of obligations if the Government of the RoK makes a negative conclusion regarding the project, as well as a prospect for resuming the Project and restoring the financial position of the debtor with the possibility of repaying debts to creditors.

In turn, the operations of the BTPP were completely suspended as of 31 December 2022. BTPP's property was fully distrained and arrested by bailiffs on the applications of creditors and tax authorities for subsequent sale through an auction to pay off the debt to creditors. Therefore, management believes that the Group has no control and the investments in BTPP are fully impaired.

Asset retirement obligations

The Group's management performed an analysis of the existence and necessity of recognizing obligations for the decommissioning, dismantling and reclamation of the territory of the Group's production assets.

4 Critical Accounting Estimates, and Judgements in Applying Accounting Policies (continued)

In particular, the Group's management analyzed the requirements of the Environmental Code of the Republic of Kazakhstan that, after the cessation of operation of facilities that have a negative impact on the environment, facility operators are required to ensure the elimination of the consequences of the operation of such facilities per the requirements of the legislation of the Republic of Kazakhstan. In accordance with the provisions of the Environmental Code, liquidation measures depend on the nature of facilities and the degree of their impact on the environment, in particular, the code regulates the classification of facilities into categories that reflect the degree of impact on the environment.

The Group conducted an analysis of the requirements, received appropriate explanations from government authorities, determined the approach and method of evaluation and, based on the Group's interpretation, per the provisions of the Environmental Code of the Republic of Kazakhstan, the legislation on electric power industry of the Republic of Kazakhstan, as well as the Group's accounting policy, recognized provisions for liabilities of subsidiaries "Ekibastuzskaya GRES-1 named after Bulat Nurzhanov" LLP, "Almaty Electric Stations" JSC, "First Wind Power Plant" LLP and "Samruk-Green Energy" LLP, as well as the joint venture "Station Ekibastuzskaya GRES-2" JSC to ensure the liquidation consequences of operation of the facilities at 31 December 2022.

The provisions were determined based on the interpretation of the group of the current environmental legislation of the Republic of Kazakhstan, supported by a feasibility study and/or engineering studies per the current standards and methods of liquidation (dismantling), reclamation work, the level of technology and prices.

The following judgments were applied by the Group in determining the amount of the obligation to eliminate the consequences of the operation of the facilities as at 31 December 2022:

- calculation of obligations to eliminate the consequences of the operation of the facilities as of 31 December 2022 was performed by the Group based on the results of assessments carried out by independent and internal specialists. The scope of work provided for by law and included in the calculation included the dismantling and disposal of the main equipment and mechanisms directly involved in the production of electrical and thermal energy (steam boilers, turbines, generators, fuel supply, etc.), engineering systems and structures intended for removal of combustion products, as well as equipment of fuel oil facilities and chemical reagents warehouse, which have a negative impact on the environment and the safety of life and/or health of people;
- there are assets (administrative buildings and other structures) on the balance sheet of facility operators in the Group, which in the future are very likely to be converted, and also have a minimal adverse impact on the environment, for which there is no need to recognize obligations to eliminate the consequences of their operation;
- for thermal power plants, referred to the I category, the amount of reserves is determined based on the expected costs that will be incurred by the facilities during the liquidation of the main equipment and mechanisms directly involved in the production of electrical and thermal energy (steam boilers, turbines, generators, fuel supply, etc.), engineering systems and structures designed to remove combustion products, as well as equipment for fuel oil facilities and a chemical reagents warehouse, as well as facilities and equipment of the fuel oil economy, which really have an adverse impact on the environment;
- the Group's management applied the judgment that the deadline for the liquidation of category I facilities of Ekibastuzskaya GRES-1 and Ekibastuzskaya GRES-2, which have a negative impact on the environment, is in 2055 and 2053, respectively, based on the useful lives of the assets. These useful lives are justified by the fact that the residual fleet life of the main and auxiliary equipment and engineering structures of the main equipment will be extended through major repairs or reconstruction until the end of filling the existing ash dumps;
- Deadlines for closing ash dumps are applied in accordance with the approved working projects for closing ash dumps per the "Rules for the formation of liquidation funds for waste disposal sites" approved by Decree of the Government of the RoK dated 10 July 2007 No. 591. Coal reserves are sufficient to continue the work on these stations. These periods were determined based on the need to ensure the country's energy security in response to a predicted shortage of electricity in the RoK.
- for Almaty Electric Stations JSC, the deadlines for the liquidation of CHPP-2 and CHPP-3 facilities were applied taking into account the timing of implementation, commissioning and technical parameters of the projects "Modernization of Almaty CHPP-2 with minimization of environmental impact" and "Reconstruction of Almaty CHPP-3".

4 Critical Accounting Estimates, and Judgements in Applying Accounting Policies (continued)

- hydroelectric power plants of the Group belong to category II facilities.the Shardara hydroelectric power station, as a strategic complex structure, which is an integral part of the hydrotechnical complex of the Shardara hydroelectric complex on the Syrdarya River, which has a direct purpose for flood control and irrigation, due to the specifics of its activity, does not eliminate embankments / dams and adjacent hydraulic structures; at the same time, in the opinion of the station's management, the liquidation work of the Company may be limited to the dismantling of the equipment of hydroelectric units and some surface utility facilities, and the provision to cover them is not significant at the reporting date;
- for the Moinak hydroelectric power plant, , in accordance with the legislation, the Group's management applied the judgment that the useful lives of the main hydraulic structures, as structures of I and II classes, in the conditions of timely overhauls amount to 60 years. After the expiration of useful lives of the main building of the hydroelectric power plant, the diversion tunnel and the halfway, in accordance with the norms of the "Methodological recommendations on the procedure for extending the life of the safe operation of technical devices, equipment and structures at hazardous production facilities," further use of these structures as a hydrological post and mudflow holders during the flood period is expected on the Sharyn River. At the same time, in the opinion of the plant's management, the liquidation work of the Company may be limited to the dismantling of the equipment of hydroelectric units and some surface utility facilities, and the provision for their coverage is not material at the reporting date;
- AZhK facilities in III and IV categories. Due to the fact that AZhK's production facilities have an insignificant minimum negative impact on the environment, the Group has not accrued obligations for liquidation of the consequences of activities in these consolidated financial statements, as there is currently no reasonable calculation method for these types of assets, and the Group has received confirmation from government authorities on the absence of obligations to eliminate the consequences for the environment;
- wind and solar power plants recognize provisions for dismantling and removal of generating and technological equipment, further, the liquidation terms are determined by the technical specifications of equipment and structures.

In view of the above, the estimated future costs of facilities for remediation are determined at current prices, increased using the estimated long-term inflation rate for the Republic of Kazakhstan and discounted.

Key assumptions in making such estimates include estimates of the discount rate, amount and timing of future cash flows. The discount rate is based on the risk-free rate defined as the yield on government bonds with maturities that coincide with the liquidation of the facilities.

	Liquidation term	Cost of the liquidation provision at 31 December 2022 (in thousands of tenge)
Subsidiaries		
Ekibastuzskaya GRES-1 named after Bulat Nurzhanov LLP	2055	7,402,232
Almaty Electric Stations JSC	2026-2065	10,494,727
First Wind Power Plant LLP	2035	1,161,534
Samruk-Green Energy LLP	2042-2051	87,912
Total for subsidiaries		**19,146,405**
Joint ventures and associates		
Ekibastuzskaya GRES-2 JSC	2053	4,218,679

Estimated asset restoration costs were added to the cost of an item of property plant and equipment (Note 7).

4 Critical Accounting Estimates, and Judgements in Applying Accounting Policies (continued)

Sensitivity analysis

In thousands of Tenge	(Decrease)/increase in material assumptions	(Decrease)/increase in obligation to eliminate the consequences of operation of facilities
Inflation rates	-1%	(10,419,497)
	+1%	11,090,447
Discount rates	-1%	3,188,603
	+1%	(2,477,312)
Liquidation period	-10%	2,838,527
	+10%	(2,220,194)

Since the actual costs of eliminating the consequences of operating the facilities may differ from their estimates due to changes in relevant legislation, interpretation of regulations, technologies, prices and other conditions, and these costs will be incurred in the distant future, the carrying amount of the provisions is subject to regular review and adjustment to take into account such changes.

Payable to the Akimat

In 2009 AZhK was involved in litigation with the Akimat of Almaty city ("Akimat") related to the settlement of AZhK payables to Akimat. On 14 February 2014 AZhK and Akimat signed an amicable agreement for the settlement of AZhK liabilities. To settle the liabilities, among other procedures, AZhK shall accept power lines, being in the communal ownership and under trust management of the Akimat, and Akimat assumes to write-off the liabilities of AZhK. The amount of liabilities of the AZhK to Akimat, after deduction of all payments made during the previous years as part of the amicable agreement, as of 31 December 2022 is Tenge 5,841,514 thousand (31 December 2022: Tenge 5,841,514 thousand). As of 31 December 2022, the transfer of ownership over power lines has not been completed. The Group will derecognise this liability when it is exempted from payments, i.e., at the time of implementation of all actions by the parties to the amicable agreement, particularly at the time of the assuming the ownership over power lines from the Akimat. At the same time, the Group recognises a gain from write-off of the liability in the amount of Tenge 5,841,514 thousand.

ECL measurement

Measurement of ECLs is a significant estimate that involves determination methodology, models and data inputs. Details of ECL measurement methodology are disclosed in Note 32. The following components have a major impact on the credit loss allowance: definition of default, SICR, probability of default ("PD"), exposure at default ("EAD"), and loss given default ("LGD"), as well as models of macro-economic scenarios. The Company regularly reviews and validates the models and inputs for the models to reduce any differences between expected credit loss estimates and actual losses in respect of receivables.

5 Segment Information

Operating segments are components that engage in business activities that may earn revenues or incur expenses, segment operating results are regularly reviewed by the chief operating decision maker (CODM) and for which discrete financial information is available. The CODM is the person or group of persons who allocates resources and assesses the performance for the entity. The functions of the CODM are performed by the management board of the Group.

CODM monitors the revenue and operating profit. CODM also monitors the EBITDA, which is calculated as profit/(loss) for the period before accounting for finance income and finance expense, income tax expenses, depreciation of property, plant and equipment and amortisation of intangible assets, impairment of property plant and equipment and investment property, impairment of goodwill, share of profit/(loss) of associates and joint ventures and effects, related to acquisition and other similar effects. Sequence for identification of adjusted EBITDA by Group might be different from sequence used by other companies.

(a) Description of products and services from which each reportable segment derives its revenue

The Group is organised on the basis of three main business segments:

- Production of electric and heating energy.
- Transmission and distribution of electricity.

Sale of electricity.

5 Segment Information (Continued)

(b) Performance of operating segments

The CODM evaluates performance of each segment based on a measure of revenue and pre-tax profit.

	Production of electric and heating energy		Electricity transmission and distribution		Sale of electricity		Other		Total	
	12 months ended		12 months ended		12 months ended		12 months ended		12 months ended	
In thousands of Kazakhstani Tenge	31 December 2022	31 December 2021	31 December 2022	31 December 2021	31 December 2022	31 December 2021	31 December 2022	31 December 2021	31 December 2022	31 December 2021
Total segment revenue –Sales of electricity	247,999,677	216,821,299	-	-	137,577,644	125,685,450	-	-	385,577,321	342,506,749
Inter-segment revenue	(79,820,339)	(76,914,281)	-	-	(1,534)	(1,049)	-	-	(79,821,873)	(76,915,330)
External revenue – Sales of electricity	168,179,338	139,907,018	-	-	137,576,110	125,684,401	-	-	305,755,448	265,591,419
Sales of heating energy	19,763,640	18,704,197	-	-	-	-	-	-	19,763,640	18,704,197
Revenue from the service on maintaining electric power capacity	34,277,444	31,953,443	-	-	-	-	-	-	34,277,444	31,953,443
Rental income from renewable energy sources	5,208,620	5,101,336	-	-	-	-	-	-	5,208,620	5,101,336
Total segment revenue – Transmission of electricity	-	-	53,654,220	46,428,445	-	-	-	-	53,654,220	46,428,445
Inter-segment revenue	-	-	(45,447,720)	(41,552,874)	-	-	-	-	(45,447,720)	(41,552,874)
External revenue –Transmission of electricity	-	-	8,206,500	4,875,571	-	-	-	-	8,206,500	4,875,571
Rental income from investment property	-	-	-	-	-	-	4,179,075	3,925,631	4,179,075	3,925,631
Sales of chemically purified water	1,852,349	1,780,575	-	-	-	-	-	-	1,852,349	1,780,575
Total other	3,266,398	2,114,659	-	-	-	-	1,514,637	1,128,310	4,781,035	3,242,969
Inter-segment revenue – other-	(1,044,482)	(1,509,687)	-	-	-	-	(1,514,637)	(1,128,310)	(2,559,119)	(2,637,997)
External revenue – other	2,221,916	604,972	-	-	-	-	-	-	2,221,916	604,972
Total external revenue	**231,503,307**	**198,051,541**	**8,206,500**	**4,875,571**	**137,576,110**	**125,684,401**	**4,179,075**	**3,925,631**	**381,464,992**	**332,537,144**

There is no revenue from discontinued operations in 2022 and 2021 (Note 28).

5 Segment Information (Continued)

In thousands of Kazakhstani Tenge	Production of electric and heating energy		Electricity transmission and distribution		Sale of electricity		Other		Inter-segment transactions		Total	
	31 December 2022	31 December 2021	31 December 2022	31 December 2021	31 December 2022	31 December 2021	31 December 2022	31 December 2021	31 December 2022	31 December 2021	31 December 2022	31 December 2021
Cost of sales	(227,126,793)	(204,681,523)	(47,039,813)	(39,357,772)	(140,489,635)	(128,428,482)	(1,130,375)	(757,547)	126,858,030	118,377,885	(288,928,586)	(254,847,439)
- Less depreciation and amortization	51,001,584	47,122,862	8,970,835	8,122,029	251,689	256,061	580,383	701,230	-	-	60,804,491	56,202,182
Selling expenses	(9,110,402)	(9,029,370)	-	-	-	-	-	-	-	-	(9,110,402)	(9,029,370)
Finance costs	(14,137,600)	(15,558,707)	(1,290,316)	(1,231,450)	(568,527)	(290,329)	(25,902,413)	(22,126,529)	12,151,158	9,220,104	(29,747,698)	(29,986,911)
Less interest expenses	(7,115,587)	(8,768,991)	(601,177)	(554,517)	(515,222)	(248,644)	(15,363,648)	(13,200,622)	2,440,986	755,267	(21,154,648)	(22,017,507)
Finance income	4,594,700	3,897,579	72,220	107,401	122,408	78,636	10,349,159	9,190,238	(12,391,111)	(10,660,849)	2,747,376	2,613,005
Share in profit of joint venture and associates	-	-	-	-	-	-	16,103,114	13,454,577	-	-	16,103,114	13,454,577
Capital expenditures	(64,008,045)	(83,007,326)	(12,043,530)	(9,590,729)	(63,935)	(87,197)	(105,570)	(55,259)	50,401	16,622	(76,170,679)	(92,723,889)
Reportable segment assets	723,868,101	714,828,699	147,606,124	147,390,377	18,727,952	17,658,685	143,126,555	161,148,529	(67,482,706)	(101,206,279)	965,846,026	939,820,011
Reportable segment liabilities	270,199,431	271,652,679	44,446,934	47,288,430	28,024,182	24,170,970	180,264,176	203,345,780	(90,202,318)	(109,278,299)	432,732,405	437,179,560

Expenses, assets and liabilities from discontinued operations relate to other segments and were not included in the table above. Finance costs from discontinued operations amounted to Tenge 155,429 thousand and does not include interest expenses (2021: Tenge 152,055 thousand). Reportable segment assets and liabilities of discontinued operations as at 31 December 2021 were disclosed in Note 28.

In thousands of Kazakhstani Tenge	Production of electric and heating energy		Electricity transmission and distribution		Sale of electricity		Other		Inter-segment transactions		Total	
	31 December 2022	31 December 2021	31 December 2022	31 December 2021	31 December 2022	31 December 2021	31 December 2022	31 December 2021	31 December 2022	31 December 2021	31 December 2022	31 December 2021
Total consolidated adjusted EBITDA	124,457,979	104,543,955	14,654,605	14,022,378	(2,112,596)	(1,278,768)	1,244,788	19,311,007	(8,942,251)	(21,661,305)	129,302,525	114,937,267
Amortization and depreciation	(51,001,584)	(47,122,862)	(8,970,835)	(8,122,029)	(251,689)	(256,061)	(580,383)	(701,230)	-	-	(60,804,491)	(56,202,182)
Finance income	4,594,700	3,897,579	72,220	107,401	122,408	78,636	10,349,159	9,193,408	(12,391,111)	(10,664,019)	2,747,376	2,613,005
Finance cost	(14,137,600)	(15,558,707)	(1,290,316)	(1,231,450)	(568,527)	(290,329)	(25,902,413)	(22,126,529)	12,151,158	9,220,104	(29,747,698)	(29,986,911)
Impairment of non-financial assets	(8,919,102)	(20,760,920)	-	-	-	-	(1,529,090)	-	-	-	(10,448,192)	(20,760,920)
Share in profit of joint ventures and associates	-	-	-	-	-	-	16,103,114	13,454,577	-	-	16,103,114	13,454,577
Profit for the year before income tax	**54,994,393**	**24,999,045**	**4,465,674**	**4,776,300**	**(2,810,404)**	**(1,746,522)**	**(314,825)**	**19,131,233**	**(9,182,204)**	**(23,105,220)**	**47,152,634**	**24,054,836**

5 Segment Information (Continued)

(c) Reconciliation of reportable segment revenues, profit or loss, assets and liabilities

In thousands of Kazakhstani Tenge	**2022**	**2021**
Total revenues for reportable segments	503,599,992	448,589,404
Revenues from other operations	5,693,712	5,053,941
Total revenue	**509,293,704**	**453,643,345**
Elimination of sales between segments	(127,828,712)	(121,106,201)
Total consolidated revenues	**381,464,992**	**332,537,144**

The Group's revenues are analysed by products and services in Note 20 (revenue from core activities). Majority of sales of the Group are within Kazakhstan.

(d) Major customers

In 2022 and 2021, more than 10% of the total revenues were derived from sales to the companies under control of Samruk-Kazyna (Note 6).

The Group's revenues are recorded during the period when obligations are performed, in accordance with IFRS 15.

6 Balances and Transactions with Related Parties

Related parties are defined in IAS 24, Related Party Disclosures. Parties are generally considered to be related if one party has the ability to control the other party, is under common control, or can exercise significant influence or joint control over the other party in making financial and operational decisions. In considering each possible related party relationship, attention is directed to the substance of the relationship, not merely the legal form. The Company's parent entity and ultimate controlling party are disclosed in Note 1.

The related parties include the companies under control of Samruk-Kazyna. Transactions with government-run companies are not disclosed if they are carried out in the ordinary course of business in accordance with conditions consistent with all public and private companies i) when they are not individually significant; ii) if the Group's services are provided on standard terms available to all consumers, or iii) provided there is no choice of providers of services such as electricity transmission services, telecommunications services, etc.

The Group purchases from and sells goods to a large number of government related entities. Such purchases and sales are individually insignificant and are generally entered into on an arm's length basis. Transactions with the state also include taxes which are detailed in Note 27.

6 Balances and Transactions with Related Parties (continued)

At 31 December 2022, the outstanding balances with related parties were as follows:

In thousands of Kazakhstani Tenge	**Companies under common control**	**JVs and associates of Samruk-Energy**	**JVs and associates of Samruk-Kazyna**	**Shareholder**	**Government related entities**
Trade and other receivables	983,678	-	12,871	-	18,265,171
Cash and cash equivalents	179	-	-	-	-
Restricted cash	212,885	-	-	-	-
Cash due from credit institutions	1,106	-	-	-	-
Other short term assets	1,337,074	4,541	-	-	35,600
Financial assets	-	-	-	-	-
Borrowings	-	13,258,829	3,384	75,136,656	11,756,694
Finance lease liabilities	28,435	-	-	-	-
Trade and other payables	5,932,455	4,104,161	7,919	30,199	10,680,628

At 31 December 2021, the outstanding balances with related parties were as follows:

In thousands of Kazakhstani Tenge	**Companies under common control**	**JVs and associates of Samruk-Energy**	**JVs and associates of Samruk-Kazyna**	**Shareholder**	**Government related entities**
Trade and other receivables	1,108,679	20,130	16,128	-	14,834,694
Cash and cash equivalents	23	-	-	-	-
Other current assets	36,349	458	-	-	10,333
Financial assets	-	-	-	-	9,161,029
Borrowings	-	-	3,760	71,139,308	13,779,537
Finance lease liabilities	33,197	-	-	-	-
Trade and other payables	3,550,512	3,008,234	664	35,164	3,862,471
Other payables	-	1,138	7	-	5,841,513

Share of emissions is disclosed in Note 15.

The income and expense items with related parties for the year ended 31 December 2022 were as follows:

In thousands of Kazakhstani Tenge	**Companies under common control**	**JVs and associates of Samruk-Energy**	**JVs and associates of Samruk-Kazyna**	**Shareholder**	**Government related entities**
Revenue	40,356,569	1,677,240	356,037	-	63,997,325
Cost of sales	(25,674,707)	(37,766,959)	(5,998)	-	(57,030,197)
General and administrative expenses	(462,755)	-	-	-	-
Selling expense	(8,961,413)	-	-	-	-
Other expenses	(689,344)	-	-	-	-
Other income	7,213	30	1,501	-	86,947
Finance income	1,819	-	-	-	-
Finance costs	(3,756)	(776,058)	-	(7,809,328)	(926,587)

6 Balances and Transactions with Related Parties (continued)

The income and expense items with related parties for the year ended 31 December 2021 were as follows:

In thousands of Kazakhstani Tenge	Companies under common control	JVs and associates of Samruk-Energy	JVs and associates of Samruk-Kazyna	Shareholder	Government related entities
Revenue	54,520,321	1,400,950	146,816	-	23,036,226
Cost of sales	(70,206,026)	(33,973,770)	-	-	(2,810,917)
General and administrative expenses	(101,676)	-	(5,373)	-	-
Selling expense	(8,898,354)	-	-	-	-
Other expenses	(52,071)	-	-	-	-
Other income	1,284	-	31	-	528,850
Finance costs	(4,602)	-	-	(7,318,194)	(992,081)
Finance income	-	-	-	-	65,718
Foreign exchange gain/(loss)	-	(439)	-	-	(108,502)

At 31 December 2022, the Group has following outstanding guarantees from related parties:

- Corporate guarantee from Samruk-Kazyna in the amount of 12,285,000 thousand Tenge for outstanding loan to Development Bank of Kazakhstan JSC (2021: Tenge 12,285,000 thousand).
- Governmental guarantee in the amount of US Dollars 25,000,000 for outstanding loan to Development Bank of Kazakhstan JSC (2021: US Dollars 25,000,000).

Key management compensation is presented below:

In thousands of Kazakhstani Tenge	2022	2021
Key management compensation - expense	295,528	318,044
Key management compensation – accrued liability	-	-
Independent directors – members of the Board of Directors - expense	48,737	57,517
Independent directors – members of the Board of Directors – accrued liability	15,049	24,222

Key management personnel compensation represents the salaries, bonuses and other short-term employee benefits. Key management personnel as at 31 December 2022 include 5 persons (31 December 2021: 4 persons). Independent directors - members of the Board of Directors at 31 December 2022 - 4 persons (31 December 2021 - 2 persons).

Transactions with related parties are made on terms agreed between the parties that do not necessarily correspond to market rates, with the exception of regulated services that are provided on the basis of the tariffs approved by the Order of the Minister of Energy *On Approval of Cap rates for Electricity for a Group of Energy-Producing Companies*.

7 Property, Plant and Equipment

Movements in the carrying amount of property, plant and equipment were as follows:

In thousands of Kazakhstani Tenge	Oil and gas assets	Buildings and constructions	Machinery and equipment	Other	Construction in progress	Total
Cost at 1 January 2021	14,863,617	282,007,293	658,504,487	16,840,820	111,702,193	1,083,918,410
Accumulated depreciation and impairment	(315,663)	(84,298,811)	(258,018,438)	(6,999,544)	(2,645,838)	(352,278,294)
Carrying amount at 1 January 2021	**14,547,954**	**197,708,482**	**400,486,049**	**9,841,276**	**109,056,355**	**731,640,116**
Additions	9,955	45,773	2,088,614	715,672	44,618,354	47,478,368
Change in accounting estimates	-	(260,589)	-	-	-	(260,589)
Transfers	-	5,798,164	24,504,561	1,227,842	(31,530,567)	-
Transfers to other assets	-	(156,124)	(509)	-	(34,796)	(191,429)
Disposal	-	(5,241,724)	(1,437,226)	(358,875)	-	(7,037,825)
Depreciation	-	(12,723,705)	(41,243,987)	(1,009,337)	-	(54,977,029)
Depreciation on disposal	-	5,211,509	1,284,156	305,859	-	6,801,524
Accrual of impairment	-	(7,848,819)	(12,414,248)	(54,721)	(426,240)	(20,744,028)
Cost at 31 December 2021	14,873,572	282,192,793	683,659,927	18,425,459	124,755,184	1,123,906,935
Accumulated depreciation and impairment	(315,663)	(99,659,826)	(310,392,517)	(7,757,743)	(3,072,078)	(421,197,827)
Carrying amount at 31 December 2021	**14,557,909**	**182,532,967**	**373,267,410**	**10,667,716**	**121,683,106**	**702,709,108**
Additions	9,955	259,332	1,305,764	878,356	73,430,651	75,884,058
Change in accounting estimates*	-	8,290,071	10,517,389	-	-	18,807,460
Transfers	-	5,030,541	18,031,458	936,687	(23,998,686)	-
Loss of control of a subsidiary	(14,883,527)	(1,386)	(155)	(146,948)	-	(15,032,016)
Disposal	-	(4,595,132)	(830,611)	(200,218)	(676)	(5,626,637)
Depreciation	-	(12,157,270)	(46,155,291)	(1,208,409)	-	(59,520,970)
Depreciation on disposal	315,663	4,568,947	700,806	186,329	-	5,771,745
Accrual of impairment	-	(2,647,655)	(18,507)	(17,197)	(33,821)	(2,717,180)
Cost at 31 December 2022	-	291,176,219	712,683,772	19,893,336	174,186,473	1,197,939,800
Accumulated depreciation and impairment	-	(109,895,804)	(355,865,509)	(8,797,020)	(3,105,899)	(477,664,232)
Carrying amount at 31 December 2022	**-**	**181,280,415**	**356,818,263**	**11,096,316**	**171,080,574**	**720,275,568**

* Change in accounting estimates include recognition of asset retirement obligation related to the elimination of the consequences of the operation of the facilities in accordance with the Environmental Code of RoK in the amount of Tenge 19,146,405 thousand (Note 4, 16).

7 Property, Plant and Equipment (continued)

Additions include capitalised borrowing costs of Tenge 7,109,611 thousand (2021: Tenge 2,882,180 thousand). The average capitalization rate on interest expenses was 12.32% (2021: 11.44%).

As at 31 December 2022 buildings and constructions include carrying value of windmills, solar panels and other related infrastructure in the amount of Tenge 14,449,822 thousand (31 December 2021: Tenge 15,578,365 thousand) that earn rental income from renewable energy power plants on a monthly basis (Note 4, 20).

As at 31 December 2022 and 31 December 2021 property, plant and equipment have not been pledged as collateral for borrowings (Note 17).

Depreciation charge is allocated to the following items of profit and loss for the year:

In thousands of Kazakhstani Tenge	**2022**	**2021**
Cost of sales	59,121,184	54,527,611
General and administrative expenses	328,525	353,984
Other operating expenses	64,366	76,980
Capitalized to construction in progress	5,933	8,322
Depreciation expense on discontinued operations	962	10,132
Total depreciation charges	**59,520,970**	**54,977,029**

8 Intangible Assets

In thousands of Kazakhstani Tenge	**Licenses**	**Computer software**	**Other**	**Total**
Cost at 1 January 2021	365,652	4,910,807	1,347,270	6,623,729
Accumulated amortisation	(158,054)	(1,998,504)	(896,773)	(3,053,331)
Carrying amount at 1 January 2021	**207,598**	**2,912,303**	**450,497**	**3,570,398**
Additions	245,867	794,869	1,980	1,042,716
Disposal	(5,344)	(66,466)	-	(71,810)
Depreciation on disposal	5,344	65,502	-	70,846
Transfers	92,063	7,840	-	99,903
Amortisation charge	(114,442)	(352,261)	(80,205)	(546,908)
Cost at 31 December 2021	698,238	5,647,050	1,349,250	7,694,538
Accumulated amortisation	(267,152)	(2,285,263)	(976,978)	(3,529,393)
Carrying amount at 31 December 2021	**431,086**	**3,361,787**	**372,272**	**4,165,145**
Additions	24,150	258,353	4,118	286,621
Disposal	(20,043)	(21,559)	(13,172)	(54,774)
Depreciation on disposal	20,043	21,559	13,172	54,774
Transfers	231,141	(298,070)	66,929	-
Amortisation charge	(239,988)	(472,353)	(11,007)	(723,348)
Loss of control over subsidiary	-	(2,214)	-	(2,214)
Cost at 31 December 2022	933,487	5,583,559	1,407,124	7,924,170
Accumulated amortisation	(487,098)	(2,736,056)	(974,813)	(4,197,967)
Carrying amount at 31 December 2022	**446,389**	**2,847,503**	**432,311**	**3,726,203**

9 Investments in Joint Ventures and Associates

The table below summarises the movements in the carrying amount of the Group's investment in joint ventures and associates.

	Joint ventures		**Associates**	
In thousands of Kazakhstani Tenge	**SEGRES-2**	**Forum Muider B.V.**	**Semirechya Energy**	**Total**
Balance at 1 January 2021	15,934,313	42,436,972	2,239,914	60,611,199
Share of profit/(loss) for the year	2,206,295	11,382,632	(134,350)	13,454,577
Dividends accrued	-	(72,455)	-	(72,455)
Balance at 31 December 2021	**18,140,608**	**53,747,149**	**2,105,564**	**73,993,321**
Share of profit/(loss) for the year	2,267,974	14,411,613	(576,473)	16,103,114
Impairment (Note 4)	-	-	(1,529,090)	(1,529,090)
Balance at 31 December 2022	**20,408,582**	**68,158,762**	**1**	**88,567,345**

At 31 December 2022 and 2021, the Group has interests in the following jointly controlled entities:

- SEGRES-2 – 50%. The remaining 50% interest is owned by National Welfare Fund Saruk-Kazyna JSC (Note 4).
- Forum Muider – 50%. The remaining 50% is owned by UC RUSAL.

The Group has a share in the Semirechya Energy LLP associate (25%). Semirechya Energy LLP plans to build a renewable energy source station. The shareholders of Semirechya Energy LLP are Hydrochina Corporation (interest share of 50%), Samruk Energy JSC (interest share of 25%), Powerchina Chegdu Engineering Corporation (interest share of 15%), and Powerchina Resourses Ltd (interest share of 10%).

The only difference at reconciliation of the amounts below and carrying values of investments in associates and joint ventures is the excluded share of other investors in these associates and joint ventures.

The Group's management believes that the Group's share in net assets in associates and joint ventures is limited to the investment in the associate.

Contingencies related to the Group's share in joint ventures are disclosed in Note 29. Related party balances and transactions are presented in Note 6.

9 Investments in Joint Ventures and Associates (continued)

Presented below is summarised financial information of joint ventures and associates as at 31 December 2022 and 2021 and for the years then ended:

	SEGRES-2		Forum Muider		Semirechya Energy	
In thousands of Kazakhstani Tenge	**31 December 2022**	**31 December 2021**	**31 December 2022**	**31 December 2021**	**31 December 2022**	**31 December 2021**
Current assets, including	28,550,621	24,234,294	75,715,328	28,498,531	4,204,479	1,966,343
Cash and cash equivalents	2,203,850	2,182,968	7,686,764	6,907,154	1,999,350	1,954,456
Non-current assets	124,194,199	123,317,966	175,947,357	165,164,875	34,866,486	28,131,560
Current liabilities, including	(14,113,693)	(11,117,120)	(41,222,330)	(32,569,413)	(32,954,602)	(21,675,646)
Current financial liabilities (excluding trade and other payables and provisions)	(9,513,823)	(3,628,077)	(8,771,705)	(1,803,068)	(30,298,159)	(21,532,084)
Non-current liabilities, including	(97,803,048)	(100,153,924)	(74,122,830)	(53,599,695)	-	-
Non-current financial liabilities (excluding trade and other payables and provisions)	(97,456,803)	(97,167,584)	(72,070,990)	(48,235,367)	-	-
Net assets	**40,828,079**	**36,281,216**	**136,317,524**	**107,494,298**	**6,116,363**	**8,422,257**
Share of the Group	50%	50%	50%	50%	25%	25%
Group's share in net assets	**20,414,039**	**18,140,608**	**68,158,762**	**53,747,149**	**1**	**2,105,564**
Revenue	67,649,879	65,822,553	113,612,131	103,081,358	1,959,646	-
Depreciation and amortization of property, plant and equipment and intangible assets	(43,474,244)	(1,648,253)	(9,018,470)	(8,218,255)	-	(7,619)
Interest income	2,187,571	1,110,662	7,416,508	3,804,909	969	-
Interest expense	(12,032,492)	(12,491,945)	(1,051,753)	(798,478)	(643,953)	-
Income tax	(5,824,458)	(5,071,764)	(8,180,076)	(6,837,767)	-	-
Profit/(loss) for the year	**(4,657,642)**	**4,395,244**	**29,230,744**	**22,821,907**	**(2,305,894)**	**(537,400)**
Other comprehensive income/(loss)	121,693	17,347	(407,518)	(56,644)	-	-
Total comprehensive income/(loss)	**(4,535,949)**	**4,412,591**	**28,823,226**	**22,765,263**	**(2,305,894)**	**(537,400)**

10 Other Non-Current Assets

In thousands of Kazakhstani Tenge	**31 December 2022**	**31 December 2021**
Bonds	380,375	653,108
Long-term receivables	621,228	9,025,111
Restricted cash	246,252	54,265
Other non-current financial assets	43,878	97,960
Less: impairment provision	(112,272)	(1,392,709)
Total other non-current financial assets	**1,179,461**	**8,437,735**
Prepayments for non-current assets	45,229,892	68,667,682
Non-current VAT recoverable	54,754	548,292
Other non-current assets	322,661	307,124
Provision for impairments (Note 4)	(6,220,277)	-
Total other non-current assets	**40,566,491**	**77,960,833**

As at 31 December 2021 long-term receivables includes the receivable from of OESK Holding LLP in the amount of Tenge 7,561,445 thousand (Note 13).

10 Other Non-Current Assets (continued)

Gross amount of other non-current assets includes advances and prepayments for the following types of construction and property, plant and equipment:

In thousands of Kazakhstani Tenge	31 December 2022	31 December 2021
Restoration of unit No. 1 of LLP "Ekibastuz SDPP-1 named after B. Nurzhanov" with the installation of electrostatic precipitators	27,975,024	51,250,884
Construction of 50 MW WPP in Ereymentau city	9,155,825	14,928,278
Overhaul of power units LLP "Ekibastuz SDPP-1 named after B. Nurzhanov"	1,257,704	1,257,704
Construction and reconstruction of substations in Almaty and Almaty region	-	698,804
Other	621,062	532,012
Total prepayments for non-current assets	**39,009,615**	**68,667,682**

11 Inventories

In thousands of Kazakhstani Tenge	31 December 2022	31 December 2021
Auxiliary production materials	6,612,285	5,470,720
Fuel	5,891,790	5,272,379
Spare parts	3,549,713	3,465,632
Other materials	516,617	436,570
Raw materials	39,234	31,370
Less: provision for write down to net realisable value and provision for slow-moving and obsolete inventories	(1,176,812)	(1,089,507)
Total inventories	**15,432,827**	**13,587,164**

As at 31 December 2022 and 31 December 2021 inventories have not been pledged as collateral for borrowings.

Presented below are movements in the Group's inventory provision:

In thousands of Kazakhstani Tenge	2022	2021
Provision at 1 January	1,089,507	1,114,980
Provision reversed	(71,711)	(111,456)
Accrual for provision	159,016	85,983
Provision at 31 December	**1,176,812**	**1,089,507**

12 Trade and Other Receivables

In thousands of Kazakhstani Tenge	31 December 2022	31 December 2021
Trade receivables	41,969,907	34,132,361
Less: impairment provision	(2,916,480)	(2,116,932)
Total financial trade receivables	**39,053,427**	**32,015,429**
Other receivables	3,445,463	3,682,143
Less: impairment provision	(2,879,299)	(3,260,504)
Total trade and other receivables	**39,619,591**	**32,437,068**

Carrying amount of financial receivables approximates fair value due to its short-term nature. As at 31 December 2022, other receivables of Maikuben-West LLP were impaired in the amount of Tenge 2,732,541 thousand (2022: Tenge 3,165,768 thousand).

12 Trade and Other Receivables (continued)

Financial receivables are denominated in Tenge. Movement in the impairment provision for trade and other receivables are as follows:

	2022		2021	
In thousands of Kazakhstani Tenge	Trade receivables	Other receivables	Trade receivables	Other receivables
Provision for impairment at 1 January	2,116,932	3,260,504	1,721,433	3,576,976
Accrual for impairment provision	1,445,060	52,865	1,340,060	159,571
Reversal of provision during the year	(642,415)	(434,070)	(937,250)	(476,043)
Amounts written off during the year	(3,097)	-	(7,311)	-
Provision for impairment at 31 December	**2,916,480**	**2,879,299**	**2,116,932**	**3,260,504**

The levels of default and calculation of loss allowance are disclosed in Note 32.

13 Other Current Assets

In thousands of Kazakhstani Tenge	31 December 2022	31 December 2021
Other trade receivables	8,083,588	1,430,438
Restricted cash	1,708,866	310,773
Debt securities	385,631	9,554,477
Term deposits	12,765	255,820
Other financial current assets	150,733	114,741
Less: impairment provision	(1,316,278)	(1,034,517)
Total other current financial assets	**9,025,305**	**10,631,732**
VAT recoverable and prepaid taxes	2,913,218	3,008,370
Advances to suppliers	2,850,335	2,768,042
Other non-financial current assets	1,902,300	2,448,699
Less: impairment provision	(418,106)	(404,786)
Total other current assets	**16,273,052**	**18,452,057**

Other receivables mainly include short-term debt of OESK Holding LLP (formerly East Kazakhstan Energy Company LLP) in the amount of Tenge 7,560,135 thousand for shares of VC REC JSC, which were sold during 2017. As at 31 December 2021 this receivables was included in Other non-current asset in the amount of Tenge 7,561,445 thousand. In connection with the request of OESK Holding LLP (formerly East Kazakhstan Energy Company LLP) to grant a deferral payment due to negative consequences of force majeure circumstances related to the COVID-19 pandemic, the Company's management decided to extend the term debt repayment till 1 October 2023 subject to indexation of the purchase price. As at 31 December 2022, the Company assigned a rating of 'SK C' and recognised an expected credit losses to the debt of OESK Holding LLP in the amount of Tenge 559,489 thousand.

14 Cash and Cash Equivalents

In thousands of Kazakhstani Tenge	31 December 2022	31 December 2021
Term deposits	21,523,461	6,691,733
Repurchase and reverse repurchase agreements ("reverse repo") with other banks with an original maturity of less than three months	9,999,119	-
Cash at current bank accounts	3,072,728	5,430,166
Cash on hand	21,452	16,272
Total cash and cash equivalents	**34,616,760**	**12,138,171**

Term deposits and current deposits have contractual maturity terms less than three months or are available on demand.

14 Cash and Cash Equivalents (continued)

In 2022 for portfolio diversification purposes the Client has used repurchase and reverse repurchase agreements ("reverse repo") which are presented by transactions on placement of cash for a short period of time (1-7 days) at stock exchange. This transaction is collateralised securities which credit rating is not lower than an investment grade. These transactions allowed to decrease the credit risk and increase the returns.

Cash and cash equivalents balances are denominated in the following currencies:

In thousands of Kazakhstani Tenge	**31 December 2022**	**31 December 2021**
Kazakhstani Tenge	33,705,253	10,679,910
Euro	911,507	1,458,257
US Dollar	-	3
Other currencies	-	1
Total cash and cash equivalents	**34,616,760**	**12,138,171**

15 Equity

Authorised capital

As at 31 December 2022, 5,632,537 of issued ordinary shares were fully paid in the amount of Tenge 378,531,570 thousand (31 December 2021: 5,601,812 shares). Each ordinary share equals to one vote. The Company has no preferred shares. There are 8,602,187 authorised shares. As at 31 December 2022, Samruk-Kazyna NWF JSC is a 100% shareholder of the Company (2021: 100%).

On 20 December 2022 Samruk Kazyna purchased 30,725 of the Group shares at price of 80,899.7 Tenge per share and were fully paid in cash in the amount Tenge 2,485,643 thousand in accordance with the preferred right to purchase shares.

On 28 April 2022, the Company declared dividends payment to the Sole Shareholder in the amount of Tenge 2,041,000 thousand – Tenge 364.35 per share (2021: Tenge 3,242,143 thousand). On 9 June 2022, the Group has fully paid dividends in amount Tenge 2,041,000 thousand to the sole Shareholder.

Other reserves

In thousands of Kazakhstani Tenge	**Merger reserve**	**Result of transactions with shareholder**	**Other comprehensive loss**	**Total**
Balance at 1 January 2021	37,282,287	90,607,549	(2,721,789)	125,168,047
Other comprehensive loss	-	-	(39,588)	(39,588)
Balance at 31 December 2021	**37,282,287**	**90,607,549**	**(2,761,377)**	**125,128,459**
Other comprehensive loss	-	-	(277,742)	(277,742)
Balance at 31 December 2022	**37,282,287**	**90,607,549**	**(3,039,119)**	**124,850,717**

16 Provision for asset restoration

Movements in provision for asset restoration are as follows:

In thousands of Kazakhstani Tenge	Note	2022	2021
Provision at 1 January		2,826,592	3,423,974
Change in accounting estimates – liquidation of the consequences of facilities' operations	4, 7	19,146,405	-
Change in accounting estimates – ash dumps		(672,037)	(661,370)
Provision for the year		88,832	857
Unwinding of discount	26	316,612	250,453
Utilization of provision		(64,000)	(187,322)
Other		(14,010)	-
Provision at 31 December		**21,628,394**	**2,826,592**

17 Borrowings

In thousands of Kazakhstani Tenge	31 December 2022	31 December 2021
Non-current portion		
Loans from Samruk-Kazyna	72,571,081	68,565,478
Bonds issued	40,113,235	40,103,965
Bank term loans	34,264,857	80,945,008
Loans from customers	844,990	922,586
Total non-current borrowings	**147,794,163**	**190,537,037**
Current portion		
Bank term loans	101,502,163	97,736,981
Loans from Bogaryr-Komir	13,258,829	-
Loans from Samruk-Kazyna	2,565,578	2,573,832
Bonds issued	413,567	3,681,824
Loans from customers	392,678	364,992
Total current borrowings	**118,132,815**	**104,357,629**
Total borrowings	**265,926,978**	**294,894,666**

Borrowings of the Group are denominated in the following currencies:

In thousands of Kazakhstani Tenge	31 December 2022	31 December 2021
Borrowings denominated in:		
- Tenge	262,518,901	290,820,743
- US Dollars	3,408,077	4,073,923
Total borrowings	**265,926,978**	**294,894,666**

17 Borrowings (continued)

An analysis of the amount of net debt and movements in the Group's liabilities arising from financial activities for each of the periods presented are provided in the table below. Items of these liabilities are reported in the consolidated statement of cash flows as part of financial activities.

In thousands of Kazakhstani Tenge	2022	2021
Borrowings at 1 January	294,894,666	263,953,176
Proceeds from borrowings and bonds issued	97,623,873	159,998,976
Borrowings repaid	(134,108,186)	(135,670,371)
Interest repaid	(21,424,925)	(22,826,741)
Capitalised interest repaid	(6,610,277)	(1,859,277)
Capitalised interest (Note 7)	7,109,611	2,882,180
Interest expense		
- Interest expenses at nominal (Note 7)	21,154,648	22,017,507
- Unwinding of present value discount (Note 7)	6,979,871	6,674,722
Foreign exchange adjustments	352,116	107,479
Other payments	(44,419)	(382,985)
Borrowings at 31 December	**265,926,978**	**294,894,666**

Samruk-Energy JSC

Samruk-Kazyna SWF JSC

On 17 March 2010 the Group signed a loan agreement with Samruk-Kazyna for amount of Tenge 48,200,000 thousand for the purpose of re-financing of debt arising as the result of acquisition of 50% interest in Forum Muider. The loan carries an interest rate of 1.2% per annum with maturity not later than 15 September 2029. The principal amount is payable in equal annual instalments and interest is payable by semi-annual payments starting from the following reporting year after the receipt of loan.

On 14 January 2011 the Company signed a loan agreement with Samruk-Kazyna for the amount of Tenge 7,000,000 thousand for the purpose of financing construction of substation of Alatau Zharyk Company JSC. The loan carries an interest rate of 2% per annum with maturity not later than 25 January 2024. The principal amount is payable at maturity and interest is payable by semi-annual payments.

On 16 January 2014 the Company signed a loan agreement with Samruk-Kazyna for amount of Tenge 200,000,000 thousand for the purpose of acquisition of remaining share in EGRES-1. The principal amount is payable on 1 December 2028 and interest at 7.8% is payable by semi-annual payments.

On 3 October 2014 principal amount of Tenge 100,000,000 thousand was converted to the Company's shares. Interest rate on the remaining principal amount was increased to 9%.

On 25 December 2015 interest rate on the principal amount was reduced to 1% per annum which was considered as a settlement of the original loan and recognition of a new loan at a fair value. At the loan origination date, the market rate was 12.8% per annum. The Company recognised a gain on initial recognition of the loan of Tenge 72,581,903 thousand as part of other reserves.

Bonds

In August and September 2017, the Company issued and placed bonds for a total of Tenge 20,000,000 thousand and Tenge 28,000,000 thousand, respectively, with a nominal value of Tenge 1,000 per bond with a five-year term. The coupon rate was 13% per annum and 12.5% per annum, respectively, and is payable twice a year and on a quarterly basis, respectively.

In November 2018, the Company issued and placed bonds in the amount of Tenge 21,736,200 thousand with a nominal value of 1,000 Tenge per 1 bond for a period of seven years. The coupon interest rate was 11.2% per annum and is payable twice a year.

On 25 November 2021, the Company issued and placed 184 units of green bonds in the amount of Tenge 18,400,000 thousand, with a par value of 100,000,000 tenge per 1 bond with a term of 6.5 years. The coupon rate was 11.4% per annum and is payable twice a year.

17 Borrowings (continued)

European Bank for Reconstruction and Development

In December 2016 the Company opened a non-revolving line of credit for Euro 100 million to refinance Eurobonds. In September 2019 the Company received two tranches of Tenge 39,114,450 thousand within this credit facility All-in-cost, which is calculated based on inflation, plus margin of 3.5% and 4.5% per annum. Changes in the independent indicative interest rate are recorded on a quarterly basis. The principal is payable twice a year and at maturity. As of 31 December 2022, the carrying amount of loan was Tenge 1,534,764 thousand (31 December 2021: Tenge 12,777,245 thousand).

Asian Development Bank

On 8 November and 5 December 2018, the Company opened non-revolving credit facilities in the amount of USD 120 million with the Asian Development Bank in order to increase the operational efficiency of core activities and identify opportunities associated with renewable energy sources. In 2019, the Company received three tranches under Credit facilities for a total of Tenge 45,860,800 thousand with maturities of tranche A and B after 5 years, tranche C after 7 years. The interest rate is set on the basis of actual inflation indicators of the Republic of Kazakhstan (All-in-cost), plus bank margin (3.75% on Tranches A and B, 4.50% on Tranche C). In 2022 tranches A and B were fully repaid. As of 31 December 2022, the carrying amount of loan was Tenge 15,786,450 thousand (31 December 2021: Tenge 46,614,572 thousand).

Bogatyr Komir LLP

During 2022, the Company received loans from subsidiary of the Group's joint venture Forum Muider - Bogatyr Komir LLP, totalling Tenge 12,482,770 thousand for a period of 12 months with the condition of repayment of the principal and interest at the end of the loan term. The annual interest rate is equal to the base rate of the National Bank of the Republic of Kazakhstan effective on the date of issuance of the Tranche plus a margin of 1% per annum.

Alatau Zharyk Company JSC

Halyk Bank of Kazakhstan JSC

In 2015, the AZhK entered into a credit facility agreement with Halyk Bank of Kazakhstan JSC ("Halyk Bank") (the "Agreement"). In accordance with the Agreement, the total amount of the credit facility is Tenge 27,514,358 thousand with different purposes depending on the limit. Interest rate was from 12 to 12.5% per annum. In accordance with the addendum, starting from 20 October 2021, fixed rates of interest were changed by 11.5% for previously issued and newly issued borrowings. As collateral for borrowings cash in current account in Halyk Bank of Kazakhstan JSC was provided. On 12 May 2022 the fixed interest rate for the use of newly issued bank loans is set at the rate equal to the base rate of the NBRK, effective on the date of issuance of the loan, plus 2% per annum of the amount of the bank loan. As of 31 December 2022, the carrying amount of loan was Tenge 5,457,423 thousand (31 December 2021: Tenge 8,558,361 thousand).

Ereymentau Wind Power LLP

Eurasian Development Bank

Under non-revolving credit facility agreement No.193 dated 31 October 2019, Ereymentau Wind Power LLP ("EWP") raised a long-term loan for construction of a wind power electric plant in Akmola region. The interest rate for tranches issued during seven years from the enforcement date of credit facility agreement is 11.5% per annum, for tranches expiring after the first seven years of the agreement – base rate amount plus margin. As of 31 December 2022, the carrying amount of loan was Tenge 6,927,648 thousand (31 December 2021: Tenge 7,500,166 thousand).

Almaty Electric Stations JSC

AO «First Heartland Jusan Bank»

On 14 December 2021, AlES entered into general facility agreement with First Heartland Jusan Bank JSC for a total credit line of Tenge 18,419,719 thousand, for a period up to 28 February 2025, with the interest rates 10.4-17.4% per annum. The purpose of the loans is refinancing of loan debt in Halyk Bank of Kazakhstan JSC and to replenish working capital.

17 Borrowings (continued)

As security for the fulfilment of obligations under the Agreement, money was provided that will become the property in the future under contracts for the provision of services for the production of thermal energy and the provision of services for the supply of water through main pipelines concluded between AlES and Almaty Heat Networks LLP, also under an agreement for the purchase - sale of electric power concluded between AlES and AZhK. As of 31 December 2022, the carrying amount of loan was Tenge 13,482,747 thousand (31 December 2021: Tenge 13,720,361 thousand).

Moinak HPS JSC

Development Bank of Kazakhstan JSC

On 14 December 2005 and 16 January 2008, the Company received a loan in two tranches from the Development Bank of Kazakhstan JSC, a related party, in the amount of US Dollars 25,000,000 and US Dollars 26,058,000 at an interest rate of 1.15*6MLIBOR + 1.5% and 8% per annum, accordingly. Loans were granted for 20 years. On 6 December 2012, Moinak HPS JSC signed an addendum to amend the interest rate of the second tranche from 8% to 7.55%, relating to the amount of US Dollars 1,563,053 for further borrowings. On 28 November 2019, Moinak HPS JSC signed an additional agreement on changing the loan currency for the second tranche from US dollars to tenge and changing the interest rate to 10.72%.

On 17 June 2011 Moinak HPS JSC signed a contract with the Development Bank of Kazakhstan JSC for the third tranche of Tenge 12,285,000 thousand at an interest rate of 12% per annum. The loan has been provided for 17 years. On 6 December 2012, Moinak HPS JSC signed an addendum on amending the interest rate of the third tranche from 12% to 7.55%, relating to borrowings after this date in the amount of Tenge 8,924,392 thousand.

As of 31 December 2022, the carrying amount of loan was Tenge 36,827,406 thousand (31 December 2021: Tenge 46,896,556 thousand).

The loans are secured as follows:

- Government guarantee of the Ministry of Finance of the Republic of Kazakhstan of US Dollars 25,000,000. Uncovered counter-guarantee for the guarantee of the Ministry of Finance of the Republic of Kazakhstan Halyk Savings Bank of Kazakhstan JSC for US Dollars 2,304,331;
- Guarantee of Samruk-Energy JSC for Tenge 1,079,213 thousand dated 13 December 2012 and for Tenge 4,545,554 thousand dated 28 November 2019;
- Guarantee of Samruk-Kazyna SWF JSC for Tenge 12,285,000 thousand dated 1 July 2011.

Ekibastuz GRES-1 LLP

Sberbank SB JSC

In 2022 all loans were repaid and the agreement on cease of credit line agreement was signed. In August 2022 EGRES-1 closed all current bank accounts. As of 31 December 2021, the carrying amount of loan was Tenge 7,677,759 thousand.

Halyk Bank of Kazakhstan JSC

During 2022, within the general agreement ERGES-1 received tranches for the total amount of the principal debt of Tenge 15,087,315 thousand (2021: Tenge 74,188,013 thousand) from Halyk Bank of Kazakhstan JSC, including for capital projects in the amount of Tenge 7,921,315 thousand (2021: Tenge 51,088,013 thousand), for replenishment of working capital Tenge 7,166,000 thousand (2021: Tenge 23,100,000 thousand). On 5 January 2022, EGRES-1 entered into additional agreements with Halyk Bank of Kazakhstan JSC to extend the term of loans in the amount of Tenge 37,132,612 thousand until 2029. Interest rate on borrowings obtained in 2022 was – 11.0-18.0%, till 31 December 2021 - 10.75-12.0%. As of 31 December 2022, the carrying amount of loan was Tenge 62,526,408 thousand (31 December 2021: Tenge 64,888,193 thousand).

17 Borrowings (continued)

AlmatyEnergoSbyt LLP

Halyk Bank of Kazakhstan JSC

AlmatyEnergoSbyt LLP has opened a short-term credit facility at Halyk Bank of Kazakhstan JSC to replenish working capital since 22 April 2015. Under this credit line in 2022, AlmatyEnergoSbyt LLP received loans totalling Tenge 24,091,243 thousand. During 2022, the interest rate in Tenge was increased from 10.75% to 18.75% per annum in Tenge, due to the increase in the interest base rate of the National Bank of the RoK from 9.25% to 16.75%. The loans were provided for replenishment of working capital.

On 6 October 2022, the limit of the credit line provided by Halyk Bank of Kazakhstan JSC was increased to Tenge 5,000,000 thousand when property is pledged as collateral security in 2023. In this regard, on 19 October 2022, supplementary agreement No. 29 with Halyk Bank of Kazakhstan JSC was concluded. As at 31 December 2022 collateral agreement was not signed.

As of 31 December 2022, the carrying amount of loan was Tenge 5,003,532 thousand (31 December 2021: Tenge 1,300,379 thousand).

18 Trade and Other Payables

In thousands of Kazakhstani Tenge	**31 December 2022**	**31 December 2021**
Trade payables	19,498,687	18,687,536
Payables on acquisition of PPE	16,990,391	13,446,083
Salary payables	2,352,092	1,890,163
Dividends payable	420,552	421,413
Other financial payables	4,306,966	2,440,701
Total financial trade payables	**43,568,688**	**36,885,896**
Payables to Almaty Akimat (Note 4)	5,841,514	5,841,514
Advances received from customers	4,167,068	4,618,465
Accrued provisions for unused vacations	2,637,241	2,152,545
Other non-financial payables	1,283,167	658,619
Total trade and other payables	**57,497,678**	**50,157,039**

Financial payables are denominated in the following currencies:

In thousands of Kazakhstani Tenge	**31 December 2022**	**31 December 2021**
Tenge	42,158,761	35,234,828
Euro	1,409,927	1,394,979
US Dollars	-	255,681
Other currencies	-	408
Total trade and other payables	**43,568,688**	**36,885,896**

19 Taxes payable and other payables to budget

In thousands of Kazakhstani Tenge	31 December 2022	31 December 2021
Provision for quotes (Note 29)	4,618,337	2,438,179
VAT	1,639,693	2,806,478
Emissions	1,565,921	1,506,590
CIT at the source of payment from nonresidents	1,425,740	-
Personal income tax	687,585	558,498
Social tax	558,274	476,576
Property tax	111,530	9,757
Withholding CIT	19,216	9,025
Mineral extraction tax	13,409	12,085
Other	672,096	33,317
Total taxes payable and other payables to budget	**11,311,801**	**7,850,505**

20 Revenue

In thousands of Kazakhstani Tenge	2022	2021
Sale of electricity	305,755,457	265,591,419
Income from services on maintenance of electric power capacity	34,277,444	31,953,443
Sale of heating energy	19,763,641	18,704,197
Electricity transmission and distribution	8,206,498	4,875,571
Income from lease of renewable energy power plants	5,208,621	5,101,336
Income from lease of investment property	4,179,075	3,925,631
Sale of chemically purified water	1,852,350	1,780,575
Other	2,221,906	604,972
Total revenue	**381,464,992**	**332,537,144**

21 Cost of Sales

In thousands of Kazakhstani Tenge	2022	2021
Fuel	68,246,607	60,320,131
Depreciation of property, plant and equipment and amortisation of intangible assets	59,763,569	55,167,570
Payroll and related expenses	50,991,047	42,426,131
Cost of power energy purchased	45,643,212	34,120,284
Electricity transmission and other services	16,847,331	16,074,142
Taxes other than on income	12,305,995	12,725,421
Repair and maintenance	9,950,215	10,526,800
Services on maintenance of electric power capacity	8,818,587	8,717,775
Water supply	7,106,102	6,329,442
Third party services	3,384,800	2,187,982
Materials	2,180,674	1,930,087
Security services	1,198,170	1,122,620
Accrual for provision on obsolete and slow-moving inventories	88,432	19,284
Other	2,403,845	3,179,770
Total cost of sales	**288,928,586**	**254,847,439**

22 Selling Expenses

In thousands of Kazakhstani Tenge	2022	2021
Dispatch and electricity control	8,058,046	7,985,697
Electricity transmission	979,871	979,871
Payroll and related expenses	52,820	62,845
Other	19,665	957
Total selling expenses	**9,110,402**	**9,029,370**

23 General and Administrative Expenses

In thousands of Kazakhstani Tenge	2022	2021
Payroll and related expenses	8,490,918	7,615,855
State duties	4,035,216	652,232
Taxes other than on income	1,346,863	786,963
Depreciation of property, plant and equipment and amortisation of intangible assets	940,866	942,913
Consulting and other professional services	466,856	654,963
Security services	466,722	450,792
Software maintenance	350,685	251,780
Materials	254,087	262,280
Business trips and representative expenses	201,676	232,845
Other	2,298,089	2,781,515
Total general and administrative expenses	**18,851,978**	**14,632,138**

State duties include penalties and fines based on the results of tax audits and research of the historical data is scope of the pilot project on horizontal monitoring of the State Revenue Committee of Ministry of Finance of RoK. In 2022 the Group accrued the penalties and fines based on the results of tax audit, including the amount of Tenge 2,981,943 thousand for EGRES-1 (Note 29). In addition, provision in the amount of Tenge 880,844 thousand related to withholding tax based on horizontal monitoring of Samruk-Energy was accrued (Note 29). The remaining amounts related to penalties and fines on income tax.

24 Other Income

In thousands of Kazakhstani Tenge	2022	2021
Income from reimbursement of costs on electric power commodity exchange	1,371,982	1,914,325
Income from gratuitously received services and property, plant and equipment	833,797	992,256
Income on fines and penalties, forfeit	747,330	196,248
Income from sale of inventory	461,156	673,209
Other operating income	526,791	615,895
Other other income	**3,941,056**	**4,391,933**

25 Finance Income

In thousands of Kazakhstani Tenge	2022	2021
Interest income on bank deposits	1,849,383	1,120,511
Interest income - unwinding of discount on non-current receivables	625,782	786,986
Interest income - unwinding of discount on bonds and loans	238,265	484,379
Other	33,946	221,129
Total finance income	**2,747,376**	**2,613,005**

26 Finance Costs

In thousands of Kazakhstani Tenge	2022	2021
Interest expense on borrowings and bonds		
- interest at nominal rate (Note 17)	21,154,648	22,017,507
- unwinding of discount (Note 17)	6,979,871	6,636,987
Unwinding of the present value of discount:		
- asset retirement obligation (Note 16)	316,612	250,453
- employee benefits	175,439	148,525
Foreign exchange losses less gains	352,116	107,479
Dividends on preference shares of subsidiaries	211,391	91,143
Other	557,621	734,817
Total finance costs recognized in profit or loss	**29,747,698**	**29,986,911**
Capitalized borrowing costs (Note 7)	7,109,611	2,882,180
Total finance costs	**36,857,309**	**32,869,091**

27 Income Tax

In thousands of Kazakhstani Tenge	2022	2021
Current income tax expense	21,055,060	14,921,128
Deferred income tax benefit	(4,944,515)	(6,544,694)
Total income tax expense	**16,110,545**	**8,376,434**

Reconciliation between the expected and the actual taxation charge is provided below:

In thousands of Kazakhstani Tenge	2022	2021
Profit before tax under IFRS	47,152,634	24,054,836
Theoretical income tax expense at statutory rate of 20% (2021: 20%)	9,430,527	4,810,967
Adjustments for:		
Share in profit of joint ventures and associates not subject to income tax	(3,220,623)	(2,690,915)
Permanent difference – asset restructuring (Note 31)	7,294,502	-
Taxes related to prior period, including expiration of the limitation period for tax losses carried forward	4,411,959	5,392,474
Other non-deductible expenses	2,287,440	773,413
Loss/(profit) of Moinak HPS exempted from income tax	94,701	(1,736,263)
Withholding income tax	49,641	347,590
Changes in unrecognised deferred income tax asset	(4,237,602)	1,479,168
Total income tax expense	**16,110,545**	**8,376,434**

Differences between IFRS and Kazakhstani statutory taxation regulations give rise to temporary differences between the carrying amount of assets and liabilities for financial reporting purposes and their tax bases. The tax effect of the movements in these temporary differences are detailed below and are recorded at the rate applicable to the period of reversal of temporary differences.

27 Income Tax (Continued)

In thousands of Kazakhstani Tenge	1 January 2022	Charged to profit or loss	31 December 2022
Tax effect of deductible temporary differences			
Tax losses carried forward	14,550,285	(6,139,051)	8,411,234
Employee benefit obligation	164,468	39,847	204,315
Bonds	281,101	608,650	889,751
Ash dump restoration provision	534,401	(534,401)	-
Inventories	77,185	(75,857)	1,328
Trade and other receivables	1,156,945	(34,857)	1,122,088
Taxes other than income tax	622,909	(507,448)	115,461
Provision for unused vacation	443,145	32,496	475,641
Other	698,171	1,642,400	2,340,571
Gross deferred income tax assets	**18,528,610**	**(4,968,221)**	**13,560,389**
Unrecognised deferred income tax assets	(4,987,778)	4,237,601	(750,177)
Less offsetting with deferred income tax liabilities	13,540,832	(730,620)	12,810,212
Recognised deferred income tax assets	-	-	-
Tax effect of taxable temporary differences			
Property, plant and equipment	(74,589,516)	4,512,813	(70,076,703)
Borrowings	(11,149,877)	1,162,323	(9,987,554)
Gross deferred income tax liabilities	**(85,739,393)**	**5,675,136**	**(80,064,257)**
Less offsetting with deferred income tax assets	13,540,832	(730,620)	12,810,212
Recognised deferred income tax liabilities	**(72,198,561)**	**4,944,516**	**(67,254,045)**

In thousands of Kazakhstani Tenge	1 January 2021	Charged to profit or loss	31 December 2021
Tax effect of deductible temporary differences			
Tax losses carried forward	16,990,482	(2,440,197)	14,550,285
Employee benefit obligation	164,321	147	164,468
Bonds	696,505	(415,404)	281,101
Ash dump restoration provision	678,528	(144,127)	534,401
Inventories	86,988	(9,803)	77,185
Trade and other receivables	827,757	329,188	1,156,945
Taxes other than income tax	104,253	518,656	622,909
Provision for unused vacation	476,563	(33,418)	443,145
Provision for the impairment of investments	614,263	83,908	698,171
Other	-	-	-
Gross deferred income tax assets	**20,639,660**	**(2,111,050)**	**18,528,610**
Unrecognised deferred income tax assets	(3,508,610)	(1,479,168)	(4,987,778)
Less offsetting with deferred income tax liabilities	17,131,050	(3,590,218)	13,540,832
Recognised deferred income tax assets	**-**	-	-
Tax effect of taxable temporary differences			
Property, plant and equipment	(82,827,015)	8,237,499	(74,589,516)
Borrowings	(13,047,287)	1,897,410	(11,149,877)
Gross deferred income tax liabilities	**(95,874,302)**	**10,134,909**	**(85,739,393)**
Less offsetting with deferred income tax assets	17,131,050	(3,590,218)	13,540,832
Recognised deferred income tax liabilities	**(78,743,252)**	**6,544,691**	**(72,198,561)**

27 Income Tax (Continued)

In the context of the Group's current structure, tax losses and current tax assets of different companies of the Group cannot be offset with the current tax liabilities and tax benefits of other companies of the Group, and accordingly, taxes can be charged even in case of consolidated tax loss. Therefore, deferred income tax assets and liabilities are offset only if they are related to the same taxable company.

The Group has potential deferred tax assets in respect of unused tax losses carry forwards. The above tax losses carry forwards expire in 2027.

The Group did not recognise deferred tax liabilities in 2022 (2021: no deferred tax liabilities) in respect of temporary differences associated with investments in joint ventures as the Group is able to control the timing of the reversal of those temporary differences and does not intend to reverse them in the foreseeable future.

28 Discontinued operations

On 28 December 2022, the Company sold ("TM") and its subsidiary Mangyshlak Munay LLP ("MM") to QazaqGaz NC JSC at a market price of Tenge 13,178,650 thousand.

Since TM and MM transactions are separate significant activities, this disposal group is presented as a discontinued operation in the consolidated financial statements.

The information on the disposed assets and liabilities and consideration on the sale is as follows:

In thousands of Kazakhstani Tenge	**28 December 2022**	**31 December 2021**
Property, plant and equipment	14,716,353	14,743,194
Other non-current assets	626,768	626,224
Inventories	362	1,043
Other current Assets	7,791	1,469
Cash and cash equivalents	6,028	15,232
Total non-current assets of disposal group sold	**15,357,302**	**15,387,162**
Other non-current liabilities	2,102,121	1,868,803
Other liabilities	104,996	289,327
Total liabilities directly associated with the disposal group sold	**2,207,117**	**2,158,130**

In thousands of Kazakhstani Tenge	**TM 28 December 2022**
Consideration received for the sale of the subsidiary	13,178,650
Carrying amount of net assets sold	(13,150,185)
Expenses for the sale of the subsidiary	(678,309)
Loss on disposal of the subsidiary	**(649,844)**

28 Discontinued operations (continued)

An analysis of the results of discontinued operations for the year ended 31 December 2022 is as follows:

In thousands of Kazakhstani Tenge	**MM**	**TM**	**Total**
Revenue	-	-	-
Other income	312,825	118	312,943
Expenses	(381,165)	(17,754)	(398,919)
Loss before tax from discontinued operations	(68,340)	(17,636)	(85,976)
Income tax expense	-	-	-
Loss from discontinued operations	**(68,340)**	**(17,636)**	**(85,976)**
Loss from revaluation of net assets of discontinued operations and their disposal	-	(649,844)	(649,844)
Loss for the year from discontinued operations	**(68,340)**	**(667,480)**	**(735,820)**

An analysis of the results of discontinued operations for the year ended 31 December 2021 is as follows:

In thousands of Kazakhstani Tenge	**TM**	**MM**	**Total**
Revenue	-	-	-
Other income	145	3,026	3,171
Expenses	(20,828)	(313,880)	(334,708)
Profit or loss before tax from discontinued operations	(20,683)	(310,854)	(331,537)
Income tax expense	-	(319)	(319)
Profit or loss from discontinued operations	**(20,683)**	**(311,173)**	**(331,856)**

29 Contingencies, Commitments and Operating Risks

COVID-19

In March 2020, the World Health Organisation declared the outbreak of COVID-19 a global pandemic. In response to the pandemic, the Kazakhstani authorities implemented numerous measures attempting to contain the spreading and impact of COVID-19, such as travel bans and restrictions, quarantines, shelter-in-place orders and limitations on business activity, including closures. Most of those measures were subsequently relaxed, however, as of 31 December 2022, there remains a risk that the authorities may impose additional restrictions in 2023 as a response to possible new variants of the virus. The Group’s activities for the period of quarantine were not suspended, the work of office employees was organized remotely. In the opinion of the Group’s management, this event related to the outbreak of the virus does not have a material effect on the Group’s operating activities and the consolidated financial statements.

War between Russia and Ukraine

On 21 February 2022 the Russian President announced that Russian government would recognise the Luhansk and Donetsk People’s Republics. On 24 February the Russian president directed its military mobilized troops to the territory of Ukraine. As a response to the Russian actions, the United States, the European Union and a number of other states imposed sanctions against Russia including the disconnection of a number of Russian financial institutions from SWIFT. Russia is Kazakhstan's largest trade partner, accounting for up to 40% of non-oil exports, and is the key country of transit for trade, notably via the Caspian Pipeline Consortium (CPC) pipeline, through which up to 80% of Kazakh crude is exported.

29 Contingencies, Commitments and Operating Risks (continued)

CPC operations were interrupted in March 2022 officially due to storm damage, which did not have a significant budgetary economic impact because of rising oil prices. However, a prolonged closure by Russia of the CPC route for Kazakh crude oil would have serious consequences for Kazakh exports and the economy as a whole. The Kazakh authorities consider alternative routes to the Caspian Sea, including through Azerbaijan, Georgia and Turkey, but these will require significant additional infrastructure and it will take many years to replace the CPC route.

In connection with the Russian/Ukraine conflict and its consequences, the Tenge exchange rate began to be more volatile and inflation index reached almost 20.3% in December 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.

In the opinion of the Group's management, this event related to the Russian/Ukraine conflict does not have a material effect on the Group's operating activities and the consolidated financial statements, except for the overall macroeconomic consequences and some delays in delivery of the imported equipment.

The long-term effects of the current economic situation are difficult to predict and management's current expectations and estimates could differ from the actual results.

Operating environment

In general, the economy of the Republic of Kazakhstan continues to display characteristics of an emerging market. Its economy is particularly sensitive to prices on oil and gas and other commodities, which constitute major part of the country's export. These characteristics include, but are not limited to, the existence of national currency that is not freely convertible outside of the country and a low level of liquidity of debt and equity securities in the markets. Higher inflation, challenges posted by the recent domestic unrest in January 2022, ongoing political tension in the region, volatility of exchange rate have caused and may continue to cause negative impact on the economy of the Republic of Kazakhstan, including decrease in liquidity and creation of difficulties in attracting of international financing.

On 20 August 2015 the National Bank and the Government of the Republic of Kazakhstan made a resolution about discontinuation of supporting the exchange rate of Tenge and implement of new monetary policy, which is based on inflation targeting regime, cancellation of exchange rate trading band and start a free-floating exchange rate. However, the National Bank's exchange rate policy allows it to intervene to prevent dramatic fluctuations of the Tenge exchange rate and to ensure financial stability.

As at the date of this report the official exchange rate of the National Bank of the Republic Kazakhstan was Tenge 445.98 per US Dollar 1 compared to Tenge 422.65 per US Dollar 1 as at 31 December 2022 (31 December 2021: Tenge 431.67 per 1 US Dollar). Therefore, uncertainty remains in relation to the exchange rate of Tenge and future actions of National Bank and the Government of the Republic of Kazakhstan and the impact of these factors on the economy of the Republic of Kazakhstan.

In September 2022 S&P Global Ratings, international rating agency affirmed the credit rating of Kazakhstan of "BBB-". The outlook on sovereign credit rating is downgraded to negative as a result of the growth of external and financial risks. Fitch Ratings affirmed Kazakhstan long-term rating at "BBB" with a stable outlook. The stable outlook is supported by the government's strong fiscal and external balance sheets, financing flexibility underpinned by accumulated oil revenue savings, net fiscal creditor position as well as measures implemented by the Government of the Republic of Kazakhstan.

Challenges posed by social tension resulted in domestic unrest in early 2022 and spillover from the Russia/Ukraine conflict and associated sanctions are balanced by high prices for key export commodities and the increase in oil production from 2024 when the Tengiz oil field's expansion starts to come onstream. According to the analysts' forecasts, the growth rate of the national economy in 2022-2025 will amount, on average, to about 3.6%.

The economic environment has a significant impact on the Group's operations and financial position. Management is taking necessary measures to ensure sustainability of the Group's operations. However, the future effects of the current economic situation are difficult to predict, and management's current expectations and estimates could differ from actual results.

Additionally, energy sector in the Republic of Kazakhstan is still impacted by political, legislative, fiscal and regulatory developments. The prospects for future economic stability in the Republic of Kazakhstan are largely dependent upon the effectiveness of economic measures undertaken by the Government, together with legal, controlling and political developments, which are beyond the Group's control.

For the purpose of measurement of expected credit losses (hereinafter – "ECL") the Group uses supportable forward-looking information, including forecasts of macroeconomic variables. As with any economic forecast, however, the projections and likelihoods of their occurrence are subject to a high degree of inherent uncertainty and therefore the actual outcomes may be significantly different from those projected.

29 Contingencies, Commitments and Operating Risks (continued)

Tax legislation

Kazakhstani tax legislation and practice is in a state of continuous development and therefore is subject to varying interpretations and frequent changes, which may be retroactive. In some cases, in order to determine the taxable base, the tax law refers to the provisions of IFRS, and the interpretation of the relevant provisions of IFRS by Kazakhstani tax authorities may differ from the accounting policies, judgments and estimates applied by management in the preparation of these consolidated financial statements, which may lead to additional tax liabilities of the Group. Fiscal periods remain open to review by the authorities in respect of taxes for five years after the end of the fiscal year.

From July 2020, the State Revenue Committee of the Ministry of Finance of the Republic of Kazakhstan (hereinafter - “SRC”) launched a pilot project to introduce horizontal monitoring, which will last until 31 December 2023. In 2021, SRC, as part of a pilot project on horizontal monitoring, inspected the historical data of the EGRES-1 and Samruk-Energy (Head office) for the five years period. Based on the results, SRC completed tax audits and issued acts with the results of tax audit. The main non-compliances relate to the interest expense deducted for tax purposes and underaccrual of withholding tax (Note 23). The Group expressed its disagreement with these notifications and continues to work to appeal its position in the court.

The Group management believes that its interpretation of the relevant legislation is appropriate and the Group’s tax positions will be sustained. In the opinion of the Group management, no material losses will be incurred in respect of existing and potential tax claims in excess of provision that have been made in these consolidated financial statements (Note 23).

Insurance

The insurance industry in the Republic of Kazakhstan is in a developing stage and many forms of insurance protection common in other parts of the word are not yet generally available in the Republic of Kazakhstan. The Group does not have full coverage for its plant facilities, losses caused by business interruptions or third party liabilities in respect of property or environmental damage arising from accidents or the Group’s activities. Until the Group obtains adequate insurance coverage, there is a risk that the loss or destruction of certain assets could have a material adverse effect on the Group’s operations and financial position.

Environmental matters

At present, environmental legislation is being tightened in the Republic of Kazakhstan and the review of the position of Kazakhstani state bodies regarding its enforcement continues. In 2021, a new environmental code came into force in the Republic of Kazakhstan, which regulates social relations in the field of interaction between man and nature (environmental relations) arising in connection with the implementation by individuals and legal entities of activities that have or can have an impact on the environment. In addition to increasing the responsibility of industrial enterprises for environmental pollution, the Code also provides for the introduction of a waste management hierarchy and prescribes requirements for the elimination of the consequences of activities.

The provisions of this Code obliges to obtain integrated environmental permits related to the use of the best available techniques (BAT), issued by the Committee for Environmental Regulation and Control of the Ministry of Ecology, Geology and Natural Resources of the Republic of Kazakhstan.

Other provisions of this Code applicable to certain Group entities include the installation of automated emission monitoring systems and waste management practices. Until a full assessment is made, it is not possible to assess the financial implications of the new requirements of Kazakhstan's new environmental code, but an increase in the cost of complying with environmental requirements is expected, either in the form of additional investments required for waste management and development of appropriate monitoring processes, or in the form of increased fees for waste generation.

According to the newly introduced norms of the environmental code, all enterprises have obligations to eliminate the consequences of the operation of facilities causing negative environmental impact, but the requirements for liquidation of the consequences depend on the category of industrial enterprises and construction projects, which are determined depending on the nature of facilities, degree of environmental impact and the scope of activities of enterprises. Since the entry into force of the new requirements and throughout 2022, the Group has been assessing the new requirements for the Group's financial statements. As a result of this work, the Group has recognized additional asset retirement obligations in relation to the elimination of the consequences of the operation of its facilities (Note 4, 16).

Under the current version of the Environmental Code, the Group has an obligation to provide financial security for the elimination of the consequences of category I facilities by 1 July 2024. Financial security is provided in the form of: guarantees; bank deposit pledge; pledge of property; insurance. Financial security is provided in one of several types of financial security listed above, or in their combination at the choice of the operator of the category I facility, provided that the share of financial security in the form of collateral for a bank deposit should be:

29 Contingencies, Commitments and Operating Risks (continued)

1) after ten years from the date of facility commissioning (for existing facilities as of 1 July 2021 until 2031) – at least fifty percent of the total amount of financial security;

2) after twenty years from the date of facility commissioning for existing facilities as of 1 July 2021 until 2041 – one hundred percent of the total amount of financial security. The operator of the category I facility is obliged to ensure the availability of financial security continuously until all of its asset retirement obligations are fully fulfilled.

The amount of financial security is determined in accordance with the methodology approved by the authorized body in the area of environmental protection, based on the estimated cost of work to eliminate the consequences of the operation of the category I facility, and is subject to recalculation every seven years.

The Group periodically evaluates its obligations related to environmental protection at least on an annual basis. As liabilities are identified, they are promptly recognized in the financial statements. Potential liabilities that may arise as a result of changes in existing laws and regulations, as well as a result of judicial practice, cannot be estimated with a sufficient degree of reliability, although they may be significant. The Group's management believes that in the current system of control over compliance with applicable environmental laws, there are no significant liabilities arising from environmental damage, except for those recognised or disclosed in these financial statements.

Under the environmental exemption, the Group is legally obligated to acquire additional greenhouse gas emissions allowances. The volume of greenhouse gas emissions for the Group was determined based on the projected production of electricity and greenhouse gas emissions coefficient per unit of production till 2025. Due to the growth in electricity consumption in the country and for the purpose of uninterrupted and reliable power supply to consumers, the generating capacities of EGRES-1 were used in full, which led to an increase in electricity generation and a shortage of quotas for greenhouse gas emissions in 2022 and 2021. The Group conducts the work to obtain an additional quota for greenhouse gas emissions in accordance with the Environmental Code of RoK. As at 31 December 2022 there was a provision to acquire additional greenhouse gas emissions for 2022 and 2021 (31 December 2021: for 2021) (Note 19).

Ash dump liquidation provision

In accordance with Environmental Code, the Group is also legally obliged to liquidate ash dump sites representing landfill sites for the Group's operating activities. As of 31 December 2022, the carrying amount of ash dump liquidation provision was Tenge 2,481,986 thousand (31 December 2021: Tenge 2,826,592 thousand). The assessment of the current ash dump liquidation provision is based on the Group's interpretation of the environmental legislation of RK in force, supported by feasibility study and engineering research in accordance with current norms of restoration methods and reclamation works. This assessment may change upon completion of subsequent nature protection research works and review of existing reclamation and restoration programmes.

Environmental, Social and Governance (ESG) matters - Consideration of climate change and resulting climate related risks

The Group shares the concerns of the world community climate change and supports global efforts to reducing greenhouse gas emissions, increasing energy efficiency, transition to renewable sources energy and phasing out carbon fuels. SK Fund, the parent company of the Group, has the strategic goal to reduce the carbon footprint of SK Fund by 10% by 2032 compared to 2021 and aims to achieve carbon neutrality by 2060. In general, carbon neutrality does not mean complete exclusion of greenhouse gas emissions - the volume of emissions that not possible to reduce, must be compensated.

The Group is continuously assessing climate related and environmental risks and their impact on the Group's operation. For the identified risks, the Group has assessed their impact on the recognition/derecognition of assets and liabilities and measurement of such assets and liabilities as well as the disclosure provided in its consolidated financial statements. The areas listed below are predominantly impacted by the climate related and environmental risks:

a) The Group has initiated projects on constructions of new combined cycle gas plant at the Almaty CHP-2 and CHP-3. The purpose is the replacement of the existing coal-fired equipment with modern environmentally friendly combined cycle power units (Note 4); and

b) The Group has assessed and recognized provisions for decommissioning of power plants and rehabilitating environmental damage due to recently introduced regulatory requirements in accordance with Environmental Code (Note 4).

29 Contingencies, Commitments and Operating Risks (continued)

Capital expenditure commitments

The Group has analysed its exposure to seasonal and other arising business risks, but did not determine any risks, which could have impact on financial indicators or position of the Group as of 31 December 2022. The Group has relevant funds and financing sources to implement capital expenditure commitments and maintain working capital.

As of 31 December 2022, the Group had contractual commitments on acquisition of property, plant and equipment totalling Tenge 65,331,177 thousand (31 December 2021: Tenge 84,376,182 thousand).

Capital expenditure commitments of joint ventures and associates

As of 31 December 2022, the Group's share in non-current contractual commitments of Forum Muider and SEGRES-2 liabilities was Tenge 3,997,304 thousand and Tenge 11,812,824 thousand accordingly (31 December 2021: Tenge 5,942,347 thousand and Tenge 12,892,412 thousand accordingly).

Borrowing covenants

The Group is subject to certain covenants related to all bank loans, obligations, financial guarantee of Samruk-Energy and loan of Samruk-Energy from Samruk-Kazyna (Note 17). Non-compliance with such covenants may result in negative consequences for the Group including growth in the cost of borrowings and declaration of default. Upon the results of 2022, the Group was in compliance with covenants on borrowings, and received waivers on reduction of thresholds, when a violation forecasted.

30 Non-controlling interest

The following table provides information about each subsidiary that has non-controlling interest that is material to the Group.

In thousands of Kazakhstani Tenge	Place of business (and country of incorporation if different)	Proportion of non-controlling interest	Proportion of non-controlling interest's voting rights held	Profit or loss attributable to non-controlling interest	Accumulated non-control-ling interest in the subsidiary	Dividends paid to non-controlling interest during the year
Year ended 31 December 2022						
Bukhtarminskaya HPS JSC	Kazakhstan	3,7%	3,7%	176,031	1,692,983	211,657
Shulbinskaya HPS JSC	Kazakhstan	7,86%	7,86%	(1,098)	23,450	-
Ust-Kamenogorskaya HPS JSC	Kazakhstan	10%	10%	(341)	2,262	-
Total				**174,592**	**1,718,695**	**211,657**
Year ended 31 December 2022						
Bukhtarminskaya HPS JSC	Kazakhstan	10%	10%	301,877	1,516,952	98,238
Shulbinskaya HPS JSC	Kazakhstan	7.86%	7.86%	(1,375)	24,547	-
Ust-Kamenogorskaya HPS JSC	Kazakhstan	10.01%	10.01%	(267)	2,604	-
Total				**300,235**	**1,544,103**	**98,238**

In thousands of Kazakhstani Tenge	Current assets	Non-current assets	Current liabilities	Non-current liabilities	Revenue	Profit/ (loss)	Total compre-hensive income	Cash flows
Year ended 31 December 2022								
Bukhtarminskaya HPS JSC	4,677,361	1,265,122	128,221	145,964	4,180,758,	3,340,728	3,552,119,	617,668
Shulbinskaya HPS JSC		-	598,444	12,156	-	(13,964)	(13,964)	-
Ust-Kamenogorskaya HPS JSC		-	121,219	-	-	(3,411)	(3,411)	-
Total	**4,677,361**	**1,265,122**	**847,884**	**158,120**	**4,180,758**	**3,323,353**	**3,534,744**	**617,668**
Year ended 31 December 2021								
Bukhtarminskaya HPS JSC	2,087,488	1,238,493	121,368	145,964	3,927,241	3,018,774	3,109,943	770,712
Shulbinskaya HPS JSC	-	-	586,143	10,492	-	(17,490)	(17,490)	-
Ust-Kamenogorskaya HPS JSC	-	-	107,511	10,297	-	(2,672)	(2,672)	-
Total	**2,087,488**	**1,238,493**	**815,022**	**166,753**	**3,927,241**	**2,998,612**	**3,089,781**	**770,712**

31 Principal Subsidiaries, Associates and Joint Venture

Name	Nature of business	Percentage of voting rights	Percentage of ownership	Country of registration
Subsidiaries:				
Alatau Zharyk Company JSC	Electricity transmission and distribution in Almaty and the Almaty region	100%	100%	Kazakhstan
Almaty Electric Stations JSC	Production of electrical, heating energy and hot water in Almaty and the Almaty region	100%	100%	Kazakhstan
AlmatyEnergoSbyt LLP	Sale of electricity in Almaty and the Almaty region	100%	100%	Kazakhstan
Shardara HPS JSC	Power generation at in Almaty and the Almaty region in the Southern Kazakhstan	100%	100%	Kazakhstan
Moinak HPS JSC	Power generation at in Almaty and the Almaty region in the Almaty region	100%	100%	Kazakhstan
Ekibastuz GRES-1 named after Bulat Nurzhanov	Production of electrical and heating energy on the basis of coal	100%	100%	Kazakhstan
Bukhtarminskaya HPS	Owner of Bukhtarminskaya hydropower station transferred under lease arrangement	90%	90%	Kazakhstan
Ust-Kamenogorskaya HPS	Since hydropower station is under lease, this company is inoperative	89.99%	89.99%	Kazakhstan
Shulbinskaya HPS	Since hydropower station is under lease, this company is inoperative	92.14%	92.14%	Kazakhstan
Samruk Green Energy LLP	Development of renewable electricity	100%	100%	Kazakhstan
First Wind Turbine LLP	Power generation at the wind-power station	100%	100%	Kazakhstan
KazGidroTekhEnergo LLP	Implementation of projects on renewable energy sources	100%	100%	Kazakhstan
TeploEnergoMash LLP	Implementation of projects on renewable energy sources	95%	95%	Kazakhstan
Energy Solutions LLP	Transportation and other services	100%	100%	Kazakhstan
Tegis Munay LLP and Mangyshlak Munay LLP	Exploration and development of a gas field (31 December 2022 – loss of control)	100%	100%	Kazakhstan
Balkhash TPP JSC	Construction of Balkhash TPP	100%	100%	Kazakhstan
Ereymentau Wind Power LLP	Power generation at the wind-power station	100%	100%	Kazakhstan
Qazaq Green Power PLC	Production of green energy	100%	100%	Kazakhstan
Associates:				
Semirechiya Energy LLP	Power generation at the wind-power plant near Almaty city	25%	25%	Kazakhstan
Joint ventures:				
Station Ekibastuz GRES-2 JSC	Production of electrical and heating energy on the basis of coal	50%	50%	Kazakhstan
Forum Muider BV	Company holding 100% charter in Bogatyr Komir LLP (Company involved in production of power generating coal) and a range of companies incorporated in the Russian Federation and the Republic of Cyprus, and not engaged in significant operations	50%	50%	Netherlands

On 4 November 2022, a new subsidiary, QAZAQ Green Power PLC (“CGP”), was registered in the jurisdiction of the Astana International Financial Center. In December 2022, the Company contributed to the authorized capital of QGP by transferring a full holding of shares of Moynak HPP JSC and interests in the First Wind Electric Station LLP of Samruk-Green Energy LLP. In these consolidated financial statements, this operation is recorded as an asset restructuring.

32 Financial Risk Management

Financial risk factors

The Group’s activities expose it to a variety of financial risks: market risk (including currency risk, interest rate risk), credit risk and liquidity risk. The Group’s overall risk management programme focuses on the unpredictability of financial markets and seeks to minimise potential adverse effects on the Group’s financial performance. The Group does not use derivative financial instruments to hedge risk exposures.

Risk management is carried out by management under policies set by the Group’s ultimate parent (Note 1), which provides principles for risk management, covering specific areas, such as credit risk, liquidity risk, and market risk.

32 Financial Risk Management (continued)

(a) Credit risk

The Group exposes itself to credit risk, which is the risk that one party to a financial instrument will cause a financial loss for the other party by failing to meet an obligation.

Exposure to credit risk arises as a result of the Group's lending and other transactions with counterparties, giving rise to financial assets.

The Group's maximum exposure to credit risk is reflected in the carrying amounts of financial assets in the consolidated statement of financial position.

Credit risk management

Credit risk is the single largest risk for the Group's business; management therefore carefully manages its exposure to credit risk.

The estimation of credit risk for risk management purposes is complex and involves the use of models, as the risk varies depending on market conditions, expected cash flows and the passage of time. The assessment of credit risk for a portfolio of assets entails further estimations of the likelihood of defaults occurring, the associated loss ratios and default correlations between counterparties.

Credit risk grading system

For measuring credit risk and grading financial instruments by the amount of credit risk, the Group applies two approaches – an Internal Risk-Based (IRB) rating system or risk grades estimated by external international rating agencies (Standard & Poor's – "S&P", Fitch, Moody's). Internal and external credit ratings are mapped on an internally defined master scale with a specified range of probabilities of default. The IRB system is designed internally, and ratings are estimated by management. Various credit-risk estimation techniques are used by the Group depending on the class of the asset.

The Group applies IRB systems for measuring credit risk for non-current receivables.

The rating models are regularly reviewed, backtested on actual default data and updated, if necessary. Despite the method used, the Group regularly validates the accuracy of ratings estimates and appraises the predictive power of the models.

External ratings are assigned to counterparties by independent international rating agencies, such as S&P, Moody's and Fitch. These ratings are publicly available. Such ratings and the corresponding range of probabilities of default ("PD") are applied for all financial assets other than trade receivables and non-current receivables

Expected credit loss (ECL) measurement

ECL is a probability-weighted estimate of the present value of future cash shortfalls (i.e., the weighted average of credit losses, with the respective risks of default occurring in a given time period used as weights). An ECL measurement is unbiased and is determined by evaluating a range of possible outcomes. ECL measurement is based on four components used by the Group: Probability of Default ("PD"), Exposure at Default ("EAD"), Loss Given Default ("LGD") and Discount Rate.

EAD is an estimate of exposure at a future default date, taking into account expected changes in the exposure after the reporting period, including repayments of principal and interest, and expected drawdowns on committed facilities. The EAD on credit related commitments is estimated using Credit Conversion Factor ("CCF"). CCF is a coefficient that shows the probability of conversion of the commitment amounts to an on-balance sheet exposure within a defined period. PD an estimate of the likelihood of default to occur over a given time period. LGD is an estimate of the loss arising on default. It is based on the difference between the contractual cash flows due and those that the lender would expect to receive, including from any collateral. It is usually expressed as a percentage of the EAD. The expected losses are discounted to present value at the end of the reporting period. The discount rate represents the effective interest rate ("EIR") for the financial instrument or an approximation thereof.

Expected credit losses are modelled over instrument's *lifetime period.* The *lifetime period* is equal to the remaining contractual period to maturity of debt instruments, adjusted for expected prepayments, if any.

Management models *Lifetime ECL,* that is, losses that result from all possible default events over the remaining lifetime period of the financial instrument. The *12-month ECL,* represents a portion of lifetime ECLs that result from default events on a financial instrument that are possible within 12 months after the reporting period, or remaining *lifetime period* of the financial instrument if it is less than a year.

32 Financial Risk Management (continued)

The ECLs that are estimated by management for the purposes of these financial statements are point-in-time estimates, rather than through-the-cycle estimates that are commonly used for regulatory purposes. The estimates consider *forward looking information,* that is, ECLs reflect probability weighted development of key macroeconomic variables that have an impact on credit risk.

The ECL modelling does not differ for Purchased or Originated Credit Impaired ("POCI") financial assets, except that (a) gross carrying value and discount rate are based on cash flows that were recoverable at initial recognition of the asset, rather than based on contractual cash flows, and (b) the ECL is always a lifetime ECL. POCI assets are financial assets that are credit-impaired upon initial recognition, such as impaired loans acquired in a past business combination.

For purposes of measuring PD, the Group defines default as a situation when the exposure meets one or more of the following criteria:

- the borrower is more than 90 days past due on its contractual payments;
- international rating agencies have classified the borrower in the default rating class;
- the borrower meets the unlikeliness-to-pay criteria listed below:
  - suspending accrual of interest/reduction in the interest rate on a financial asset;
  - writing-off the principal amount;
  - sales of a financial asset at a significant discount to its nominal value;
  - restructuring that will result in reduction in/write-off of the loan/debt release;
  - increase in the maturity of a financial asset;
  - granting of indulgence on the principal/interests;
  - filing a bankruptcy claim against the counterparty in line with the legislation of the Republic of Kazakhstan;
  - bankruptcy claim filed by the counterparty;
  - liabilities covered by the guarantee agreement or payment under the guarantee agreement are past due more than 90 days.

For purposes of disclosure, the Group fully aligned the definition of default with the definition of credit-impaired assets. The default definition stated above is applied to all types of financial assets of the Group.

An instrument is considered to no longer be in default (i.e. to have cured) when it no longer meets any of the default criteria for a consecutive period of three months. This period of three months has been determined based on an analysis that considers the likelihood of a financial instrument returning to default status after curing by using different possible definitions of cures.

The assessment whether or not there has been a significant increase in credit risk ("SICR") since initial recognition is performed on an individual basis and on a portfolio basis.

The level of ECL that is recognised in these consolidated financial statements depends on whether the credit risk of the borrower has increased significantly since initial recognition. This is a three-stage model for ECL measurement.

A financial instrument that is not credit-impaired on initial recognition and its credit risk has not increased significantly since initial recognition has a credit loss allowance based on 12-month ECLs (Stage 1).

If a SICR since initial recognition is identified, the financial instrument is moved to Stage 2 but is not yet deemed to be credit-impaired and the loss allowance is based on lifetime ECLs. If a financial instrument is credit-impaired, the financial instrument is moved to Stage 3 and loss allowance is based on lifetime ECLs. The consequence of an asset being in Stage 3 is that the entity ceases to recognise interest income based on gross carrying value and applies the asset's effective interest rate to the carrying amount, net of ECL, when calculating interest income.

If there is evidence that the SICR criteria are no longer met, the instrument is transferred back to Stage 1. If an exposure has been transferred to Stage 2 based on a qualitative indicator, the Group monitors whether that indicator continues to exist or has changed.

ECL for POCI financial assets is always measured on a lifetime basis. The Group therefore only recognises the cumulative changes in lifetime expected credit losses

32 Financial Risk Management (continued)

The table below classifies financial assets, such as other long-term receivables and bonds and loans given carried at amortised cost, by separate stage of impairment models. ECL provisions of other financial assets is insignificant as at 31 December 2022.

	ECL allowance				Gross carrying amount			
In thousands of Kazakhstani Tenge	Stage 1 (12-months ECL)	Stage 2 (lifetime ECL for SICR)	Stage 3 (lifetime ECL for credit impaired)	Total	Stage 1 (12-months ECL)	Stage 2 (lifetime ECL for SICR)	Stage 3 (lifetime ECL for credit impaired)	Total
Other receivables								
At 1 January 2022	(95,729)	(1,440,208)	(469,205)	(2,005,142)	1,754,113	8,232,231	469,205	10,455,549
New originated or purchased	(40,390)	-	-	(40,390)	-	-	-	-
Derecogntion during the period	19,383	880,719	-	900,102	(115,073)	(1,268,416)	-	(1,383,489)
Unwinding of discount	-	-	-	-	49,744	483,810	-	533,554
Other movements	-	-	152,005	152,005	-	-	(152,005)	(152,005)
Reclassification from trade receivables	-	-	-	-	-	112,510	-	112,510
Total movements with impact on credit loss allowance charge for the year	**(21,007)**	**880,719**	**152,005**	**1,011,717**	**(65,329)**	**(672,096)**	**(152,005)**	**(889,430)**
At 31 December 2022	**(116,736)**	**(559,489)**	**(317,200)**	**(993,425)**	**1,688,784**	**7,560,135**	**317,200**	**9,566,119**

	ECL allowance				Gross carrying amount			
In thousands of Kazakhstani Tenge	Stage 1 (12-months ECL)	Stage 2 (lifetime ECL for SICR)	Stage 3 (lifetime ECL for credit impaired)	Total	Stage 1 (12-months ECL)	Stage 2 (lifetime ECL for SICR)	Stage 3 (lifetime ECL for credit impaired)	Total
Other receivables								
At 1 January 2021	(1,281,937)	-	(183,865)	(1,465,802)	9,862,394	-	760,025	10,622,419
New originated or purchased	-	(264,019)	(640,647)	(904,666)	-	-	-	-
Change to another stage	1,176,189	(1,176,189)	-	-	(8,965,446)	8,965,446	-	-
Derecogntion during the period	-	-	355,307	355,307	(56,788)	(1,357,523)	(290,820)	(1,705,131)
Unwinding of discount	-	-	-	-	-	538,883	-	538,883
Other movements	10,019	-	-	10,019	162,778	85,425	-	248,203
Reclassification from trade receivables	-	-	-	-	751,175	-	-	751,175
Total movements with impact on credit loss allowance charge for the year	**1,186,208**	**(1,440,208)**	**(285,340)**	**(539,340)**	**(8,108,281)**	**8,232,231**	**(290,820)**	**(166,870)**
At 31 December 2021	**(95,729)**	**(1,440,208)**	**(469,205)**	**(2,005,142)**	**1,754,113**	**8,232,231**	**469,205**	**10,455,549**

The Group has three approaches for ECL measurement: (i) assessment on an individual basis; (ii) assessment on a portfolio basis: internal ratings are estimated on an individual basis but the same credit risk parameters (e.g. PD, LGD) will be applied during the process of ECL calculations for the same credit risk ratings and homogeneous segments of the loan portfolio; and (iii) assessment based on external ratings.

In general, ECL is the sum of the multiplications of the following credit risk parameters: EAD, PD and LGD, that are defined as explained above, and discounted to present value using the instrument's effective interest rate. The ECL is determined by predicting credit risk parameters (EAD, PD and LGD) for each future month during the lifetime period for each individual exposure or collective segment. These three components are multiplied together and adjusted for the likelihood of survival (i.e. the exposure has been repaid or defaulted in an earlier month). This effectively calculates an ECL for each future period, that is then discounted back to the reporting date and summed up. The discount rate used in the ECL calculation is the original effective interest rate or an approximation thereof.

32 Financial Risk Management (continued)

The table below summarises external (if any) and internal credit ratings at the end of the relevant reporting period and related to on counterparty rating, expect for reverse repo which based on rating of security provided as a collateral:

In thousands of Kazakhstani Tenge	Cash	Restricted cash	Term deposits	Bonds and loans
31 December 2022:				
BBB+ (S&P)	-	-	1,000	-
BBB- (stable) (S&P)	15,019,756	-	1,106	-
BB+ (stable) (S&P)	11,902,680	1,708,866	-	-
BB (stable) (S&P)	-	-	-	-
BB- (stable) (S&P)	6,250,245	-	-	382,858
B+ (stable) (S&P)	1,429,160	-	10,659	-
n/a	14,919	246,252	-	383,148
Total financial assets	**34,616,760**	**1,955,118**	**12,765**	**766,006**

In thousands of Kazakhstani Tenge	Cash	Restricted cash	Term deposits	Bonds and loans
31 December 2021:				
BBB+ (S&P)	-	-	-	-
BBB- (stable) (S&P)	3,599,482	4,586	182,592	9,161,029
BB+ (stable) (S&P)	2,392,210	-	7,254	-
BB (stable) (S&P)	4,083,511	-	-	-
BB- (stable) (S&P)	493,789	5,000	65,974	-
B+ (stable) (S&P)	878,818	-	-	-
B (stable) (S&P)	669,737	-	-	-
B (negative) (S&P)	-	-	-	1,091
n/a	20,624	355,452	-	1,045,465
Total financial assets	**12,138,171**	**365,038**	**255,820**	**10,207,585**

The Group applies the provision matrix for calculation of ECL on trade receivables. To measure the expected credit losses, trade and other receivables have been grouped based on shared credit risk characteristics and the overdue days.

The levels of default and calculation of loss allowance at the end of the relevant reporting period were as follows:

In thousands of Kazakhstani Tenge	Trade receivables from legal entities					
	Total	**Current**	**1-30 days**	**31-60 days**	**61-90 days**	**>90 days**
Trade receivables at 31 December 2022	34,970,175	22,480,639	4,603,014	2,019,820	1,068,442	4,798,260
Level of default		0.26%	0.67%	5.52%	14.51%	49.64%
ECL	(2,736,828)	(57,541)	(31,032)	(111,426)	(155,048)	(2,381,781)
Total	**32,233,347**	**22,423,098**	**4,571,982**	**1,908,394**	**913,394**	**2,416,479**

32 Financial Risk Management (continued)

In thousands of Kazakhstani Tenge	Trade receivables from legal entities					
	Total	**Current**	**1-30 days**	**31-60 days**	**61-90 days**	**>90 days**
Trade receivables at 31 December 2021	28,398,028	16,899,246	4,414,282	2,677,035	877,086	3,530,379
Level of default		3.48%	0.31%	0.98%	1.59%	39.01%
ECL	(2,019,869)	(588,893)	(13,537)	(26,263)	(13,906)	(1,377,270)
Total	**26,378,159**	**16,310,353**	**4,400,745**	**2,650,772**	**863,180**	**2,153,109**

In thousands of Kazakhstani Tenge	Trade receivables from individuals					
	Total	**Current**	**Total**	**31-60 days**	**Total**	**>90 days**
Trade receivables at 31 December 2022	6,999,732	6,611,831	138,358	32,687	12,441	204,415
Level of default		0.15%	1.94%	7.54%	25.22%	78.98%
ECL	(179,652)	(9,918)	(2,684)	(2,465)	(3,138)	(161,447)
Total	**6,820,080**	**6,601,913**	**135,674**	**30,222**	**9,303**	**42,968**

In thousands of Kazakhstani Tenge	Trade receivables from individuals					
	Total	**Current**	**Total**	**31-60 days**	**Total**	**>90 days**
Trade receivables at 31 December 2021	5,734,333	5,400,931	125,761	126,183	7,195	74,263
Level of default		0.25%	3.30%	9.39%	21.18%	88.63%
ECL	(97,063)	(13,723)	(4,145)	(11,851)	(1,524)	(65,820)
Total	**5,637,270**	**5,387,208**	**121,615**	**114,332**	**5,671**	**8,444**

Forward-looking information incorporated in the ECL models

The assessment of SICR and the calculation of ECLs both incorporate supportable forward-looking information. The Group identified certain key economic variables that correlate with developments in credit risk and ECLs: GDP, inflation, exchange rate, oil price, and short-term economic indicator used for description of the economic development trend based on changes in the performance of primary sectors.

The impact of the relevant economic variables on the PD, EAD and LGD has been determined by performing statistical regression analysis to understand the impact that the changes in these variables historically had on the default rates and on the components of LGD and EAD.

As with any economic forecast, the projections and likelihoods of occurrence are subject to a high degree of inherent uncertainty, and therefore the actual outcomes may be significantly different to those projected.

The Group regularly reviews its methodology and assumptions to reduce any difference between the estimates and the actual loss of credit. Such backtesting is performed at least once a year.

The results of backtesting the ECL measurement methodology are communicated to Group Management and further steps for tuning models and assumptions are defined after discussions between authorised persons.

(b) Liquidity risk

Liquidity risk is the risk that an entity will encounter difficulty in meeting obligations associated with financial liabilities. In accordance with the Group policy on formation and monitoring of development plans the Group manages the liquidity risk using short-term (one month) forecasts and also mid-term forecast for the next five years. In addition, the Group develops and approves development strategy of the Group for the next ten years. In planning cash flows, the Group also accounts for income from temporary excess cash using the bank deposits.

32 Financial Risk Management (continued)

The table below analyses the Group's financial liabilities into relevant maturity groupings based on the remaining period at the end of the reporting period to the contractual maturity date. The amounts disclosed in the maturity table are the contractual undiscounted cash flows, including future payment of interest and principal.

In thousands of Kazakhstani Tenge	Demand and less than 1 month	From 1 to 3 months	From 3 to 12 months	From 12 months to 5 years	Over 5 years
At 31 December 2022					
Borrowings	11,783,756	13,571,593	139,287,768	121,010,160	134,480,684
Trade and other payables	39,735,895	2,071,263	1,542,731	218,799	-
Finance lease	52,156	115,037	502,387	1,946,787	369,725
Total future payments, including future principal and interest payments	**51,571,807**	**15,757,893**	**141,332,886**	**123,175,746**	**134,850,409**
At 31 December 2021					
Borrowings	7,126,557	35,015,029	86,989,304	158,260,697	142,401,361
Other financial liabilities	-	-	-	1,868,803	-
Trade and other payables	34,239,802	751,960	1,466,802	44,077	383,255
Finance lease	59,852	244,771	858,199	2,536,344	339,122
Total future payments, including future principal and interest payments	**41,426,211**	**36,011,760**	**89,314,305**	**162,709,921**	**143,123,738**

(c) Market risk

The Group takes on exposure to market risks. Market risks arise from open positions in (a) currency, (b) interest rates and (c) equity products, all of which are exposed to general and specific market movements.

Currency risk

The Group's certain borrowings (Note 17) and trade payables (Note 18) are denominated in foreign currencies (US dollars and Euro) and hence the Group is exposed to foreign exchange risk. Due to the fact that the variety of financial derivative instruments on the Kazakhstani market is limited and those instruments are rather expensive the management chooses at the moment not to hedge the Group's foreign exchange risk, as currently the benefits from implementing such instruments do not outweigh the costs. Nevertheless, the Group continues monitoring changes of financial derivatives market in order to implement hedging structure in the future or as needed.

The table below shows the total amount of foreign currency denominated liabilities that give rise to foreign exchange exposure:

In thousands of Kazakhstani Tenge	USD	Euro	Rouble	Total
At 31 December 2022				
Assets	-	911,507	-	911,507
Liabilities	(3,408,077)	(1,409,927)	-	(4,818,004)
Net position	**(3,408,077)**	**(498,420)**	**-**	**(3,906,497)**
At 31 December 2021				
Assets	3	1,458,257	1	1,458,261
Liabilities	(6,198,407)	(1,394,979)	(408)	(7,593,794)
Net position	**(6,198,404)**	**63,278**	**(407)**	**(6,135,533)**

The following table presents sensitivities of profit or loss and equity to reasonably possible changes in exchange rates applied at the end of the reporting period relative to the functional currency of the respective Group entities, with all other variables held constant.

32 Financial Risk Management (continued)

	Impact on profit or loss	
In thousands of Kazakhstani Tenge	**At 31 December 2022**	**At 31 December 2021**
US Dollar strengthening by 21% (2021: strengthening by 10%)	(572,574)	(495,872)
US Dollar weakening by 21% (2021: weakening by 13%)	572,574	644,634
Euro strengthening by 18% (2021: strengthening by 10%)	(71,722)	5,062
Euro weakening by 18% (2021: weakening by 13%)	71,722	(6,581)

In general, the Group is not exposed to significant currency risks and is not subject to negative changes in Tenge rate volatility. The financial obligations denominated in foreign currency approximates 1% of total obligations. Currency risks were minimised in previous periods by refinancing foreign currency loans, and at 31 December 2022 the Group has only one loan in foreign currency from the Development Bank of Kazakhstan in US Dollars.

Interest rate risk

The Group takes on exposure to the effects of fluctuations in the prevailing levels of market interest rates on its financial position and cash flows.

Interest rate risk arises from long-term and short-term borrowings. The Group is exposed to potential market risk of LIBOR quotas at London Stock Exchange and All-in-Cost (total bank costs, taking into account the inflation rate in the Republic of Kazakhstan and other bank charges). Increase in LIBOR and All-in-Cost would have an adverse effect on the Group's cash flows. The Group carefully monitors changes in floating interest rates.

If at 31 December 2022, interest rates had been 245 basis points higher/less, with all other variables held constant, profit for the year would have been Tenge 83,659 thousand higher or Tenge 83,659 thousand lower, mainly as a result of higher/lower interest expense on floating interest rate liabilities (31 December 2021: Tenge 50,924 thousand and Tenge 10,185 thousand respectively). The above sensitivity amount calculated based on USD liabilities in amount Tenge 3,408,077 thousand (2021: Tenge 4,073,923 thousand), which have variable interest rate.

Management of capital

The Group's objectives when managing capital are to safeguard the Group's ability to continue as a going concern in order to provide returns for shareholders and benefits for other stakeholders and to maintain an optimal capital structure to reduce the cost of capital. In order to maintain or adjust the capital structure, the Group may adjust the amount of dividends paid to shareholders, return capital to shareholders, or sell assets to reduce debt. Consistent with others in the industry, the Group monitors capital on the basis of the gearing ratio. This ratio is calculated as net debt divided by total capital. Net debt is calculated as total borrowings (including current and non-current borrowings as shown in the consolidated statement of financial position) less cash and cash equivalents. Total capital is calculated as equity as shown in the consolidated statement of financial position plus net debt. Management considers the current gearing ratio of 30-40% as acceptable for the risk profit of the Group.

In thousands of Kazakhstani Tenge	**Note**	**31 December 2022**	**31 December 2021**
Total borrowings	17	265,926,978	294,894,666
Less:			
Cash and cash equivalents	14	(36,616,760)	(12,138,171)
Net borrowings		231,310,218	282,756,495
Total equity		**533,113,621**	**502,640,451**
Total capital		**764,423,839**	**785,396,946**
Gearing ratio		**30%**	**36%**

33 Fair Value Disclosures

Fair value measurement

To be indicative of the reliability of the data used in determining fair value, the Group classifies its financial instruments at three levels established in accordance with IFRS. Fair value measurements are analysed by level in the fair value hierarchy as follows: (i) level one are measurements at quoted prices (unadjusted) in active markets for identical assets or liabilities, (ii) level two measurements are valuations techniques with all material inputs observable for the asset or liability, either directly or indirectly (that is, as prices), and (iii) level three measurements are valuations not based on observable market data (that is, unobservable inputs). Management applies judgement in categorising financial instruments using the fair value hierarchy. If a fair value measurement uses observable inputs that require significant adjustment, that measurement is a Level 3 measurement. The significance of a valuation input is assessed against the fair value measurement in its entirety. Fair values analysed by level in the fair value hierarchy and the carrying value of assets and liabilities not measured at fair value are as follows:

	31 December 2022				**31 December 2021**			
In thousands of Kazakhstani Tenge	**Level 1**	**Level 2**	**Level 3**	**Carrying amount**	**Level 1**	**Level 2**	**Level 3**	**Carrying amount**
Assets								
Cash and cash equivalents	-	34,616,760	-	34,616,760	-	12,138,171	-	12,138,171
Restricted cash	-	1,955,118	-	1,955,118	-	365,038	-	365,038
Term deposit	-	12,765	-	12,765	-	255,820	-	255,820
Financial receivables	-	39,053,877	-	39,053,877	-	32,015,429	-	32,015,429
Long-term receivables	-	7,470,101	-	7,470,101	-	8,240,566	-	8,240,566
Dividends receivable	-	-	488	488	-	-	458	458
Bonds		769,766	-	766,006	-	10,220,287	-	10,207,585
Total financial assets	-	**83,878,387**	**488**	**83,875,115**	**-**	**63,235,311**	**458**	**63,223,067**
Liabilities								
Borrowings	-	220,483,525	-	265,926,979	-	285,788,849	-	294,894,666
Financial payables	-	43,568,688	-	43,568,688	-	36,885,896	-	36,885,896
Rent	-	2,057,953	-	2,057,953	-	2,423,162	-	2,423,162
Non-current trade payables	- - -							
Total financial liabilities	**-**	**266,110,166**	**-**	**311,553,620**	**-**	**325,097,907**	**-**	**334,203,724**

Financial assets carried at amortised cost

The estimated fair value of fixed interest rate instruments is based on estimated future cash flows expected to be received discounted at current interest rates for new instruments with similar credit risks and remaining maturities. Discount rates used depend on the credit risk of the counterparty.

Liabilities carried at amortised cost

The estimated fair value of fixed interest rate instruments is based on estimated future cash flows expected to be received discounted at current interest rates for new instruments with similar credit risks and remaining maturities.

34 Events after the Reporting Period

In January and February 2023 the Group received loans from Halyk Bank in the amount of Tenge 7,528,456 thousand for the project "Restoration of power unit No. 1" with a maturity till 30 November 2029 and an interest rate of 18.75% and Tenge 2,800,000 thousand was received for replenishment of working capital with a maturity of 12 months and interest rate of 18.75%.

On 25 January 2023 the Group early repaid a loan of Tenge 4,000,000 thousand and accrued interest of Tenge 138,152 thousand to Halyk Bank of Kazakhstan JSC.

On 23 February 2023 AZhK and EGRES-1 signed additional agreements to the Credit Line Agreements with Halyk Bank which change the period within which the bank has an option to request earlier repayment from 10 months to 13 months.

35 Earnings per Share and Carrying Amount of one Share

Earnings per share from continuing operations

In thousands of Kazakhstani Tenge	2022	2021
Profit for the year attributable to the Group's owners (in thousands of Kazakhstani Tenge) from continuing operations	30,867,497	15,378,167
Weighted average number of ordinary shares in issue	5,602,741	5,601,812
Profit per share from continuing operations attributable to the Group's owners (rounded to Tenge)	**5,509**	**2,745**

Loss per share from discontinued operations

In thousands of Kazakhstani Tenge	2022	2021
Loss for the year attributable to the Group's owners (in thousands of Kazakhstani Tenge) from discontinued operations	(735,820)	(331,856)
Weighted average number of ordinary shares in issue	5,602,741	5,601,812
Loss per share from discontinued operations attributable to the Group's owners (rounded to Tenge)	**(131)**	**(59)**

Carrying amount of one share

At 31 December 2022, this indicator calculated by the management of the Group based on the consolidated financial statements amounted to Tenge 93,987 (31 December 2021: Tenge 88,985). The table for calculating the carrying amount of one share is as follows:

In thousands of Kazakhstani Tenge	2022	2021
Total assets	965,846,026	939,820,011
Less: intangible assets	(3,726,203)	(4,165,145)
Less: total liabilities	(432,732,405)	(437,179,560)
Net assets for ordinary shares	529,387,418	498,475,306
Number of ordinary shares at 31 December	5,632,537	5,601,812
Carrying amount of one share, Tenge	93,987	88,985