ANNEX 1.
CONSOLIDATED FINANCIAL STATEMENTS

"Sovereign Wealth Fund "Samruk-Kazyna" JSC
Consolidated financial statements

For the year ended December 31, 2022, with the report of the independent auditor

CONTENTS

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Independent Auditor's Report

To the Shareholder, Board of Directors and Management of "Sovereign Wealth Fund "Samruk-Kazyna" JSC

Opinion

We have audited the consolidated financial statements of "Sovereign Wealth Fund "Samruk-Kazyna" JSC and its subsidiaries (hereinafter - the Group), which comprise the consolidated statement of financial position as at 31 December 2022, and the consolidated statement of comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as at 31 December 2022 and its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with International Financial Reporting Standards (IFRSs).

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 are independent of the Group in accordance with the International Ethics Standards Board for Accountants' (IESBA) International Code of Ethics for Professional Accountants (including International Independence Standards) (IESBA Code) together with the ethical requirements that are relevant to our audit of the consolidated financial statements in the Republic of Kazakhstan, and we have fulfilled our other ethical responsibilities in accordance with these requirements and the IESBA Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

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. For each matter below, our description of how our audit addressed the matter is provided in that context.

We have fulfilled the responsibilities described in the *Auditor's responsibilities for the audit of the consolidated financial statements section* of our report, including in relation to these matters. Accordingly, our audit included the performance of procedures designed to respond to our assessment of the risks of material misstatement of the consolidated financial statements. The results of our audit procedures, including the procedures performed to address the matters below, provide the basis for our audit opinion on the accompanying consolidated financial statements.

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Key audit matter	*How our audit addressed the key audit matter*
Impairment of non-current assets	
We considered this matter to be one of the matters of the most significance in our audit due to the high level of subjectivity in respect of assumptions underlying impairment analysis of non-current assets and significant judgements and estimates made by the management. In addition, increased cost of debt and uncertainty regarding future economic growth affects the Group's business prospects and triggers potential impairment of the Group's assets. Significant assumptions included discount rates, commodities prices, tariffs forecasts, inflation and exchange rate forecasts. Significant estimates included production forecasts, future capital expenditures and commodity reserves available for development and production. Information on non-current assets and the impairment tests performed is disclosed in *Note 4* to the consolidated financial statements.	We obtained management's impairment analysis, including analysis of impairment indicators and impairment test models. We involved our internal business valuation specialists in the testing of the impairment analysis and calculation of recoverable amounts performed by the management. We analysed the assumptions underlying management forecast. We compared natural resource and commodity prices used in the calculation of recoverable amounts to available market forecasts. We compared the discount rate and long-term growth rates to general market indicators and other available information. We tested the mathematical accuracy of the impairment models and assessed their sensitivity to changes in assumptions. We analysed the disclosures made in the consolidated financial statements in respect of the impairment of non-current assets.
Compliance with loan covenants	
In accordance with the terms of certain financing arrangements, the Group should comply with certain loan covenants. Breaching covenants could result in significant fines and penalties along with funding shortages. In addition, cross default provisions are in place under many of the Group's financing arrangements. Compliance with covenants was one of the matters of most significance in our audit since it can have a major impact on the going concern assumption used in the preparation of the consolidated financial statements, and on classification of interest-bearing liabilities in the consolidated statement of financial position. Information on compliance with covenants is disclosed in *Note 19* to the consolidated financial statements.	We examined the terms of financing arrangements on covenants including additional clauses on cross default conditions. We compared data used in the calculations with the consolidated financial statements and with the financial statements of subsidiaries. We assessed arithmetic accuracy of financial covenants calculations. We analysed the forecast made in approved budgets as of 31 December 2022, to assess if a breach is likely to occur in the next 12 months, we obtained and analysed management's analysis for the potential impact on going concern. We analysed communication with creditors in respect of compliance with covenants as at 31 December 2022. We also analysed the information disclosed in the consolidated financial statements.

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Responsibilities of management and the Audit Committee for the consolidated financial statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with IFRSs, 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.

The Audit Committee is 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 skepticism 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.

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- 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 the Audit Committee 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 the Audit Committee 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.

From the matters communicated with the Audit Committee, 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 partner in charge of the audit resulting in this independent auditor's report is Adil Syzdykov.

Ernst & Young LLP

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Adil Syzdykov
Auditor

Rustamzhan Sattarov
General Director
Ernst & Young LLP

Auditor Qualification Certificate
No. МФ - 0000172 dated 23 December 2013

State audit license for audit activities on the territory of the Republic of Kazakhstan: series МФЮ-2 No. 0000003 issued by the Ministry of finance of the Republic of Kazakhstan on 15 July 2005

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20 April 2023

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CONSOLIDATED STATEMENT OF FINANCIAL POSITION

As of December 31

In millions of tenge	Note	2022	2021
Assets			
Non-current assets			
Property, plant and equipment	7	**14,385,944**	14,264,058
Intangible assets	8	**1,945,362**	2,004,032
Exploration and evaluation assets	9	**294,300**	278,949
Investment property		**36,529**	37,014
Investments in joint ventures and associates	10	**6,734,581**	5,681,234
Amounts due from credit institutions	12	**270,568**	104,803
Loans issued and net investment in finance lease	11	**151,726**	357,413
Other non-current financial assets	13	**739,611**	667,832
Other non-current assets	14	**473,725**	578,190
Deferred tax assets	33	**88,968**	69,148
		25,121,314	24,042,673
Current assets			
Inventories	15	**865,484**	728,897
VAT receivable		**203,658**	168,889
Income tax prepaid		**124,947**	55,513
Trade accounts receivable	16	**1,081,402**	1,024,892
Amounts due from credit institutions	12	**1,433,305**	671,859
Loans issued and net investment in finance lease	11	**66,889**	46,703
Other current financial assets	13	**347,700**	506,895
Other current assets	16	**250,022**	209,986
Cash and cash equivalents	17	**2,940,203**	2,810,730
		7,313,610	6,224,364
Assets classified as held for sale or distribution to the Shareholder	6	**1,140,071**	42,721
		8,453,681	**6,267,085**
Total assets		**33,574,995**	**30,309,758**

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

For the year ended December 31

In millions of tenge	Note	2022	2021
Equity and liabilities			
Equity attributable to equity holder of the Parent			
Share capital	18.1	**5,268,819**	5,268,580
Currency translation reserve	18.7	**2,220,063**	1,894,545
Revaluation reserve of investments at fair value through other comprehensive income		**35,519**	32,694
Hedging reserve	18.8	**(5,900)**	(48,906)
Other capital reserves	18.9	**(16,986)**	(16,984)
Retained earnings		**9,738,130**	8,125,704
		17,239,645	15,255,633
Non-controlling interests	18.6	**2,504,016**	1,917,459
Total equity		**19,743,661**	17,173,092
Non-current liabilities			
Borrowings	19	**5,400,163**	6,908,483
Loans from the Government of the Republic of Kazakhstan	20	**679,844**	569,105
Provisions	21	**407,211**	442,394
Lease liabilities	22	**482,968**	379,985
Employee benefit liabilities		**126,476**	125,455
Other non-current liabilities	23	**178,680**	187,843
Deferred tax liabilities	33	**1,654,216**	1,333,617
		8,929,558	9,946,882
Current liabilities			
Borrowings	19	**1,267,512**	954,209
Loans from the Government of the Republic of Kazakhstan	20	**3,760**	10,264
Provisions	21	**155,101**	100,348
Income taxes payable		**79,110**	16,766
Trade and other payables	24	**1,125,978**	1,118,055
Lease liabilities	22	**138,192**	129,676
Employee benefit liabilities		**13,472**	14,981
Other current liabilities	24	**1,073,558**	845,485
		3,856,683	3,189,784
Liabilities associated with assets classified as held for sale or distribution to the Shareholder	6	**1,045,093**	–
		4,901,776	3,189,784
Total liabilities		**13,831,334**	**13,136,666**
Total equity and liabilities		**33,574,995**	**30,309,758**

Managing Director for Economy and Finance – Member of the Management Board

Nazira Nurbayeva

Chief accountant

Almaz Abdrakhmanova

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME (continued)

For the year ended December 31

In millions of tenge	Note	2022	2021
Revenue	25	**14,785,284**	11,709,658
Government grants		**53,392**	54,614
		14,838,676	11,764,272
Cost of sales	26	**(11,281,525)**	(8,794,057)
Gross profit		**3,557,151**	2,970,215
General and administrative expenses	27	**(482,482)**	(443,619)
Transportation and selling expenses	28	**(906,869)**	(728,331)
Expected credit losses on financial assets, net		**(19,386)**	(4,341)
Impairment loss, net	29	**(71,682)**	(131,315)
(Loss)/gain on disposal of subsidiaries	6	**(1,882)**	2,203
Operating profit		**2,074,850**	1,664,812
Finance costs	30	**(653,989)**	(555,537)
Finance income	31	**320,100**	174,898
Other non-operating loss		**(114,924)**	(51,327)
Other non-operating income		**74,603**	95,242
Share in profit of joint ventures and associates, net	32	**1,449,260**	1,142,082
Net foreign exchange loss, net		**(9,898)**	(777)
Profit before income tax		**3,140,002**	2,469,393
Income tax expenses	33	**(771,118)**	(561,036)
Net profit for the year		**2,368,884**	**1,908,357**

In millions of tenge	Note	2022	2021
Other comprehensive income			
Other comprehensive income to be reclassified to		**522.650**	151.889
profit or loss in subsequent periods			
Exchange differences on translation of foreign operations		**522,650**	151,889
Unrealized loss on debt instruments at fair value through other comprehensive income		**(1,945)**	(389)
Share of the other comprehensive income of associates and joint ventures	10	**5,188**	2,382
Gain on transactions with hedge instruments	18.8	**45,812**	15,888
Net realized gain on debt instruments at fair value through other comprehensive income		**66**	840
Tax effect on transactions of OCI components		**(37,141)**	(12,620)
Other comprehensive income to be reclassified to			
profit or loss in subsequent periods, net of tax		**534,630**	157,990
Other comprehensive income not to be reclassified to		**319**	462
profit or loss in subsequent periods			
Share of the other comprehensive loss of associates and joint ventures	10	**(18)**	(169)
Actuarial gain/(loss) on defined benefit plans		**9,145**	(412)
Tax effect on transactions of OCI components		**319**	462
Other comprehensive loss not to be reclassified to			
profit or loss in subsequent periods		**9,446**	(119)
Other comprehensive income for the year, net of tax		**544,076**	157,871
Total comprehensive income for the year, net of tax		**2,912,960**	2,066,228
Net profit for the year attributable to:			
Equity holder of the Parent		**1,921,509**	1,629,216
Non-controlling interests		**447,375**	279,141
		2,368,884	1,908,357
Total comprehensive income for the year, attributable to:			
Equity holder of the Parent		**2,430,394**	1,774,115
Non-controlling interests		**482,566**	**292,113**
		2,912,960	**2,066,228**
Earnings per share – tenge			
Basic and diluted	**18.10**	**680.33**	**548.07**

Managing Director for Economy and Finance –
Member of the Management Board

Nazira Nurbayeva

Chief accountant

Almaz Abdrakhmanova

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

Attributable to the equity holder of the Parent

In millions of tenge	Note	Share capital	Revaluation reserve of investments at fair value through other comprehen-sive income	Currency translation reserve
Balance as at December 31, 2020		**5,258,657**	**31,464**	**1,763,499**
Net profit for the year		–	–	–
Other comprehensive income for the year		–	1,230	130,449
Total comprehensive income for the year		**–**	**1,230**	**130,449**
Issue of shares	18.1	9,923	–	–
Dividends	18.2	–	–	–
Other transactions with the Shareholder		–	–	–
Other distributions to the Shareholder	18.3	–	–	–
Transfer of assets to the Shareholder	6	–	–	–
Discount on loans from the Government	18.4	–	–	–
Disposal of subsidiaries		–	–	–
Change in ownership interests of subsidiaries – disposal of interest that does not result in the loss of control	18.5	–	–	–
Other equity movements		–	–	597
Balance as at December 31, 2021		**5,268,580**	**32,694**	**1,894,545**
Net profit for the year		–	–	–
Other comprehensive income for the year		–	2,825	453,184
Total comprehensive income for the year		**–**	**2,825**	**453,184**
Issue of shares	18.1	239	–	–
Equity contribution to subsidiary		–	–	–
Dividends	18.2	–	–	–
Other transactions with the Shareholder	4	–	–	–
Other distributions to the Shareholder	18.3	–	–	–
Discount on loans from the Government	18.4	–	–	–
Acquisition of joint venture	5	–	–	–
Change in ownership interests of subsidiaries – disposal of interest that does not result in the loss of control	18.5	–	–	(128,297)
Other equity movements		–	–	631
Balance as at December 31, 2022		**5,268,819**	**35,519**	**2,220,063**

Managing Director for Economy and Finance –
Member of the Management Board

Nazira Nurbayeva

For the year ended December 31

Hedging reserve	Other capital reserves	Retained earnings	Total	Non-controlling interests	Total
(60,416)	**(16,984)**	**6,502,544**	**13,478,764**	**1,672,851**	**15,151,615**
–	–	1,629,216	1,629,216	279,141	1,908,357
11,960	–	1,260	144,899	12,972	157,871
11,960	**–**	**1,630,476**	**1,774,115**	**292,113**	**2,066,228**
–	–	–	9,923	5,759	15,682
–	–	(88,337)	(88,337)	(92,511)	(180,848)
–	–	6,286	6,286	–	6,286
–	–	(65,582)	(65,582)	–	(65,582)
–	–	(37,434)	(37,434)	–	(37,434)
–	–	(278)	(278)	–	(278)
–	–	–	–	1,225	1,225
–	–	177,907	177,907	36,680	214,587
(450)	–	122	269	1,342	1,611
(48,906)	**(16,984)**	**8,125,704**	**15,255,633**	**1,917,459**	**17,173,092**
–	–	1,921,509	1,921,509	447,375	2,368,884
43,365	–	9,511	508,885	35,191	544,076
43,365	**–**	**1,931,020**	**2,430,394**	**482,566**	**2,912,960**
–	–	–	239	–	239
–	–	–	–	433	433
–	–	(170,024)	(170,024)	(186,073)	(356,097)
–	–	(4,201)	(4,201)	–	(4,201)
–	–	(212,644)	(212,644)	–	(212,644)
–	–	68,684	68,684	–	68,684
–	–	9,937	9,937	1,052	10,989
272	(2)	(9,470)	(137,497)	288,571	151,074
(631)	–	(876)	(876)	8	(868)
(5,900)	**(16,986)**	**9,738,130**	**17,239,645**	**2,504,016**	**19,743,661**

Chief accountant

Almaz Abdrakhmanova

CONSOLIDATED STATEMENT OF CASH FLOWS

In millions of tenge	Note	2022	2021
Cash flows from operating activities			
Receipts from customers		**16,570,087**	12,528,322
Payments to suppliers		**(9,696,953)**	(7,397,233)
Payments to employees		**(1,459,091)**	(1,114,920)
Other taxes and payments		**(2,114,087)**	(1,717,500)
Receipts from suppliers under the arbitration decision		**–**	112,058
Operations with financial instruments		**12,548**	13,690
Short-term lease payments and variable lease payments		**(95,791)**	(49,012)
Proceeds from subsidized interest rates on financial liabilities		**29,276**	–
Return of VAT from the budget		**143,866**	241,670
Other payments		**(244,566)**	(100,811)
Income taxes paid		**(512,154)**	(347,423)
Interest paid		**(607,858)**	(557,366)
Interest received		**213,899**	114,565
Net cash flows received from operating activities		**2,239,176**	1,726,040
Cash flows from investing activities			
Acquisition of property, plant and equipment, and exploration and evaluation assets and other non-current assets		**(1,298,462)**	(1,295,235)
Acquisition of intangible assets		**(29,416)**	(31,994)
Proceeds from sale of property, plant and equipment		**6,849**	36,956
Proceeds from sale of other non-current assets		**42,565**	47,662
Dividends received from joint ventures and associates	10	**734,518**	547,447
Acqusition of subsidiaries, net of cash acquired with the subsidiary		**–**	89
Issuance of bank deposits		**(2,239,910)**	(1,066,385)
Redemption of bank deposits		**1,345,573**	737,951
Loans issued		**(20,935)**	(17,541)
Proceeds from sale of subsidiaries, net of cash of disposed subsidiaries		**(2,869)**	(27,819)
Proceeds from sale/(acquisition) of joint ventures and associates, net		**44**	12,181
Additional contributions to share capital of joint ventures and associates without change in ownership	10	**(15,418)**	(1,926)
Repayment of loans issued		**239,040**	30,480
Acquisition of debt instruments		**(1,136,781)**	(728,299)
Proceeds from sale/repayment by issuers of debt instruments		**1,045,138**	722,163
Other payments		**(40,957)**	(36,916)
Net cash flows used in investing activities		**(1,371,021)**	**(1,071,186)**

For the year ended December 31

In millions of tenge	Note	2022	2021
Cash flows from financing activities			
Proceeds from borrowings	19, 20	**1,341,055**	1,462,347
Repayment of borrowings	19, 20	**(1,618,738)**	(1,171,065)
Reservation of cash for payment of borrowings	19	**(152)**	(292,258)
Repayment of lease liabilities	22	**(153,822)**	(121,314)
Contributions to the share capital by the Equity holder of the Parent	18.1	**–**	9,923
Contributions by non-controlling interests		**50**	792
Distributions to the Shareholder		**(132,204)**	(67,568)
Dividends paid to non-controlling interests of subsidiaries	18.2	**(184,145)**	(92,076)
Disposal of interest that does not result in the loss of control	18.5	**153,860**	247,474
Dividends paid to the Shareholder	18.2	**(170,024)**	(88,337)
Bonds early extinguishment premium and fees paid	19	**7,370**	–
Other payments		**(3,939)**	(2,120)
Net cash flows used in financing activities		**(760,689)**	(114,202)
Net increase in cash and cash equivalents		**107,466**	540,652
Effects of exchange rate changes on cash and cash equivalents		**102,497**	41,984
Changes in cash and cash equivalents disclosed as part of assets held for sale		**(80,760)**	979
Change in allowance for expected credit losses		**270**	(554)
Cash and cash equivalents at the beginning of the year		**2,810,730**	**2,227,669**
Cash and cash equivalents at the end of the year	17	**2,940,203**	**2,810,730**

Managing Director for Economy and Finance –
Member of the Management Board
Nazira Nurbayeva

Chief accountant
Almaz Abdrakhmanova

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended December 31, 2022

1. General information

Corporate information

"Sovereign Wealth Fund "Samruk-Kazyna" JSC (the "Fund" or "Samruk-Kazyna") was established on November 3, 2008 in accordance with the Decree of the President of the Republic of Kazakhstan dated October 13, 2008 and the Resolution of the Government of the Republic of Kazakhstan dated October 17, 2008. The formation was enacted by the merger of "Sustainable Development Fund "Kazyna" JSC ("Kazyna") and "Kazakhstan Holding Company for State Assets Management "Samruk" JSC ("Samruk") and the additional transfer to the Fund of interests in certain entities owned by the Government of the Republic of Kazakhstan (the "State" or the "Government"). The Government is the sole shareholder of the Fund (the "Shareholder" or the "Parent").

During this process the Government's overall objective was to increase management efficiency and to optimise organisational structures for them to successfully achieve their strategic objectives as set in the respective Government programs.

The Fund is a holding company combining companies listed in Note 34 (the "Group"). Prior to February 1, 2012, the Fund's activities were governed by the Law of the Republic of Kazakhstan *On National Welfare Fund* No. 134-4 dated February 13, 2009 and were aimed to assist in provision of stable development of the state economy, modernization and diversification of economy, and improvement of the Group companies' efficiency. According to the Law of the Republic of Kazakhstan enacted on February 1, 2012 *On Sovereign Wealth Fund* No. 550-4, the Fund's activity is focused on improving sovereign wealth of the Republic of Kazakhstan by increasing the long-term value of the Group companies and by effective management of the Group assets.

For management purposes, the Group is organized into organizational business units based on their products and services, and has 8 (eight) reportable operating segments as follows *(Note 38):*

- Oil-and-gas and petrochemical segment includes operations related to exploration and production of oil and gas, transportation of oil and gas, refining and trading of crude oil, gas and refined products, and production of oil-and-gas and petrochemical products;
- Transportation segment includes operations related to railway and air transportation of cargo and passengers.
- Communication segment includes operation of fixed line communication, including local, long-distance intercity and international telecommunication services (including CIS and non-CIS countries); and also renting out of lines, data transfer services and wireless communication services.
- Energy segment includes operations related to production and distribution of electricity, the function of oversight over the input of electricity into the energy system and consumption of imported electricity, the function of centralized operation and dispatch of facilities in the Unified Energy System of Kazakhstan.
- Mining segment includes exploration, mining, processing, sales of mineral resources and geological exploration.
- Industrial segment includes industry enterprises and projects of chemical industry.
- Corporate center segment covers Fund's investing and financing activities, including provision of loans to related and third parties.
- Other segment includes operations related to assisting the Government in increasing housing availability by investing into residential development and other operations.

These consolidated financial statements were authorised for issue by the Managing Director for Economy and Finance – Member of the Management Board and Chief accountant of the Fund on April 20, 2023 and preliminary approved by the Audit Committee of the Board of Directors of the Fund. These consolidated financial statements should be further approved by the Board of Directors and the Sole Shareholder.

Privatization plan

On April 30, 2014 the Government approved the initial Complex privatization plan for 2014-2016. On December 30, 2015 the Government approved the new 2016-2020 Complex privatization plan (replacing previous 2014-2016 Complex privatization plan) and the list of all state owned assets to be privatized, including certain Fund subsidiaries.

On December 29, 2020, by the Resolution of the Government of the Republic of Kazakhstan No. 908 *On Some Issues of Privatization for* 2021-2025, a new comprehensive Complex privatization plan for 2021-2025 was approved, which includes a new list of state owned organizations and assets of the Fund's group to be transferred to a competitive environment.

2. Basis of preparation

These consolidated financial statements have been prepared on a historical cost basis, except as described in the accounting policies and the notes to these consolidated financial statements.

These consolidated financial statements are presented in Kazakhstan tenge ("tenge") and all monetary amounts are rounded to the nearest million tenge except when otherwise indicated.

Statement of compliance

These consolidated financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by International Accounting Standard Board ("IASB").

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 judgment in the process of applying the accounting policies. The areas involving a higher degree of judgment or complexity, or areas where assumptions and estimates are significant to the consolidated financial statements are disclosed in *Note 4*.

The consolidated financial statements were prepared on a going concern basis.

Foreign currency translation

Functional and presentation currency

Items included in these consolidated financial statements of each of the Group's entities are measured using the currency of primary economic environment in which the entity operates ("the functional currency"). The consolidated financial statements are presented in tenge, which is the Group's presentation currency.

Transactions and balances

Foreign currency transactions are translated into the functional currency using the exchange rates prevailing at the dates of the transactions. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at the reporting date exchange rates of monetary assets and liabilities denominated in foreign currencies are recognized in profit and loss.

Non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the exchange rates as at the dates of initial transactions. Non-monetary items measured at fair value in a foreign currency are translated using the exchange rates at the date when the fair value is determined.

Group entities

Gains, losses and financial position of all of the Group's subsidiaries, joint ventures and associates (none of which has the currency of a hyperinflationary economy) that have a functional currency different from the presentation currency are translated into the presentation currency as follows:

- Assets and liabilities for each statement of financial position presented are translated at the closing rate at that reporting date;
- Income and expenses for each statement of comprehensive income are translated at average exchange rates (unless this average is not a reasonable approximation of the cumulative effect of the rates prevailing on the transaction dates; in which case income and expenses are translated at the rate on the dates of the transactions); and
- All resulting exchange differences are recognized as a separate component of other comprehensive income.

Exchange rates

Weighted average currency exchange rates established by the Kazakhstan Stock Exchange ("KASE") are used as official currency exchange rates in the Republic of Kazakhstan.

The following table presents currency exchange rates to tenge:

	December 31, 2022	December 31, 2021	Weighted average for 2022	Weighted average for 2021	April 20, 2023
United States dollar ("USD")	**462.65**	431.80	**460.93**	426.06	**455.63**
Euro ("EUR")	**492.86**	489.10	**485.29**	503.96	**499.37**
Russian ruble ("RUR")	**6.43**	5.76	**6.92**	5.78	**5.58**

For the year ended December 31, 2022, the Group had foreign exchange loss of 9,114,106 million tenge and foreign exchange gain of 9,104,208 million tenge, due to fluctuations in foreign exchange rates to tenge.

The war in Ukraine

The war in Ukraine, which began in 2022, has resulted in a number of IFRS accounting pronouncements affecting financial reporting.

Many countries have already imposed and continue to impose new sanctions on certain Russian entities and Russian citizens. The situation itself, as well as potential fluctuations in commodity prices, exchange rates, import and export restrictions, availability of local materials and services and access to local resources have directly affected the significant volumes of operations within the CIS.

Management is unable to predict either the extent or duration of developments in the Kazakhstan economy or assess their potential impact on the Group's future financial position. Management believes it is taking all necessary measures to support the sustainability and growth of the Group's business in the current circumstances.

Renegotiation of loans in the context of IBOR reform

In the context of IBOR reform, some financial instruments have already been amended or will be amended as they transition from IBORs to risk free rates (further RFR). In addition to the interest rate of a financial instrument changing, there may be other changes made to the terms of the financial instrument at the time of transition. For financial instruments measured at amortised cost, the Group first applies the following practical expedients:

- A practical expedient to require contractual changes, or changes to cash flows that are directly required by the reform, to be treated as changes to a floating interest rate, equivalent to a movement in a market rate of interest;
- Permit changes required by IBOR reform to be made to hedge designations and hedge documentation without the hedging relationship being discontinued;
- Provide temporary relief to entities from having to meet the separately identifiable requirement when an RFR instrument is designated as a hedge of a risk component.

Second, for any changes not covered by the practical expedient, the Group applies judgement to assess whether the changes are substantial and if they are, the financial instrument is derecognized and a new financial instrument is recognized. If the changes are not substantial, the Group adjusts the gross carrying amount of the financial instrument by the present value of the changes not covered by the practical expedient, discounted using the revised effective interest rate.

3. Summary of significant accounting policies

New and amended standards and interpretations

The accounting policies adopted in the preparation of the consolidated financial statements are consistent with those followed in the preparation of the Group's annual consolidated financial statements for the year ended December 31, 2021, except for the adoption of new standards and interpretations effective as of January 1, 2022.

The following amendments applicable for the Group were applied for the first time in 2022:

- *Onerous Contracts – Costs of Fulfilling a Contract – Amendments to IAS 37.* The amendments specify that when assessing whether a contract is onerous or loss-making, an entity needs to include costs that relate directly to a contract to provide goods or services including both incremental costs (e.g., the costs of direct labour and materials) and an allocation of costs directly related to contract activities (e.g., depreciation of equipment used to fulfil the contract and costs of contract management and supervision). General and administrative costs do not relate directly to a contract and are excluded unless they are explicitly chargeable to the counterparty under the contract. These amendments had no impact on the consolidated financial statements of the Group.
- *Reference to the Conceptual Framework – Amendments to IFRS 3.* The amendments replace a reference to a previous version of the IASB's Conceptual Framework with a reference to the current version issued in March 2018 without significantly changing its requirements. The amendments add an exception to the recognition principle of IFRS 3 Business Combinations to avoid the issue of potential 'day 2' gains or losses arising for liabilities and contingent liabilities that would be within the scope of IAS 37 Provisions, Contingent Liabilities and Contingent Assets or IFRIC 21 Levies, if incurred separately. The exception requires entities to apply the criteria in IAS 37 or IFRIC 21, respectively, instead of the Conceptual Framework, to determine whether a present obligation exists at the acquisition date. The amendments also add a new paragraph to IFRS 3 to clarify that contingent assets do not qualify for recognition at the acquisition date. These amendments had no impact on the consolidated financial statements of the Group as there were no contingent assets, liabilities or contingent liabilities within the scope of these amendments that arose during the period.
- *Property, Plant and Equipment: Proceeds before Intended Use – Amendments to IAS 16 Leases.* The amendment prohibits entities from deducting from the cost of an item of property, plant and equipment, any proceeds of the sale of items produced while bringing that asset to the location and condition necessary for it to be capable of operating in the manner intended by management. Instead, an entity recognises the proceeds from selling such items, and the costs of producing those items, in profit or loss.
- The subsidiary of the Fund, "Kazakhstan Petrochemical Industries Inc." LLP, started test production and sale of polypropylene products. These products were obtained by bringing the intergrated gas chemical complex into a condition required for its operation in accordance with the intentions of management. Revenue from realization of test products was recognized within other income, and cost of sales of test products was recognized within other expenses.
- *IFRS 9 Financial Instruments – Fees in the '10 per cent' test for derecognition of financial liabilities.* The amendment clarifies the fees that an entity includes when assessing whether the terms of a new or modified financial liability are substantially different from the terms of the original financial liability. These fees include only those paid or received between the borrower and the lender, including fees paid or received by either the borrower or lender on the other's behalf. There is no similar amendment proposed for IAS 39 Financial Instruments: Recognition and Measurement. These amendments had no impact on the consolidated financial statements of the Group as there were no modifications of the Group's financial instruments during the period. The Group intends to apply the amendments in the future periods if they become applicable.

Standards that have been issued but not yet effective

The new and amended standards and interpretations that are issued, but not yet effective, up to the date of issuance of the Group's financial statements are disclosed below. The Group intends to adopt these new and amended standards and interpretations, if applicable, when they become effective.

These amendments and interpretations did not have an impact on the consolidated financial statements of the Group:
- IFRS 17 Insurance Contracts;
- Amendments to IAS 1 *Presentation of Financial Statements named Classification of Liabilities as Current or Non-current;*
- Amendments to IAS 8 *Accounting Policies, Changes in Accounting Estimates and Errors named Definition of Accounting Estimates;*
- Amendments to IAS 1 Presentation of Financial Statements and IFRS Practice Statement 2 Making Materiality Judgements named *Disclosure of Accounting Policies;*
- Amendments to IFRS 16 *named Lease Liability in a Sale and Leaseback;*
- Amendments to IAS 12 Income Taxes named *Deferred Tax Related to Assets and Liabilities arising from a Single Transaction.*

The Group does not plan for early adoption in respect of above-mentioned new standards and amendments to existing standards to which this option is available.

The Group has not early adopted any standard, interpretation or amendment that has been issued but is not yet effective.

Basis of consolidation

These consolidated financial statements comprise the financial statements of the Fund and its controlled subsidiaries *(Note 34).*

Subsidiaries

Subsidiaries are the entities controlled by the Group. Control is achieved when the Group is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. Specifically, the Group controls an investee if, and only if, the Group has:
- Power over the investee (i.e. existing rights that give it the current ability to direct the relevant activities of the investee);
- Exposure, or rights, to variable returns from its involvement with the investee;
- The ability to use its power over the investee to affect its returns.

Generally, there is a presumption that a majority of voting rights results in control. To support this presumption and when the Group has less than a majority of the voting or similar rights of an investee, the Group considers all relevant facts and circumstances in assessing whether it has power over an investee, including:
- The contractual arrangement with the other vote holders of the investee;
- Rights arising from other contractual arrangements;
- The Group's voting rights and potential voting rights.

The Group re-assesses whether or not it controls an investee if facts and circumstances indicate that there are changes to one or more of the three elements of control. Consolidation of a subsidiary begins when the Group obtains control over the subsidiary and ceases when the Group loses control over the subsidiary.

Assets, liabilities, revenue and expenses of a subsidiary acquired or disposed of during the year are included in the consolidated financial statements from the date the Group gains control until the date the Group ceases to control the subsidiary.

Except for acquisition in transactions between entities under common control, subsidiaries are consolidated from the date when control is obtained by the Group and are de-consolidated from the date when control ceases. At the acquisition of the subsidiary, acquisition cost is distributed between assets and liabilities based on their fair value as at the date of acquisition. Financial statements of the subsidiaries are prepared for the same reporting period as those of the Fund, using consistent accounting policies.

All intra-group balances and transactions, including unrealized gains resulting from intra-group transactions are eliminated in full. Unrealized losses are eliminated in the same manner as unrealized gains, except that they are eliminated to the extent that there is no evidence of impairment.

Non-controlling interests represents a portion of equity in subsidiaries, which is not owned by the Group, and is recorded separately in equity in the consolidated statement of financial position separately from the equity attributable to the Parent. Losses within a subsidiary are attributed to the non-controlling interests even if that results in its deficit balance.

A change in the ownership interest of a subsidiary, without a loss of control, is accounted for as an equity transaction. If the Group loses control over a subsidiary, it:

- Derecognises the assets (including goodwill) and liabilities of the subsidiary;
- Derecognises the carrying amount of any non-controlling interests;
- Derecognises the cumulative translation differences recorded in equity;
- Recognises the fair value of the consideration received;
- Recognises the fair value of any investment retained;
- Recognises any surplus or deficit in profit or loss;
- Reclassifies the Parent's share of components previously recognised in OCI to profit or loss or retained earnings, as appropriate, as would be required if the Group had directly disposed of the related assets or liabilities.

Business combinations

Business combinations are accounted for using the acquisition method. The cost of an acquisition is measured as an aggregate of the consideration transferred, measured at acquisition date fair value and the amount of any non controlling interests in the acquiree. For each business combination, the acquirer measures the non-controlling interests in the acquiree either at fair value or at the proportionate share of the acquiree's identifiable net assets. Acquisition costs incurred are expensed and included in general and administrative expenses.

When the Group acquires a business, it assesses the financial assets acquired and liabilities assumed for appropriate classification and designation in accordance with the contractual terms, economic circumstances and pertinent conditions as at the acquisition date. This includes an analysis of the need of separation of embedded derivatives in host contracts by the acquiree.

If the business combination is achieved in stages, equity interest previously held by the Group in the acquiree is remeasured to fair value at the acquisition date through profit or loss.

Any contingent consideration to be transferred by the acquirer will be recognised at fair value at the acquisition date. Contingent consideration classified as an asset or liability that is a financial instrument and within the scope of IFRS 9 Financial Instruments: Recognition and Measurement, is measured at fair value with changes in fair value recognised in the statement of profit or loss in accordance with IFRS 9. If the contingent consideration is not within the scope of IFRS 9, it is measured at fair value through profit and loss. Contingent consideration that is classified as equity is not remeasured and subsequent settlement is accounted for within equity.

Goodwill is initially measured at cost, being the excess of the aggregate of the consideration transferred and the amount recognised for non-controlling interests, and any previous interest held, over the net identifiable assets acquired and liabilities assumed. If the fair value of the net assets acquired is in excess of the aggregate consideration transferred, the Group re-assesses whether it has correctly identified all of the assets acquired and all of the liabilities assumed and reviews the procedures used to measure the amounts to be recognised at the acquisition date. If the reassessment still results in an excess of the fair value of net assets acquired over the aggregate consideration transferred, then the gain is recognised in profit or loss.

After initial recognition, the goodwill is measured at cost less any accumulated impairment losses. For the purpose of impairment testing, goodwill acquired in a business combination is, from the acquisition date of an entity by the Group, allocated to each of the Group's cash-generating units that are expected to benefit from the combination, irrespective of whether other assets or liabilities of the acquiree are assigned to those units.

Where goodwill forms part of a cash-generating unit and part of the operation within that unit is disposed of, the goodwill associated with the operations disposed off is included in the carrying amount of the operation when determining the gain or loss on disposal of the operation. Goodwill disposed off in this circumstance is measured on the basis of the relative values of the operation disposed off and the portion of the cash-generating unit retained.

Business combinations achieved in stages

The acquisition date fair value of the acquirer's previously held equity interest in the acquiree is remeasured to fair value at the acquisition date through profit or loss.

In a business combination achieved in stages the acquirer recognises goodwill as of the acquisition date measured as the excess of (a) over (b) below:

(a) The aggregate of:

  (i) The consideration transferred measured in accordance with this IFRS 3 Business Combinations, which generally requires acquisition-date fair value;

  (ii) The amount of any non-controlling interests in the acquiree measured in accordance with IFRS 3; and

  (iii) The acquisition-date fair value of the acquirer's previously held equity interest in the acquire;

(b) The net of the acquisition-date amounts of the identifiable assets acquired and the liabilities assumed.

Acquisition of subsidiaries from parties under common control

Acquisition of subsidiaries from parties under common control (entities under the Government's control) is accounted for using the pooling of interest method.

Assets and liabilities of the subsidiary transferred under common control are recorded in these consolidated financial statements at the carrying amounts of the transferring entity (the "Predecessor") at the date of the transfer. Related goodwill, if any, inherent in the Predecessor's original acquisition is also recorded in these consolidated financial statements. Any difference between the total book value of net assets, including the Predecessor's goodwill, and the consideration paid is accounted for in these consolidated financial statements as an adjustment to equity.

These consolidated financial statements are presented as if the subsidiary had been acquired by the Group on the date it was originally acquired by the Predecessor.

Change in ownership interests in subsidiaries

In transactions where part of the interest in existing subsidiary is either sold or acquired, but control is retained, the differences between the carrying amounts of net assets attributable to interests in subsidiaries acquired or disposed and the consideration given or received for such increases or decreases are charged or credited to retained earnings.

Joint operations

A joint operation is a type of joint arrangement whereby the parties that have joint control of the arrangement have rights to the assets and obligations for the liabilities, relating to the arrangement. In relation to its interests in joint operations, the Group recognizes its: Assets, including its share of any assets held jointly; Liabilities, including its share of any liabilities incurred jointly; Revenue from the sale of its share of the output arising from the joint operation; Share of the revenue from the sale of the output by the joint operation; Expenses, including its share of any expenses incurred jointly.

Investment in joint ventures and associates

An associate is an entity over which the Group has significant influence. Significant influence is the power to participate in the financial and operating policy decisions of the investee, but which does not comprise control or joint control over those policies.

A joint venture is a type of joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the joint venture. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require unanimous consent of the parties sharing control. Under contractual arrangement that establishes joint control the Group may own less than 50% of shares in joint ventures.

The considerations made in determining significant influence or joint control are similar to those necessary to determine control over subsidiaries.

The Group has interests in joint ventures which are jointly controlled entities, whereby the venturers have a contractual arrangement that establishes joint control over the economic activities of the entities. Also, the Group has interests in associates, in which it exercises significant influence over the economic activities of the entities. The Group's investment in its joint ventures and associates are accounted for using the equity method.

Under the equity method, investment in joint venture / associate is carried in the consolidated statement of financial position at cost plus post acquisition changes in the Group's share of net assets of the joint venture / associate. Goodwill relating to a joint venture / associate is included in the carrying amount of the investment and is neither amortised nor individually tested for impairment.

The consolidated statement of comprehensive income reflects the share of the results of operations of the joint venture / associate. Where there has been a change in net assets recognized directly in the equity of the joint venture / associate, the Group recognises its share of any changes and discloses this, when applicable, in the consolidated statement of changes in equity. Unrealised gains and losses resulting from transactions between the Group and joint venture / associate are eliminated to the extent of the Group's interest in the joint venture / associate.

The share in profit of joint ventures / associates is shown on the face of the consolidated statement of comprehensive income. This is the profit attributable to equity holders of the joint venture / associate and therefore is profit after tax and non-controlling interests in the subsidiaries of the joint ventures / associates.

Financial statements of the joint venture / associate are prepared for the same reporting period as those of the Parent. Where necessary, adjustments are made to bring their accounting policies in line with those of the Group.

After application of the equity method, the Group determines whether it is necessary to recognise an additional impairment loss on the Group's investment in its joint ventures / associates. The Group determines at each reporting date whether there is any objective evidence that the investment in the joint venture / associate is impaired. If this is the case the Group calculates the amount of impairment as the difference between the recoverable amount of investment in the joint venture / associate and its carrying amount and recognises impairment loss in the consolidated statement of comprehensive income.

Upon loss of joint control over the joint venture and significant influence over associate, the Group measures and recognises any retaining investment at its fair value. Any difference between the carrying amount of the investment in the joint venture / associate upon loss of joint control / significant influence and the fair value of the retained investment and proceeds from disposal is recognized in profit or loss.

Current versus non-current classification

The Group presents assets and liabilities in the consolidated statement of financial position based on current/non-current classification. An asset is classified as current when it is:
- Expected to be realized or intended to be sold or consumed in normal operating cycle;
- Held primarily for the purpose of trading;
- Expected to be realized within 12 (twelve) months after the reporting period; or
- Cash or cash equivalent unless restricted from being exchanged or used to settle a liability for at least 12 (twelve) months after the reporting period.

All other assets are classified as non-current.

A liability is current when:
- It is expected to be settled in normal operating cycle;
- It is held primarily for the purpose of trading;
- It is due to be settled within 12 (twelve) months after the reporting period; or
- There is no unconditional right to defer the settlement of the liability for at least 12 (twelve) months after the reporting period.

The Group classifies all other liabilities as non-current. Deferred tax assets and liabilities are always classified as non current assets and liabilities.

Assets classified as held for sale and discontinued operations

Assets and disposal groups classified as held for sale are measured at the lower of carrying amount and fair value less costs to sell. Assets and disposal groups are classified as held for sale if their carrying amounts will be recovered through a sale transaction rather than through the continuing use. This condition is regarded as met only when the sale is highly probable and the asset or disposal group is available for immediate sale in its present condition. Management must be committed to the sale, which should be expected to qualify for recognition as a completed sale within 1 (one) year from the date of classification.

In the consolidated statement of comprehensive income for the reporting period, and for the prior year comparable period, incomes and expenses from discontinued operations are reported separately from normal income and expenses, even when the Group retains a non-controlling interests in the subsidiary after sale. The resulting profit or loss (net of tax) is reported separately in the consolidated statement of comprehensive income.

Property, plant and equipment and intangible assets once classified as held for sale are not depreciated.

Oil and natural gas exploration, evaluation and development expenditure

Costs incurred before obtaining subsoil use rights (licenses)

Costs incurred before obtaining full subsoil use rights (licenses) are expensed in the period in which they are incurred, except when costs are incurred after signing preliminary agreements with the Government of the Republic of Kazakhstan, in such cases costs incurred after this date are capitalized.

Expenditures for acquisition of subsurface use rights

Expenditures for acquisition of subsurface use rights (exploration and production) comprise signature bonuses, historical costs, obligatory expenditures for ecological and social programs and are capitalized within intangible assets as subsurface use rights at exploration and evaluation phase.

Expenditures for acquisition of subsurface use rights are accounted for on a field-by-field basis. Each field is tested for impairment on an annual basis. If no future activity is planned, the remaining balance of the acquisition costs is written off. Starting from the commercial production on fields subsurface use rights (remaining costs) shall be transferred to the property, plant and equipment and shall be amortized using unit-of-production method on actual production based on total proved reserves.

Exploration and evaluation expenditures (construction in progress)

Exploration and evaluation expenditures include geological and geophysical costs; costs directly related to exploration drilling; stripping activities; overhead and other expenses on exploration and evaluation, which could be related to a certain field. These costs include employee remuneration, materials and fuel used, rig costs and payments made to contractors. Except for geological and geophysical costs, exploration and evaluation expenditures are capitalized within exploration and evaluation assets, accounted for by subsurface use contracts and are not amortized. If mineral or hydrocarbon resources are not found, this could be an indication of impairment. All capitalized costs are subject to technical, commercial and management review at least once a year to confirm the continued intent to develop or otherwise extract value from the discovery. When this is no longer the case, the costs are written off. If mineral or hydrocarbon resources are determined and development is sanctioned, relevant costs are then transferred to oil and gas or mining assets subclasses.

Development and production expenditures (oil and gas and mining assets)

Development and production expenditures comprise previously capitalized (and reclassified in commencement of production) expenditures for acquisition of subsurface use rights and exploration and evaluation costs; drilling of producing wells regardless of the drilling results; construction of landfills; development of surface technological facilities required for production, collection and preparation of hydrocarbons and mineral resources at fields; other costs incurred in the process of organization of commercial production at fields; capitalized discounted costs for wells and mines abandonment and site restoration.

Development and production expenditures are capitalized within property, plant and equipment (oil and gas and mining assets), and are accounted for on a field-by-field basis. Oil and gas and mining assets are depreciated using a unit-of-production method based on actual production from commencement of commercial production at fields. Certain oil and gas and mining assets (surface facilities and equipment) with useful lives significantly differing from those of the fields are depreciated on a straight-line basis over their useful lives. The cost of acquisition of subsurface use rights including discounted decommissioning costs are depreciated over total proved reserves. The other field development costs are amortized over proved developed reserves.

Property, plant and equipment (other than oil and gas and mining assets)

On initial recognition, property, plant and equipment is measured at cost. Subsequently, property, plant and equipment are stated at cost less accumulated depreciation, depletion and impairment. The cost of self-constructed assets includes the cost of materials, direct labour and an appropriate proportion of production overheads.

Property, plant and equipment, other than oil and gas and mining assets, principally comprise the following classes of assets, which are depreciated on a straight-line basis over the expected useful lives:

Unified power system assets	8-100 years
Refinery assets	4-100 years
Pipelines	2-30 years
Buildings and premises	2-100 years
Railway tracks and infrastructure	10-80 years
Machinery, equipment and vehicles	2-50 years
Other	2-20 years

In cases when items of property, plant and equipment are subject to major inspection, the cost is recognized in the carrying amount of property, plant and equipment as a replacement of component if the recognition criteria set out in IAS 16 are satisfied.

An item of property, plant and equipment is derecognised upon disposal or when no future economic benefits are expected from its use or disposal. Any gain or loss arising on derecognition of an asset (calculated as the difference between the net disposal proceeds and the carrying amount of the asset) is included in profit or loss in the reporting period the asset is derecognised.

Residual values, useful lives and methods of depreciation are reviewed, and adjusted if appropriate, at each financial year end.

Intangible assets

Intangible assets acquired separately are measured on initial recognition at cost. The cost of intangible assets acquired in a business combination is fair value as at the date of acquisition. Following initial recognition, intangible assets are carried at cost less any accumulated amortisation and any accumulated impairment loss. Internally generated intangible assets, excluding capitalised development costs, are not capitalised and expenditure is charged against profits in the year in which the expenditure is incurred.

The useful lives of intangible assets are assessed to be either finite or indefinite. Intangible assets with finite lives are amortised over the useful economic life and assessed for impairment whenever there is an indication that the intangible asset may be impaired. The amortisation period and the amortisation method for an intangible asset with a finite useful life are reviewed at least at each financial year-end. Changes in the expected useful life or the expected pattern of consumption of future economic benefits embodied in the intangible asset is accounted for by changing the amortisation period or method, as appropriate, and treated as changes in accounting estimates.

The amortisation expense on intangible assets with finite lives is recognized in the consolidated statement of comprehensive income in the expense category consistent with the function of the intangible asset.

Intangible assets with the finite useful life principally comprise the following classes of assets which are amortised on a straight-line basis over the expected useful lives:

Licenses	3-20 years
Software	1-14 years
Other	2-15 years

Indefinite lives intangible assets are not amortized, but tested for impairment annually or whenever there are indications of impairment and, if necessary, written down to the recoverable amount.

Investment properties

Investment property is initially measured at cost, including transaction costs.

Since the Group adopted cost model, after initial recognition, investment property is accounted for in accordance with the cost model as set out in IAS 16 Property, Plant and Equipment, that is, at cost less accumulated depreciation and less accumulated impairment losses.

The depreciation is calculated based on straight line method basis over the expected remaining useful average life of 2 100 years.

Investment property is derecognised (eliminated from the consolidated statement of financial position) on its disposal or when the investment property is permanently withdrawn from use and no future economic benefits are expected in the future. The difference between the net inflows arisen from the disposal and carrying amount of the asset is recognised in the consolidated statement of comprehensive income for the period in which it was derecognized.

Impairment of non-financial assets

The Group assesses non-financial assets or groups of assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Individual assets are grouped for impairment assessment purposes at the lowest level at which there are identifiable cash inflows that are largely independent of the cash inflows of other groups of assets. If any such indication of impairment exists or when annual impairment testing for an asset group is required, the Group makes an estimate of its recoverable amount.

An asset’s or cash generating unit’s (CGU’s) recoverable amount is higher of its fair value less costs to sell and its value in use. Where the carrying amount of an asset or CGU exceeds its recoverable amount, the asset or CGU is considered impaired and an allowance is made to reduce the asset to its recoverable amount. In assessing value in use, the estimated future cash flows are adjusted for the risks specific to the asset or CGU and are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money. An assessment is made at each reporting date as to whether there is any indication that previously recognized impairment provision may no longer exist or may have decreased. If such indication exists, the recoverable amount is estimated.

A previously recognized impairment loss is reversed only if there has been a change in the estimates used to determine the asset’s recoverable amount since the last impairment allowance was recognized. If that is the case, the carrying amount of the asset is increased to its recoverable amount.

That increased amount cannot exceed the carrying amount that would have been determined, net of depreciation/ amortisation, had no impairment loss been recognized for the asset in prior years. Such reversal is recognized in profits and losses.

After such a reversal, the depreciation/amortisation charge is adjusted in future periods to allocate the asset’s revised carrying amount, less any residual value, on a systematic basis over its remaining useful life.

The following process is applied in assessing impairment of goodwill:

- Goodwill is tested for impairment annually as at December 31, and when circumstances indicate that its carrying amount may be impaired;
- Impairment is determined for goodwill by assessing the recoverable amount of the cash-generating units, to which the goodwill relates. Where the recoverable amount of the cash-generating units is less than their carrying amount an impairment loss is recognized. Impairment losses relating to goodwill cannot be reversed in future periods.

Impairment of exploration and evaluation assets

Exploration and evaluation assets are tested for impairment when reclassified to oil and gas development tangible or intangible assets or whenever facts and circumstances indicate impairment. One or more of the following facts and circumstances indicate that the Group should test exploration and evaluation assets for impairment (the list is not exhaustive):

- The period for which the Group entity has the right to explore and appraise in the specific area has expired during the period or will expire in the near future, and is not expected to be renewed;
- Substantive expenditure on the further exploration for and evaluation of hydrocarbon resources in the specific area is neither budgeted nor planned;
- Exploration for and evaluation of hydrocarbon resources in the specific area have not led to the discovery of commercial viable quantities of hydrocarbon resources and the Group entity has decided to discontinue such activities in the specific area;
- Sufficient data exist to indicate that, although a development in the specific area is likely to proceed, the carrying amount of the exploration and evaluation asset is unlikely to be recovered in full from successful development or by sale.

Financial assets

Initial recognition and measurement

Financial assets are classified, at initial recognition, as subsequently measured at amortised cost, fair value through other comprehensive income (FVOCI), and fair value through profit or loss (FVPL).

The classification of financial assets at initial recognition depends on the financial asset's contractual cash flow characteristics and the Group's business model for managing them. With the exception of trade receivables that do not contain a significant financing component or for which the Group has applied the practical expedient, the Group initially measures a financial asset at its fair value plus, in the case of a financial asset not at fair value through profit or loss, transaction costs. Trade receivables that do not contain a significant financing component or for which the Group has applied the practical expedient are measured at the transaction price determined under IFRS 15.

In order for a financial asset to be classified and measured at amortised cost or FVOCI, it needs to give rise to cash flows that are "solely payments of principal and interest (SPPI)" on the principal amount outstanding. This assessment is referred to as the SPPI test and is performed at an instrument level.

The Group's business model for managing financial assets refers to how it manages its financial assets in order to generate cash flows. The business model determines whether cash flows will result from collecting contractual cash flows, selling the financial assets, or both.

Purchases or sales of financial assets that require delivery of assets within a time frame established by regulation or convention in the market place (regular way trades) are recognised on the trade date, i.e., the date that the Group commits to purchase or sell the asset.

Subsequent measurement

For purposes of subsequent measurement, financial assets are classified in three categories:

- Financial assets at amortised cost (debt instruments);

- Financial assets at fair value through other comprehensive income;

- Financial assets at fair value through profit or loss.

Financial assets at amortised cost (debt instruments)

The Group measures financial assets at amortised cost if both of the following conditions are met:

- The financial asset is held within a business model with the objective to hold financial assets in order to collect contractual cash flows; and

- The contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Financial assets at amortised cost are subsequently measured using the effective interest (EIR) method and are subject to impairment. Gains and losses are recognised in profit or loss when the asset is derecognised, modified or impaired.

The Group's financial assets at amortised cost include trade and other receivables, loans due from third and related parties, debt securities of third and related parties and bank deposits.

Financial assets at fair value through other comprehensive income

The Group measures financial assets at FVOCI if both of the following conditions are met:

- The financial asset is held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets; and

- The contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding. Interest consists of consideration for the time value of money, and for the credit risk associated with the principal amount outstanding during a particular period of time.

The Group's financial assets at FVOCI include mainly debt securities of third and related parties.

Financial assets at fair value through profit or loss

Financial assets at FVPL include certain loans due from related parties, which contain embedded derivative financial instruments, and coupon bonds included in other financial assets mandatorily required to be measured at fair value. Financial assets with cash flows that are not solely payments of principal and interest are classified and measured at FVPL, irrespective of the business model. Notwithstanding the criteria for debt instruments to be classified at amortised cost or at FVOCI, as described above, debt instruments may be designated at FVPL on initial recognition if doing so eliminates, or significantly reduces, an accounting mismatch.

Financial assets at FVPL are carried in the consolidated statement of financial position at fair value with net changes in fair value recognised in the consolidated statement of comprehensive income.

The Group's financial assets at FVPL include mainly loans issued, debt and equity securities of third and related parties.

Derecognition

A financial asset is primarily derecognised (removed from the consolidated statement of financial position) when:

- The rights to receive cash flows from the asset have expired; or

- The Group has transferred its rights to receive cash flows from the asset or has assumed an obligation to pay the received cash flows in full without material delay to a third party under a "pass-through" arrangement; and either (a) the Group has transferred substantially all the risks and rewards of the asset; or (b) the Group has neither transferred nor retained substantially all the risks and rewards of the asset, but has transferred control of the asset.

When the Group has transferred its rights to receive cash flows from an asset or has entered into a pass-through arrangement, it evaluates if, and to what extent, it has retained the risks and rewards of ownership. When it has neither transferred nor retained substantially all of the risks and rewards of the asset, nor transferred control of the asset, the Group continues to recognise the transferred asset to the extent of its continuing involvement. In that case, the Group also recognises an associated liability. The transferred asset and the associated liability are measured on a basis that reflects the rights and obligations that the Group has retained.

Continuing involvement that takes the form of a guarantee over the transferred asset is measured at the lower of the original carrying amount of the asset and the maximum amount of consideration that the Group could be required to repay.

Impairment of financial assets

The Group recognises an allowance for expected credit losses (ECLs) for all debt instruments not held at fair value through profit or loss.

ECLs are based on the difference between the contractual cash flows due in accordance with the contract and all the cash flows that the Group expects to receive, discounted at an approximation of the original effective interest rate.

The expected cash flows will include cash flows from the sale of collateral held or other credit enhancements that are integral to the contractual terms.

ECLs are recognised in two stages. For credit exposures for which there has not been a significant increase in credit risk since initial recognition, ECLs are provided for credit losses that result from default events that are possible within the next 12-months (a 12-month ECL). For those credit exposures for which there has been a significant increase in credit risk since initial recognition, a loss allowance is required for credit losses expected over the remaining life of the exposure, irrespective of the timing of the default (a lifetime ECL).

For trade and other receivables the Group applies a simplified approach in calculating ECLs. Therefore, the Group does not track changes in credit risk, but instead recognises a loss allowance based on lifetime ECLs at each reporting date. The Group has established a provision matrix that is based on its historical credit loss experience, adjusted for forward-looking factors specific to the debtors and the economic environment.

The Group considers a financial asset in default when contractual payments are 90 days past due. However, in certain cases, the Group may also consider a financial asset to be in default when internal or external information indicates that the Group is unlikely to receive the outstanding contractual amounts in full before taking into account any credit enhancements held by the Group. A financial asset is written off when there is no reasonable expectation of recovering the contractual cash flows.

Hedge accounting

The Group designates certain hedging instruments in respect of foreign currency risk, as either hedges of net investments in foreign operations or cash flow hedges.

At the inception of the hedge relationship, the Group documents the relationship between the hedging instrument and the hedged item, along with its risk management objectives and its strategy for undertaking various hedge transactions. Furthermore, at the inception of the hedge and on an ongoing basis, the Group documents whether the hedging instrument is highly effective in offsetting changes in fair values of foreign operations or cash flows of the hedged item attributable to the hedged risk.

Amounts previously recognized in other comprehensive income and accumulated in equity are reclassified to profit or loss in the periods when the hedged item affects profit or loss, in the same line as the recognized hedged item.

Hedge accounting is discontinued:

- When the Group revokes the hedging relationship;
- When the hedging instrument expires or is sold, terminated, or exercised; or
- When it no longer qualifies for hedge accounting.

Any gain or loss recognized in other comprehensive income and accumulated in equity at that time remains in equity and is recognized when the forecast transaction is ultimately recognized in profit or loss. When a forecast transaction is no longer expected to occur, the gain or loss accumulated in equity is recognized immediately in profit or loss. The gain or loss relating to the ineffective portion is recognized immediately in profit or loss.

Investments in foreign operations hedge

Foreign currency gain or loss arising on items that are designated as part of the hedge of the Group's net investment in foreign operations are recognized in consolidated statement of comprehensive income within currency translation reserve.

Cash flow hedges

Foreign currency gain or loss arising from financial instruments that are designated and qualify as cash flow hedges is recognized in consolidated statement of comprehensive income within hedge reserve.

Inventories

Inventories are valued at cost or net realisable value, whichever is lower. Costs comprise charges incurred in bringing inventory to its present location and condition. Net realisable value is the estimated selling price in the ordinary course of business, less the estimated costs of completion and estimated costs necessary to sell. The same cost formula is used for all inventories having a similar nature and use. Inventories of oil and gas and energy operating segments are valued on a first-in first-out ("FIFO") basis. All other inventories are valued on the weighted-average cost basis.

Cash and cash equivalents

Cash and cash equivalents are defined as cash on hand, demand deposits, short-term and highly liquid investments with original maturity of not more than 3 (three) months readily convertible to known amounts of cash and subject to insignificant risk of change in value.

Financial liabilities

Initial recognition and measurement

Financial liabilities are classified, at initial recognition, as financial liabilities at FVPL, loans borrowings and payables, or as derivatives designated as hedging instruments in an effective hedge, as appropriate.

All financial liabilities are recognized initially at fair value and in the case of loans and borrowings, plus directly attributable transaction costs.

The Group's financial liabilities include trade and other payables, loans and borrowings and derivative financial instruments.

Subsequent measurement

The measurement of financial liabilities depends on their classification as follows:

Financial liabilities at fair value through profit or loss

Financial liabilities at FVPL includes financial liabilities held for trading and financial liabilities designated upon initial recognition as at fair value through profit or loss.

Financial liabilities are classified as held for trading if they are acquired for the purpose of selling in the near term. This category includes derivative financial instruments entered into by the Group that are not designated as hedging instruments in hedge relationships as defined by IFRS 9. Separated embedded derivatives are also classified as held for trading unless they are designated as effective hedging instruments.

Gains or losses on liabilities held for trading are recognized in profit or loss.

The Group has not designated any financial liabilities upon initial recognition as at FVPL.

Trade and other payables

Trade payables are recognized initially at fair value and subsequently measured at amortized cost using the effective interest rate (EIR).

Loans and borrowings

After initial recognition, interest bearing loans and borrowings are subsequently measured at amortized cost using the EIR. Gains and losses are recognized in the consolidated statement of comprehensive income when the liabilities are derecognized as well as through the EIR amortization process.

Amortized cost is calculated by taking into account any discount or premium on acquisition and fee or costs that are an integral part of the EIR. The EIR amortization is included in finance costs.

Borrowings are classified as current liabilities unless the Group has an unconditional right to defer settlement of the liability for at least 12 (twelve) months after the reporting date. Borrowing costs that are directly attributable to the acquisition, construction or production of a qualifying asset are capitalized as part of the cost of that asset. Other borrowing costs are recognized as an expense when incurred.

Financial guarantee contracts

Financial guarantee contracts issued by the Group are those contracts that require a payment to be made to reimburse the holder for a loss it incurs because the specified debtor fails to make a payment when due in accordance with the terms of a debt instrument. Financial guarantee contracts are recognised initially as a liability at fair value, adjusted for transaction costs that are directly attributable to the issuance of the guarantee. Subsequently, the financial guarantee contracts after initial recognition at the higher of the amount initially recognized less, when appropriate, the cumulative amount of income/amortization in accordance with the principles of IFRS 15 Revenue from Contracts with Customers and the amount of the estimated allowance for expected credit losses.

Derecognition of financial liabilities

A financial liability is derecognized when the obligation under the liability is discharged or cancelled or expires.

When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as a derecognition of the original liability and the recognition of a new liability, and the difference in the respective carrying amounts is recognized in profit or loss.

Offsetting of financial instruments

Financial assets and financial liabilities are offset and the net amount reported in the consolidated statement of financial position if, and only if, there is a currently enforceable legal right to offset the recognised amounts and there is an intention to settle on a net basis, or to realise the assets and settle the liabilities simultaneously.

Fair value of financial instruments

The fair value of financial instruments that are traded in active markets at each reporting date is determined by reference to quoted market prices or dealer price quotations (bid price for long positions and ask price for short positions), without any deduction for transaction costs.

For financial instruments not traded in an active market, the fair value is determined using appropriate valuation techniques. Such techniques may include:
- Using recent arm's length market transactions;
- Reference to the current fair value of another instrument that is substantially the same;
- A discounted cash flow analysis or other valuation models.

An analysis of fair values of financial instruments and further details as to how they are measured are provided in *Note 36*.

Leases

Determining whether the agreement is a lease or whether it contains evidence of a lease is based on an analysis of the content of the agreement at the date of the commencement of the lease. The agreement is a lease or contains signs of a lease if the implementation of the agreement depends on the use of a particular asset (or assets), and the right to use the asset or assets as a result of this agreement is transferred from one party to the other, even if this asset (or these assets) is not indicated (not specified) in the agreement explicitly.

The Group as lessee

For the lease contracts (or separate components of the contracts), under which the Group is granted the right to control the use of an identified asset (as defined by IFRS 16 Leases) for a certain period of time in exchange for consideration, the Group recognizes a right-of-use asset and a corresponding lease liability at the inception of the contract. Non-lease components of the contracts are accounted for in accordance with other relevant standards.

In accordance with IFRS 16 Leases, the Group applies practical expedient for not recognising the lease for the lease contracts with lease term of less than 12 months at lease inception and without purchase option, for the leases with variable lease rates that do not depend on an index or rate and for the leases of low value assets.

The Group recognizes short-term leases and leases of low value assets as expense on a straight-line basis over the term of the lease. The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date. Lease payments are discounted by using the Group incremental borrowing rate, except when the rate is implicit in the lease and can be readily determined.

The Group remeasures the lease liability (and makes a corresponding adjustment to the related right-of-use asset) whenever:

- The lease term has changed or there is a significant event or change in circumstances resulting in a change in the assessment of exercise of a purchase option, in which case the lease liability is remeasured by discounting the revised lease payments using a revised discount rate;

- The lease payments change due to changes in an index or rate or a change in expected payment under a guaranteed residual value, in which cases the lease liability is remeasured by discounting the revised lease payments using an unchanged discount rate (unless the lease payments change is due to a change in a floating interest rate, in which case a revised discount rate is used);

- A lease contract is modified and the lease modification is not accounted for as a separate lease, in which case the lease liability is remeasured based on the lease term of the modified lease by discounting the revised lease payments using a revised discount rate at the effective date of the modification..

At the commencement date, the Group measures the right-of-use asset at cost that includes the amount of the initial measurement of the lease liability, any lease payments made at or before the commencement date less any lease incentives received, any initial direct costs incurred by the lessee. The right-of-use asset is subsequently measured according to the accounting policy that is applied for own assets, including for depreciation and amortization and impairment measurement.

The recognised right-of-use asset is depreciated over the shorter period of expected useful life of the underlying asset or lease term.

The Group presents lease liabilities in the consolidated statement of financial position as a separate line *(Note 22)*, while right-of-use assets are presented within the same line item as that within which the corresponding underlying assets would be presented if they were owned, i.e. within property, plant and equipment *(Note 7)*.

In accordance with the requirements of IFRS 16, the Group classifies repayment of principal in cash flows from financial activities. In accordance with the Group's accounting policy, interest paid is classified as part of the cash flows from operating activities. Payments on short-term leases, leases of low value assets and variable rental payments not included in the valuation of the lease liability are presented as part of operating activities.

The Group as lessor

The Group enters into lease agreements as a lessor with respect to some of its property, plant and equipment items.

Leases for which the Group is a lessor are classified as finance or operating leases. Whenever the terms of the lease transfer substantially all the risks and rewards of ownership to the lessee, the contract is classified as a finance lease. All other leases are classified as operating leases. Rental income from operating leases is recognised on a straight-line basis over the term of the relevant lease.

Provisions

Asset retirement obligation (decommissioning)

Provision for decommissioning is recognized in full, on a discounted cash flow basis, when the Group has an obligation to dismantle and remove a facility or an item of property, plant and equipment and to restore the site on which it is located, and when a reasonable estimate of that provision can be made.

The amount recognized is the present value of the estimated future expenditure determined in accordance with local conditions and requirements. A corresponding addition to the carrying amount of the related item of property, plant and equipment in the amount equivalent to the provision is also recognized. This amount is subsequently depreciated as part of the capital costs of the production and transportation facilities in accordance with respective depreciation method.

Changes in the measurement of an existing decommissioning provision that result from changes in the estimated timing or amount of the outflow of resources embodying economic benefits required to settle the obligation, or change in the discount rate, is accounted for so that:

- Changes in the provision are added to, or deducted from, the carrying amount of the related asset in the current period;
- The amount deducted from the cost of the asset shall not exceed its carrying amount. If a decrease in the provision exceeds the carrying amount of the asset, the excess is recognized immediately in the consolidated statement of comprehensive income; and
- If the adjustment results in an addition to the cost of an asset, the Group considers whether this is an indication that the new carrying amount of the asset may not be fully recoverable. If it is such an indication, the Group tests the asset for impairment by estimating its recoverable amount, and accounts for any impairment loss, in accordance with IAS 36.

Other provisions

Provisions are recognized in the consolidated financial statements when the Group has a present obligation (legal or constructive) as a result of a past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation. Where the Group expects a provision to be reimbursed, for example under an insurance contract, the reimbursement is recognized as a separate asset but only when the reimbursement is virtually certain.

If the effect of the time value of money is material, provisions are determined by discounting the expected future cash flows at a pre-tax rate that reflects current market assessments of the time value of money and, where appropriate, the risks specific to the liability. Where discounting is used, the increase in the provision due to the passage of time is recognized as a finance cost.

Employee benefits

Contributions to pension funds

The Group withholds 10% from the salary of its employees limited to certain annual amounts as the employees' contribution to their designated pension funds. Under the legislation, employees are responsible for their retirement benefits payable by that pension funds and the Group has no present or future obligation to further compensate its employees upon their retirement in relation to these arrangements.

Social tax

The Group pays social tax on salaries payable to employees according to the current statutory requirements of the Republic of Kazakhstan. Social tax is expensed as incurred.

Defined benefit plan

In accordance with the Collective Agreements signed with trade unions and other benefit regulations, some subsidiaries of the Group provide certain benefits to its employees upon their retirement ("Defined Benefit Plan").

The Group recognises actuarial gains and losses arising from the reassessment of the employee benefit liability in the period they are identified in OCI and profits and losses, and recognises benefit costs and obligations based on estimates determined in accordance with IAS 19 Employee Benefits.

The obligation and cost of benefits under the defined benefit plan are determined using the projected unit credit method. This method considers each year of service as giving rise to an additional unit of benefit entitlement and measures each unit separately to build up the final obligation. The cost of providing benefits is charged to profit and loss, so as to attribute the total benefit cost over the service lives of employees in accordance with the benefit formula of the defined benefit plan. This obligation is measured at the present value of estimated future cash flows using a discount rate that is similar to the interest on government bonds where the currency and terms of these bonds are consistent with the currency and estimated terms of the defined benefit plan obligation. The defined benefit plans of Group's subsidiaries are unfunded.

Equity

Share capital

Common shares are classified as equity. External costs directly attributable to the issue of new shares, other than on a business combination, are shown as a deduction from the proceeds in equity. Any excess or deficiency of the fair value of consideration received over the par value of shares issued is recognized as an increase or decrease in the retained earnings.

Non-controlling interests

Non-controlling interests are presented in the consolidated statement of financial position within equity, separately from the equity attributable to the equity holders of the Parent. Losses of subsidiaries are attributed to the non-controlling interests even if this results in a deficit balance.

Dividends

Dividends are recognized as a liability and deducted from equity at the reporting date only if they are declared before or on the reporting date. Dividends are disclosed in the consolidated financial statements when they are proposed before the reporting date or proposed or declared after the reporting date but before the consolidated financial statements are authorised for issue.

Other distributions to the Shareholder

Other distributions to the Shareholder recognized as deductions from retained earnings are represented by expenses incurred or asset distribution made at the discretion of the Shareholder, including property, plant and equipment, interest in another entities, other disposal groups, cash and other assets in accordance with accounting policy of the Group.

Revenue recognition

Revenue is recognized when it is probable that the economic benefits will flow to the Group and the amount of revenue can be reliably measured.

Sale of goods

Revenues are recognized when (or as) the Group satisfies a performance obligation by transferring a promised good or service (i.e. an asset) to a customer. An asset is transferred when (or as) the customer obtains control of that asset, which usually occurs when the title is passed, provided that the contract price is fixed or determinable and collectability of the receivable is reasonably assured. For export sales, title generally passes at the border of the Republic of Kazakhstan. Revenue is measured at the fair value of the consideration received or receivable taking into account the amount of any trade discounts, volume rebates and reimbursable taxes.

Sales of support services are recognized as services are performed provided that the service price can be determined and no significant uncertainties regarding the receipt of revenues exist.

Rendering of services

Revenue from rendering of services is recognized when the services have been performed.

In respect of services related to transportation, revenue is recognized with reference to the stage of completion of the transportation at the reporting date provided that the stage of completion of transportation and the amount of revenue can be measured reliably. Prepayments received from customers relating to transportation services that have not been started yet are recognized upon receipt as "advances received from customers". Deferred income is credited to current revenue, as the service is provided.

The Group's revenue in the energy, communications and transportation segments is primarily recognized over a period of time, while the rest of the Group's revenue is primarily recognized at a point in time.

Sale and lease back transactions

The Group accounts for a transfer of an asset in a sale and leaseback transaction as a sale only if the transfer meets the requirements of IFRS 15 Revenue from Contracts with Customers.

If, under IFRS 15, a sale is to be recognised by the seller-lessee, then the right-of-use asset leased back is measured at the proportion of the previous carrying amount of the asset that relates to the right of use retained by the seller-lessee. The seller-lessee recognises only the amount of any gain or loss that relates to the rights transferred to the buyer-lessor.

If the transfer of an asset by the seller-lessee does not satisfy the requirements of IFRS 15 to be accounted for as a sale of the asset, the seller-lessee continues to recognize the transferred asset and recognizes a financial liability equal to proceeds for the transfer by applying IFRS 9 Financial Instruments.

Interest income

For all financial instruments measured at amortised cost and interest-bearing financial assets classified as investments held at FVOCI, interest income is recorded using the effective interest rate (EIR). EIR is the rate that exactly discounts the estimated future cash payments or receipts over the expected life of the financial instrument or a shorter period, where appropriate, to the net carrying amount of the financial asset or liability.

Trade receivables

Accounts receivable represent the Group's right to the consideration amount, which is unconditional (i.e., only the passage of time is required before payment of the consideration is due).

Contract liabilities from contracts with customers

A contract liability is recognised if a payment is received or a payment is due (whichever is earlier) from a customer before the Group transfers the related goods or services. Contract liabilities are recognised as revenue when the Group performs under the contract (i.e., transfers control of the related goods or services to the customer).

Costs to obtain a contract

The Group pays commission to sales agents for new connected subscribers in the communication segment. The commission to sales agents is capitalized within other non-current assets in the consolidated statements of financial position. Costs to obtain a contract are amortized over the period the service is provided to the customer.

Establishment of tariffs

A number of subsidiaries of the Group are subject to regulation by the Committee for regulation of natural monopolies of the Republic of Kazakhstan ("CRNM"). This Committee is responsible for approval of the methodology for tariff calculation and tariff rates, under which the subsidiaries derive a significant portion of their revenues.

Government grants

Due to the fact that the Government of the Republic of Kazakhstan is the sole shareholder of the Fund, the Group analyses all transactions with the Government to assess its role: where the Government acts primarily in its capacity of the Shareholder or where it acts as a regulator.

If it is determined that in a specific transaction the Government acts in capacity of the Shareholder any gains or losses incurred by the Group as a result of such transaction are reflected directly in equity as either a contribution or withdrawal of equity by the Shareholder.

If it is determined that in a specific transaction the Government does not act in capacity of the Shareholder such transactions are accounted for using provisions of IAS 20 *Accounting for Government Grants and Disclosure of Government Assistance.* In such circumstances, government grants are recognized at their fair value where there is reasonable assurance that the grant will be received and all attaching conditions will be complied with. When the grant relates to an expense item, it is recognized as income over the period necessary to match the grant on a systematic basis to the costs that it is intended to compensate. Where the grant relates to an asset, the fair value is credited to a deferred income account and is released to the consolidated statement of comprehensive income over the expected useful life of the relevant asset by equal annual instalments. Grants related to income are presented separately in the consolidated statement of comprehensive income within revenues from operating activities.

Expense recognition

Expenses are recognized as incurred and are reported in the consolidated statement of comprehensive income in the period to which they relate on the accrual basis.

Income tax

Income tax for the year comprises current and deferred tax. Income tax is recognized in the profits and losses, except to the extent that it relates to items charged or credited to other comprehensive income or equity, in which case it is recognized in other comprehensive income. Current tax expense is the expected tax payable on the taxable income for the year and any adjustment to tax payable in respect of previous years.

Excess profit tax ("EPT") is treated as an income tax and forms part of income tax expense. In accordance with the subsurface use contracts, the Group accrues and pays EPT, at specified rates of after tax profit which has been adjusted for specific deductions in accordance with the applicable subsurface use contracts, when certain internal rates of return are exceeded.

Deferred tax is calculated with respect to both corporate income tax ("CIT") and EPT. Deferred EPT is calculated on temporary differences for assets allocated to subsurface use contracts at the expected rate of EPT to be paid under the contract.

Deferred tax is provided using the statement of financial position method, in relation to temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. The temporary differences arising due to the following are not provided for:

- The initial recognition of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither accounting profit nor taxable profit or loss; and
- In respect of taxable temporary differences associated with investments in subsidiaries, associates and interests in joint ventures, when the timing of the reversal of the temporary differences can be controlled and it is probable that the temporary differences will not reverse in the foreseeable future.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply to the period when the asset is realised or the liability is settled based on the tax rates (and tax laws) that have been enacted or substantively enacted at the reporting date.

A deferred tax asset is recognized only to the extent that it is probable that future taxable profits will be available against which the asset can be utilized. Deferred tax assets are reduced to the extent that it is no longer probable that the related tax benefit will be realized.

Value added tax ("VAT")

Tax authorities permit the settlement of sales and purchases VAT on a net basis. VAT receivable represents VAT on domestic purchases net of VAT on domestic sales. Export sales are zero rated.

Related parties

Related parties include the Group's Shareholder, key management personnel, associates, joint ventures and entities in which a substantial interest in the voting power is owned, directly or indirectly, by the Group's shareholders or key management personnel.

Contingent liabilities and contingent assets

Contingent liabilities are not recognised in the consolidated financial statements. They are disclosed in the notes to the consolidated financial statements *(Note 37)* unless the possibility of an outflow of resources embodying economic benefits is remote.

Contingent assets are not recognized in the consolidated financial statements. Where an inflow of economic benefits is probable, they are disclosed in the notes.

Subsequent events

Post-year-end events that provide evidence of conditions that existed at the reporting date (adjusting events) are reflected in the consolidated financial statements. Post-year-end events that are not adjusting events are disclosed in the notes when material.

4. Significant accounting estimates and judgements

The preparation of the consolidated financial statements in conformity with IFRS requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities and contingent assets and liabilities at the reporting date and reported amounts of assets, liabilities, revenues, expenses and contingent assets and liabilities during the reporting period. Actual outcomes could differ from these estimates.

The key assumptions concerning the future and other key sources of estimation uncertainty at the reporting date, that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are discussed below:

Recoverability of oil and gas assets, downstream, refining and other assets

The Group assesses assets or CGU for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Where an indicator of impairment exists, a formal estimate of the recoverable amount is made, which is considered to be the higher of the fair value less costs to sell and value in use. These assessments require the use of estimates and assumptions such as long-term oil prices, discount rates, future capital requirements, operating performance (including production and sales volumes) that are subject to risk and uncertainty. Where the carrying amount of an asset or CGU exceeds its recoverable amount, the asset/CGU is considered to be impaired and is written down to its recoverable amount. In assessing recoverable values, the estimated future cash flows are adjusted for the risks specific to the asset group and are discounted to their present value using a discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. Fair value less costs to sell is identified as the price that would be received to sell the asset in an orderly transaction between market participants and does not reflect the effects of factors that may be specific to the entity and not applicable to entities in general.

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 year 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.

Impairment testing assumptions

The Group's long-term assumptions for Brent oil prices, KZT/USD exchange rate and inflation projections have been revised and are based on externally sourced forecasts and rates of the independent research organizations considering long-tern market expectations. Production volumes estimates are based on proved developed and undeveloped reserves for subsidiaries, and on proved and probable reserves for significant investments in joint ventures and associates.

Production period is either based on subsoil use contracts' expiration date or on extended license period, to which the Group has strong intention to extend its licenses. Estimated production volumes are based on the Group's production plans that are mostly used for the purposes of application filing for extension of subsoil use contracts.

Discount rates were estimated on the weighted average cost of capital of the individual cash generating unit and ranged between 12.01-17.09% depending on the functional currency, production period, size, equity risk premium, beta and gearing ratio of the relevant CGU.

The long-term price assumptions applied were derived from Bloomberg consensus; so did the near-term commodity price assumptions, a summary of which, in real 2022 terms, is provided below:

	2023	2024	2025	2026	2027
Brent oil (ICE Brent $/bbl)	93.94	88.00	85.00	80.05	81.65

In *"Oil-and-gas and petrochemical segment"* net impairment charges were 18,006 million tenge for 2022. Impairment charges mainly relate to the exploration and evaluation assets in the amount of 8,895 million tenge of Southern Urikhtau project, in the amount of 5,893 million tenge of six sites and 3 deposits of QazaqGas Exploration and Production LLP, the subsidiary of National Company "QazaqGas" JSC, "QazaqGas" Exploration and Production" LLP, and in the amount of 3,172 million tenge of Isatay project *(Note 29).*

Headroom of the majority of oil and refining assets are sensitive to changes in price or other assumptions. The changes within next financial periods may result in recoverable amount of these assets above or below the current carrying amounts and therefore there is a risk of impairment reversals or charges in those periods.

In 2021 the Group recognized impairment loss of 12,751 million tenge. Impairment charges mainly relate to partial impairment of refining assets of KMG International N.V. (further KMGI) of 8,298 million tenge *(Note 29)* and barges of Kazmortransflot LLP of 4,453 million tenge *(Note 29)*. The recoverable amounts of the barges were based on value-in-use calculations and recoverable amount of KMGI assets for impairment testing purposes was determined based on fair value less cost to disposal.

Oil and gas reserves

Oil and gas reserves are a material factor in the Group's computation of depreciation, depletion and amortization expenses. The Group estimates its oil and gas reserves in accordance with the methodology of the Society of Petroleum Engineers (SPE). In estimating its reserves under SPE methodology, the Group uses long-term planning prices. Using planning prices for estimating proved reserves removes the impact of the volatility inherent in using year-end spot prices. Management believes that long-term planning price assumptions, which are also used by management for their business planning and investment decisions are more consistent with the long-term nature of the upstream business and provide the most appropriate basis for estimating oil and gas reserves.

All reserve estimates involve some degree of uncertainty. The uncertainty depends mainly on the amount of reliable geological and engineering data available at the time of the estimate and the interpretation of this data.

The relative degree of uncertainty can be conveyed by placing reserves into one of two principal classifications, either proved or unproved. Proved reserves are more certain to be recovered than unproved reserves and may be further sub-classified as developed and undeveloped to denote progressively increasing uncertainty in their recoverability.

Estimates are reviewed and revised annually. Revisions occur due to the evaluation or re-evaluation of already available geological, reservoir or production data, availability of new data, or changes to underlying price assumptions. Reserve estimates may also be revised due to improved recovery projects, changes in production capacity or changes in development strategy. Proved developed reserves are used to calculate the unit of production rates for depreciation, depletion and amortization in relation to oil and gas production assets. The Group has included in proved reserves only those quantities that are expected to be produced during the initial subsoil use contract period. This is due to the uncertainties surrounding the outcome of such renewal procedures, since the renewal is ultimately at the discretion of the Government. An increase in the Group's subsoil use contract periods and corresponding increase in reported reserves would generally lead to lower depreciation, depletion and amortization expense and could materially affect earnings.

A reduction in proved developed reserves will increase depreciation, depletion and amortization expense (assuming constant production), reduce income and could also result in an immediate write-down of the property's book value. Given the relatively small number of producing fields, it is possible that any changes in reserve estimates year on year could significantly affect prospective charges for depreciation, depletion and amortization.

Please refer Note 29 for details on annual impairment test results.

Mining reserves

Mining reserves are a critical component of the projected cash flow estimates that are used to assess the recoverable values of assets and to determine depreciation and amortisation expense in mining segment.

Group entities usually estimate reserves based on results of detailed mine exploration, which is evaluated and approved by State Reserves Commission (SRC) of Kazakhstan Geology Committee. Normally upon stripping during production actual reserves of each area are greater or lesser than geological reserves approved by SRC.

Uranium reserves (estimate)

Uranium reserves are a critical component of the Group's projected cash flow estimates that are used to assess the recoverable values of relevant assets as well as depreciation and amortisation expense. Estimates of uranium reserves also determine the life of mines, which in turn affect asset retirement obligation calculations.

On an annual basis the Group engages an independent consultant to assess the Group's ore reserves and mineral resources in accordance with the Australasian Code for reporting on geological exploration works, mineral resources and ore reserves (hereinafter JORC Code). Independent assessment of reserves and resources was carried out as of December 31, 2022 and 2021. The consultant reviewed all key information upon which the reported mineral resource and ore reserve statements for the mining assets of the Group are based.

The consultant's reports contain an assessment of the tonnes of uranium contained in ore which has the potential to be extracted by the existing and planned mining operations (the mineral resource), and also the tonnes of uranium contained in ore currently planned to be extracted as envisaged by the respective life-of-mine plans (the ore reserve). The Group used the ore reserves data for calculation of impairment of long-term assets, unit of production depreciation for each of the Group's mines as well as asset retirement obligation calculations.

Goodwill

KMGI CGU, including goodwill

As at December 31, 2022 and 2021, the Group performed its annual impairment tests for goodwill and downstream, refining and other assets due to existence of impairment indicators at the CGUs of KMGI. As the result of the impairment analysis, recoverable amount of KMGI CGUs exceeded their carrying values.

Pavlodar refinery, goodwill

As of December 31, 2022 and 2021 the Group has goodwill of 88,553 million tenge related to acquisition of Pavlodar oil chemistry refinery LLP (further Pavlodar refinery), the subsidiary of National Company "KazMunayGas" JSC. The Group performed annual impairment test for the Pavlodar refinery goodwill using the current tolling business scheme employed by Pavlodar refinery in December 2022 and 2021. The Group considered the forecast for oil tolling volumes, oil tolling tariffs, capital expenditures, among other factors, when reviewing for indicators of impairment. The recoverable amount is calculated using a discounted cash flow model. In 2022, the discount rate of 12.86% (2021: 12.06%) was calculated based on the pre-tax weighted average cost of capital. The inherent risk was included by applying an individual beta factor. The beta factor was estimated based on the publicly available market data. Forecasted cash flows till to 2031 were based on five-years business plan of Pavlodar refinery 2023-2027 (2021: 2022-2026 years), which assumes current management estimates on potential changes in operating and capital costs. As at December 31, 2022 and 2021 the recoverable amount of goodwill, which was determined based on value-in-use, exceeded its book value, as such no impairment of Pavlodar refinery goodwill was recognized.

Sensitivity to changes in assumptions

Results of the assessment of recoverable amount of Pavlodar refinery goodwill are sensitive to changes in key assumptions, in particular, assumptions related to changes in discount rate and target EBITDA in terminal period. Increase in discount rates by 1.0% to 13.86% (2021: 13.06%) and decrease of target EBITDA in terminal period by 1% would not result decrease of the recoverable amount of CGU Pavlodar refinery to its carrying value.

National Company "Kazakhstan Temir Zholy" JSC ("NC KTZh")

The management assesses the recoverability of goodwill annually as of December 31 or every time when impairment indicators of the single CGU appear.

For the analysis of goodwill impairment, management has used the detailed calculation of value in use of the single cash-generating unit as at 31 December 2022. A number of subjective factors, both operational and financial, using the best evidence available, had been used to estimate cash flows.

The Group applied the cash flows forecast period of 10 years, as the Group prepares its Development Strategy for 10 year period and makes forecasts within the framework of this strategy, projecting an increase in freight turnover based on GDP growth rates of the Republic of Kazakhstan and neighbouring regions, since such dependence was noted in the past. Given the availability of forecasts for GDP growth rates over a 10-year horizon, the Group's management believes it can reliably forecast its cash flows over a 10-year period. The level of tariffs for access to the mainline railway network used in the forecast period is based on the tariffs approved by the CRNM for 2021-2025, while in subsequent periods the tariffs were adjusted taking into account the forecasted inflation rate. The transit rates have been adjusted based on the forecasted Swiss Franc to tenge exchange rate. The long-term growth rate in terminal period is 4%.

Operational assumptions used in the test reflect expected volumes of transportation services, including transit volumes, based on projected demand and historical growth dynamic of transit freight transportation volumes.

Financial assumptions include significant estimates associated with tariff forecasts and growth rates, discounts, and projected tenge to Swiss Franc exchange rates, in which the revenue from transit transportation is denominated. The discount rate (WACC) used in calculating the value in use of the Group amounted to 12.61%.

Management concluded that the recoverable amount of the goodwill exceeds its carrying amount as of December 31, 2022.

The Group performed a sensitivity analysis and concluded that when using the following reasonably possible changes in the key assumptions individually and unchanged remaining parameters, the fair value of property, plant and equipment, intangible assets and goodwill will equal its carrying value:

- Freight transportation volumes – A decrease of the volumes by 12.53% compared to the calculation;
- Discount rate (WACC) – An increase of the discount rate from 12.61% to 14.58%.

However, with more significant changes in any of the above key assumptions or simultaneous adverse impact of several factors, could result in the carrying amount of Group non-current assets being higher than their recoverable amount, and the requirement to recognise impairment in the future.

DP Ortalyk LLP, JV Akbastau JSC and Karatau LLP

Goodwill relates to business combinations in prior periods being: 5,166 million tenge relates to subsurface use operations of DP Ortalyk LLP at the area Central on Mynkuduk mine, 24,808 million tenge relates to Karatau LLP and 18,520 million tenge relates to JV Akbastau JSC, which independently perform subsurface use operations at the Budenovskoye mine. At least annually, goodwill is tested for impairment. The carrying value of goodwill applicable to each of these entities is allocated to their respective cash generating units and the recoverable amount was determined on a value in use basis from forecast cash flows over the term of subsurface use contracts. Forecast cash flows are based on the approved volume of proven reserves, estimated volumes of production and sales over a life of mine plan approved by management, using a discount rate of 18.49% for 2022 year (2021: 12.97%). Production volumes are consistent with those agreed with the competent authority and independent consultant's report and are based on the production capacity of the cash-generating units.

Key assumptions used in calculations include forecast sales prices, production costs and capital expenditures. Sales prices used in developing forecast cash flows were determined using an independent official source Ux Consulting LLC published in the fourth quarter of 2022. Production costs and capital expenditures are based on approved budgets for 2023-2027 and growth of 6.16% which approximates long-term average inflation rates. The estimated values in use significantly exceed the carrying amounts of the non-current assets of the three cash-generating units, including goodwill, and therefore even reasonably possible changes in key assumptions would not lead to impairment losses being recognised.

Khan Tengri Holding B.V., Kcell JSC and IP TV

On September 30, 2022, the Group (sole owner of all issued and paid-up equity of Khan Tengri Holding B.V.) decided to liquidate Khan Tengri Holding B.V. According to the Distribution Act, all assets, including 100% of the share in Mobile Telecom-Service LLP, were transferred to Kazakhtelecom JSC. Accordingly, goodwill acquired through business combinations of purchase of Khan Tengri Holding B.V. was allocated to 100% of the share in Mobile Telecom-Service LLP.

For impairment testing, goodwill related to Communication segment acquired through business combinations was allocated to three unites (further "CGUs") ("Mobile Telecom Service LLP", "Kcell JSC", "IP TV")

The carrying amount of goodwill allocated to each of CGUs was as follows:

In millions of tenge	2022	2021
Mobile Telecom-Service LLP	**96,206**	96,206
Kcell JSC	**53,490**	53,490
IP TV	**2,706**	2,706
	152,402	152,402

The Group performed its annual impairment test in December 2022 and 2021.

Mobile Telecom-Service LLP

The recoverable amount of the Mobile Telecom-Service LLP (further "MTS") CGU has been determined based on a discounted cash flow model as it was deemed to produce a more reliable result. This valuation method was based on unobservable inputs (discounted cash flows), which represent Level 3 of the fair value hierarchy.

The discount rate of 2022 was 16.33% (2021: 21.09%), and it was calculated on the weighted average cost of capital before taxes. The weighted average cost of capital takes into account both borrowed funds and own equity. Forecasted cash flows till to 2027 were based on five-years business plan of MTS 2023-2027, which assumes current management estimates on potential changes in operating and capital costs. The significant part of those cash flows after 2028 was forecasted by applying expected inflation rate of 2022: 1.5% (2021: 1.5%).

Kcell JSC

The recoverable amount of the Kcell JSC (hereinafter – "Kcell") CGU has been determined based on a discounted cash flow model as it was deemed to produce a more reliable result. This valuation method was based on unobservable inputs (discounted cash flows), which represent Level 3 of the fair value hierarchy. The discount rate of 2022 was 16.33% (2021: 19.56%), and it was calculated on the weighted average cost of capital before taxes. The weighted average cost of capital takes into account both borrowed funds and own equity. Forecasted cash flows till to 2027 were based on five-years business plan of Kcell JSC 2023-2027, which assumes current management estimates on potential changes in operating and capital costs. The significant part of those cash flows after 2028 was forecasted by applying expected inflation rate of 2022: 1.5% (2021: 1.5%).

IP TV

The recoverable amount of IP TV CGU has been determined based on a value in use calculation using cash flow projections from financial budgets approved by senior management covering a five-year period.

The pre-tax discount rate applied to the cash flow projections is 14.97% (2021: 16.94%), and cash flows beyond the five year period are extrapolated using a 1.5% growth rate (2021: 1.5%).

The calculation of value-in-use for IPTV, MTS and Kcell CGUs is most sensitive to the following assumptions:

- Customer base over the forecast period and average revenue per customer with direct impact on revenue growth rates;
- The level of capital investments included in the financial plan;
- EBITDA margin included in the financial plan;
- Growth rate for cash flow extrapolation beyond the forecast period;
- Discount rate.

As a result of the analysis, management did not identify an impairment for these CGUs as at December 31, 2022.

Sensitivity to changes in assumptions – MTS

Although the management expects that the market share owned by the Group would grow over the forecast period, according to the financial plan, slowing growth of customer base or decrease in the average revenue per customer, leading to a decrease in revenue from current business plan by more than 16% (2021: 6.67%), would result in a loss from impairment in MTS CGU for 1,066 million tenge (2021: 389 million tenge).

Increase in capital investments by more than 94% (2021: 45%) would result in loss from impairment in MTS CGU for 2,295 million tenge (2021: 3,481 million tenge).

Decrease in EBITDA margin by more than 16% (2021: 8%) would result in loss from impairment in MTS CGU for 2,075 million tenge (2021: 2,211 million tenge).

An increase in discount rate by 82% from 29.72% to 45.72% (2021: by 31% from 21.09% to 27.63%) would result in impairment loss in MTS CGU for 168 million tenge (2021: 35 million tenge).

Sensitivity to changes in assumptions – Kcell JSC

Although the management expects that the market share of mobile telecommunications owned by the Group would grow over the forecast period, according to the financial plan, slowing growth of customer base or decrease in the average revenue per customer, leading to a decrease in revenue from current business plan by more than 14.10% (2021: 11.87%), would result in a loss from impairment in Kcell CGU for 180 million tenge (2021: 177 million tenge).

Increase in capital investments by more than 93% (2021: 154%) would result in loss from impairment in Kcell CGU for 337 million tenge (2021: 249 million tenge).

Decrease in EBITDA margin by more than 13% (2021: 15%) would result in loss from impairment in Kcell CGU for 4,111 million tenge (2021: 247 million tenge).

An increase in discount rate by 88% from 16.33% to 30.70% (2021: by 38.8% from 19.56% to 27.15%) would result in loss from impairment in Kcell CGU for 1,379 million tenge (2021: 445 million tenge).

Sensitivity to changes in assumptions – IP TV

Although the management expects that the market share owned by the Group would grow over the forecast period, according to the financial plan, slowing growth of customer base or decrease in the average revenue per customer, leading to a decrease in revenue from current business plan by more than 8.40% (2021: 8.08%), would result in a loss from impairment in IP TV GCU for 82 million tenge (2021: 59 million tenge).

Increase in capital investments by more than 255% (2021: 240%) would result in loss from impairment in IP TV CGU for 16 million tenge (2021: 3 million tenge).

Management recognises that the speed of technological change and the possibility of new entrants can have a significant impact on growth rate assumptions. A reduction in the long-term growth rate in IP TV CGU would not result in impairment loss.

An increase in discount rate by 23% from 14.97% to 18.42% (2021:increase by 23,56% from 16.33% to 26.62%) would result in impairment loss in IP TV CGU for 152 million tenge (2021: 48 million tenge).

Power generating assets

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.

Please refer Note 29 for details on impairment test results.

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") and 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 July 1, 2022 in accordance with Order of the Minister of Energy of the RoK dated June 30, 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 February 27, 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 May 22, 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 December 27, 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;
- 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 September 1, 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 Kazakhstan's" approved by Decree of the Government of the Republic of Kazakhstan dated October 12, 2021.

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 December 31, 2026. In 2021, the Group recognized a provision for impairment in the amount of 20,737 million tenge 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 *(Note 29)*. 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 October 10, 2022, AlES received a positive opinion of a comprehensive non-departmental expertise on the feasibility study of the Project. On December 14, 2022, AlES took part in the auction, and per the results, AlES was declared the winner of the auction (9,788,700 tenge/MW*month excluding VAT). The committed capacity is 480 MW.

On January 27, 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.

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 December 31, 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 September 1, 2022 per joint order of the DCRNM of the Ministry of National Economy of the Republic of Kazakhstan for Almaty and Almaty Region dated August 18, 2022;
- Law of the Republic of Kazakhstan dated December 30, 2022 amended Law of RoK “On Natural Monopolies” dated December 27, 2018 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 December 31, 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 of Samruk Energy JSC, Qazaq Green Power PLC and the subsequent transfer of a full stake in Moynakskaya 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 December 31, 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 mentioned above 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 July 4, 2009 "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 March 27, 2014.

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.

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 2,721 million tenge.

Semirechya Energy LLP

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

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.

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 6,220 million tenge.

Sensitivity of impairment test - for Green energy production

In millions of Tenge	(Decrease)/increase in material assumptions	(Decrease)/increase in value in use
Electricity tariff	-10%	(2,317)
	+10%	2,336
Sales volume	-10%	(2,791)
	+10%	2,791
WACC	-1%	1,394
	+1%	(1,255)

JV Alaigyr LLP

As at December 31, 2022,the Group carried out an assessment of the value of the use of the net assets of the subsidiary of National Mining Company "Tau-Ken Samruk", JV Alaigyr LLP When assessing the following key assumptions were used:

- Discount rate (cost of equity) in the amount of 11.84%;
- The launch of the factory and the output to the design capacity of 900 thousand tonnes are planned in 2024;
- Project implementation period until 2038;
- The projected price for lead-silver ore is 2,240 us dollars per ton and is indexed in the forecast period.

For the year ended December 31, 2022, the Group recognised an impairment loss on property, plant and equipment of JV Alaigyr LLP in the amount of 13,296 million tenge *(Note 29).*

Assets of Polymer Production

As at December 31, 2022, the Group performed the assessment of the recoverable amount of assets of Polymer Production and identified the impairment indicators. The main indicator of impairment is that the sum of the current period and future periods' budgets for property, plant and equipment show an operating loss or net cash outflow. As a result of the impairment test the Group recognized the impairment loss of 7,096 million tenge *(Note 29).*

Gas turbine power plant and water treatment assets (Karabatan Utility Solutions LLP)

The Group analysed the availability of indicators of impairment of property, plant and equipment of subsidiary of "Samruk-Kazyna Ondeu" JSC, Karabatan Utility Solutions LLP (further "KUS"), as at December 31, 2022. Approval of tariff and tariff estimates for regulated services on water supply through distribution networks and wastewater removal and treatment was determined as the main indicator of impairment of property, plant and equipment. Accordingly, the Group performed an impairment test of property, plant and equipment as at December 31, 2022. As a result of assessment of the recoverable amount of non-current assets performed by the management of the Group the impairment was recognised in the amount of 14,077 million tenge, part of which in the amount of 9,877 million tenge was recognised in the consolidated statement of comprehensive loss and the balance of 4,201 million tenge was recognised in equity as Other transactions with the Shareholder, as part of assets related to assets of General Plant Infrastructure ("GPI"), which are subject to impairment *(Note 29).* As at December 31, 2022 the carrying value of property, plant and equipment, construction in progress and advances paid for non-current assets amounted to 110,280 million tenge and the recoverable amount of these assets was 96,203 million tenge.

KUS calculates the recoverable amount using a discounted cash flow model. Discount rate of 13.46% was derived from the Group's post-tax weighted average cost of capital. The business plan approved by the Group for the period 2023-2027 is the main source of information as it contains projections of production volumes, sales volumes, revenues, costs and capital expenditure.

Various assumptions such as electricity and water sales price forecasts, inflation rates take into account existing prices, foreign currency exchange rates and other macroeconomic factors, and historical trends and fluctuations. Estimated cash flows were limited to the end of the useful life date of property, plant and equipment in 2051. Costs up to 2027 were projected based on KUS budget and business plan, as well as current estimates by KUS management of potential changes in operating and capital expenditures.

Most cash flows beyond that period have been projected by applying an assumed inflation rate, except for capital expenditure, which was based on management's best estimate available at the valuation date.

Sensitivity of property, plant and equipment impairment test to significant assumptions

Key assumptions required for estimation of recoverable amount are inflation rate, discount rate and tariff and tariff estimates for regulated services of water supply through distribution network and wastewater removal and treatment. The sensitivity to changes in the key assumptions has been assessed. 1% increase in discount rate would result in an increase in impairment loss by 7,064 million tenge.

Decrease in tariff for regulated services of water supply through distribution network and wastewater removal and treatment by 10% from the forecast tariff of 2,241 tenge excluding VAT per 1 m^3 and 2,254 tenge excluding VAT per 1 m^3 respectively will lead to increase in impairment loss by 8,851 million tenge.

Assets related to uranium production

Assets related to uranium mines include property, plant and equipment, mine development assets, mineral rights, exploration and evaluation assets, investments in associates, investments in joint ventures, and other investments.

For the purpose of impairment testing assets are grouped at the lowest levels for which there are separately identifiable cash inflows that are largely independent of the cash inflows from other assets or groups of assets (termed as 'cash generating units'). The Group has identified each mine (contract territory) as a separate cash-generating unit unless several mines are technologically connected with single processing plant in which case the Group considers such mines as one cash-generating unit.

As at December 31, 2022, management conducted an analysis and did not find any impairment indicators of assets (cash generating units) associated with the production of uranium products.

Assets retirement obligations

Oil and gas production facilities

Under the terms of certain subsoil use contracts, legislation and regulations the Group has legal obligations to dismantle and remove tangible assets and restore the land at each production site. Specifically, the Group's obligation relates to the ongoing closure of all non-producing wells and final closure activities such as removal of pipes, buildings and recultivation of the contract territories, and also obligations to dismantle and remove tangible assets and restore territory at each production site. Since the subsoil use contract terms cannot be extended at the discretion of the Group, the settlement date of the final closure obligations has been assumed to be the end of each subsoil use contract period. The extent of the Group's obligations to finance the abandonment of wells and for final closure costs depends on the terms of the respective subsoil use contracts and current legislation.

Where neither subsoil use contracts nor legislation include an unambiguous obligation to undertake or finance such final abandonment and closure costs at the end of the subsoil use contract term, no liability has been recognized. There is some uncertainty and significant judgment involved in making such a determination. Management's assessment of the presence or absence of such obligations could change with shifts in policies and practices of the Government or in the local industry practice.

The Group calculates asset retirement obligations separately for each contract. The amount of the obligation is the present value of the estimated expenditures expected to be required to settle the obligation adjusted for expected inflation and discounted using average long-term risk-free interest rates for emerging market sovereign debt adjusted for risks specific to the Kazakhstan market.

At each reporting date the Group reviews site restoration provisions, and adjusts them to reflect the current best estimate in accordance with IFRIC 1 *Changes in Existing Decommissioning, Restoration and Similar Liabilities.*

Estimating the future closure costs involves significant estimates and judgments by management. Most of these obligations are many years in the future and, in addition to ambiguities in the legal requirements, the Group's estimate can be affected by changes in asset removal technologies, costs and industry practice. The Group estimates future well abandonment cost using current year prices and the average long-term inflation rate.

The long-term inflation and discount rates used to determine the obligation in the consolidated statement of financial position across the Group entities at December 31, 2022 were in the range from 2.09% to 15.05% and from 6.42% to 12.38%, respectively (December 31, 2021: from 2.23% to 8.10% and from 3.80% to 10.25%, respectively). As at December 31, 2022 the carrying amounts of the Group's asset retirement obligations relating to decommissioning of oil and gas facilities were 88,163 million tenge (December 31, 2021: 174,913 million tenge) *(Note 21).*

Major oil and gas pipelines

According to the Law of the RK On Major Pipelines which was made effective on July 4, 2012 and and the Environmental Code of the Republic of Kazakhstan the Group has legal obligation to decommission its major oil and gas pipelines at the end of their operating life and to restore the land to its original condition. Asset retirement obligation is calculated based on estimate of the work to decommission and rehabilitate. As at December 31, 2022, the carrying values of the Group's asset retirement obligations relating to decommissioning of pipelines, compressor stations and land were 105,430 million tenge (December 31, 2021: 126,685 million tenge).

Assets related to uranium production

In accordance with environmental legislation and the subsurface use contracts, the Group has a legal obligation to remediate damage caused to the environment from its operations and to decommission its mining assets and landfills and restore landfill sites after closure of mining activities. Provision is made based upon the net present values of estimated site restoration and retirement costs as soon as the obligation arises from past mining activities.

The provision for asset retirement obligations is estimated based upon the Group's interpretation of current environmental legislation in the Republic of Kazakhstan and the Group's related programme for liquidation of subsurface use consequences on the contracted territory and other operations supported by the feasibility study and engineering research in accordance with the applicable restoration and retirement standards and techniques.

Provisions for asset retirement obligations are subject to potential changes in environmental regulatory requirements and the interpretation of the legislation. Provisions for mining assets and landfills retirement obligations are recognised when there is a certainty of incurring of such liabilities and when it is possible to measure the amounts reliably. The scope of work stipulated by the legislation and included in the calculations of the asset retirement obligations contains the dismantling of facilities and infrastructure (pumping, injection and observation wells, technological units for acidification and distribution of solutions, pipelines, access roads, technological sites, landfills, buildings and other facilities) and subsequent restoration of land.

The calculation of the provision for production assets retirement as at December 31, 2022 was performed by the Group's internal specialists and reviewed by an independent consultant.

Principal assumptions used in such estimations include the estimate of discount rate and the amount and timing of future cash flows. The discount rate is applied to the nominal costs that management expects to spend on mining site restoration in the future.

Management's estimates based on current prices are inflated using the expected long-term inflation rate of 5.99% in 2022 (2021: 5.12%), and subsequently discounted using a rate that reflects the current market estimates of the time value of money and those risks specific to the liability not reflected in the best estimate of the costs. The discount rate is based on a risk-free rate determined as interest rates on government bonds with the maturity as the average of Group subsoil use contracts. The discount rate used by the Group's companies for calculation of the provision as at December 31, 2022 is 11.55% (2020: 9.85%).

At 31 December 2022, site restoration provision for mining assets was 38,116 million tenge (2021: 31,431 million tenge). The increase is mainly attributable to the update of prices for liquidation works that reflect the current economic environment, as well as the impact of introducing a unified calculation methodology across the Group mining entities that resulted in re-estimates of required liquidation works, including low radioactive waste management, dismantlement of process units and handling of construction debris.

Decommissioning of the Ulba plant facility

The Group has previously recognised an obligation only for the disposal of radioactive waste, landfill restoration and asset remediation for Ulba Metallurgical Plant JSC, the subsidiary of "National Atomic Company "Kazatomprom" JSC. In 2021 the Environmental Code of the Republic of Kazakhstan (the Code) came into effect. The Code stipulates that operators of assets that are considered to have a negative impact on the environment have an obligation to decommission such assets in accordance with the requirements of the legislation. Liquidation measures will depend on the assets' nature and the degree of their impact on the environment.

The Group has recognised for the first time a decommissioning provision as of December 31, 2022 of Tenge 7,624 million based on its current interpretation of the relevant legislation and technical analysis performed. The liability recognised includes dismantlement of facilities and infrastructure located at production facility sites (technological sites, landfills, buildings and other facilities), radioactive waste disposal and subsequent land restoration.

Principal assumptions used in the estimations include:

- Current prices are inflated using the expected long-term inflation rate (of 7.7% for assets with liquidation term until 2027, 4.6% for assets with liquidation term until 2042, 3.93% for assets with liquidation term after 2044), and subsequently discounted;
- The discount rate for calculation of the provision as at 31 december 2022 is 14.4% for assets with liquidation term until 2027, 11.3% for assets with liquidation term until 2042, 10% for assets with liquidation term after 2044;
- The discounting period equates to the remaining useful life of buildings and constructions, of not less than 50 years. All buildings and constructions are subject to annual technical reviews to determine required capital and operating expenditure requirements.

Total provision for the Ulba Metallurgical Plant JSC as of December 31, 2022 amounted to 9,243 million tenge (2021: 1,339 million tenge).

Based on the Group's analysis of current regulation, management concluded that certain other Ulba metallurgical plant's assets should be excluded from asset retirement obligations as of December 31, 2022 since there is no reasonable calculation method for these types of assets and/or the potential amount of such liabilities is not significant. This judgement is based on the following:

- Such assets do not have a significant negative impact on the environment and ecological legislation does not require financial provision for the assets;
- Production processes involving these assets do not lead to consequences that would require dismantlement and recultivation works to mitigate the negative environmental impact.

As the requirements of the Environmental Code are relatively new, there is no practice of applying these requirements and there are ambiguities in the legislation, management has applied significant judgment in terms of assessing liabilities and their amounts. In case of changes in environmental legislation, its interpretation and practice of its application, as well as in the judgments and in the Group's estimates, such liabilities may be revised in the future.

Assets retirement obligations related to the power generating facilities

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.

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 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, and SEGRES-2 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 EGRES-1 and SEGRES-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 July 10, 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";

- 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 Moinakskaya HPP JSC , 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.

As of December 31, 2022 provision for assets retirement obligations related to the power generating facilities amounted to 23,365 million tenge (as of December 31,2021: 0).

Provision for environmental remediation

The Group also makes judgments and estimates in establishing provisions for environmental remediation obligations. Environmental expenditures are capitalized or expensed depending upon their future economic benefit. Expenditures that relate to an existing condition caused by past operations and do not have a future economic benefit are expensed.

Liabilities are determined based on current information about costs and expected plans for remediation and are recorded on discounted basis. The Group's environmental remediation provision represents management best estimate based on an independent assessment of the anticipated expenditure necessary for the Group to remain in compliance with the current regulatory regime in Kazakhstan and Europe. The Group has classified this obligation as non-current except for the portion of costs, included in the annual budget for 2023. For environmental remediation provisions, actual costs can differ from estimates because of changes in laws and regulations, public expectations, discovery and analysis of site conditions and changes in clean-up technology. Movements in the provision for environmental remediation obligations are disclosed in *Note 21*.

Provision for taxes

Uncertainties exist with respect to the interpretation of complex tax regulations, changes in tax laws, and the amount and timing of future taxable income. Given the wide range of the Group's international business relationships and the long-term nature and complexity of existing contractual agreements, differences arising between the actual results and the assumptions made, or future changes to such assumptions, could necessitate future adjustments to taxable profits and expense already recorded. The Group establishes provisions, based on reasonable estimates, for possible consequences of audits by the tax authorities of the respective countries in which it operates.

The amount of such provisions is based on various factors, such as experience of previous tax audits and differing interpretations of tax regulations by the taxable entity and the responsible tax authority. Such differences of interpretation may arise on a wide variety of issues depending on the conditions prevailing in the respective Group company's domicile.

In assessing tax risks, management considers to be probable obligations the known areas of non-compliance with tax legislation, which the Group would not appeal or does not believe it could successfully appeal, if additional taxes are charged. Such determinations inherently involve significant judgment and are subject to change as a result of changes in tax laws and regulations, amendments to the taxation terms of the Group's subsurface use contracts, the determination of expected outcomes from pending tax proceedings and current outcome of ongoing compliance audits by tax authorities. The provision for taxes disclosed in *Note 21* relates to the Group's other taxes. Provisions and contingent liabilities related to income tax are included or disclosed as income tax liabilities or contingencies *(Note 33)*. Further uncertainties related to taxation are disclosed in *Note 37*.

Provision for construction of social objects

The Government assigns various sponsorship and financing obligations to the Group. Management of the Group believes that such Government's assignments represent constructive obligations of the Group and require recognition on the basis of respective resolution of the Government of the Republic of Kazakhstan. Furthermore, as the Government is the ultimate controlling party of the Group, the expenditures on these assignments are recognized as "other distributions to the Shareholder" directly in the equity.

Useful lives of items of property, plant and equipment

The Group assesses remaining useful lives of items of property, plant and equipment at least at each financial year-end. If expectations differ from previous estimates, the changes are accounted for prospectively as a change in an accounting estimate in accordance with IAS 8 *Accounting Policies, Changes in Accounting Estimates and Errors*.

VAT recoverability

The Group conducts an assessment of the recoverability of VAT and, if required, makes provisions for doubtful VAT recoverable at each reporting date. The provision for doubtful VAT recoverable is determined based on the management's anticipated VATable turnovers and the likelihood of cash refunds for VAT. As at December 31, 2022, an amount of 203,658 million tenge related to VAT recoverable has been recognized as a current asset (as ata December 31,2021: 168,889 million tenge). The Group anticipates that this amount will either be refunded by the tax authorities or utilized to offset future VAT liabilities in 2023.

Deferred tax assets

Deferred tax assets are recognized for all allowances and unused tax losses to the extent that it is probable that taxable temporary differences and business nature of such expenses will be proved. Significant management judgment is required to determine the amount of deferred tax assets that can be recognized, based upon the likely timing and level of future taxable profits together with future tax planning strategies. The carrying amount of recognized deferred tax assets as at December 31, 2022 was equal to 88,968 million tenge (December 31, 2021: 69,148 million tenge). Further details are contained in *Note 33.*

Fair value of financial instruments

Where the fair value of financial assets and financial liabilities recorded in the consolidated statement of financial position cannot be derived from active markets, they are determined using valuation techniques including the discounted cash flows model. The inputs to these models are taken from observable markets where possible, but where this is not feasible, a degree of judgment is required in establishing fair values.

The judgments include considerations of inputs such as liquidity risk, credit risk and volatility. Changes in assumptions about these factors could affect the fair value of financial instruments reported in the consolidated financial statements. Further details are disclosed in *Note 36.*

Employee benefit liability

The Group uses actuarial valuation method for measurement of the present value of defined employee benefit liability and related current service cost. This involves use of demographic assumptions about the future characteristics of current and former employees who are eligible for benefits (mortality, both during and after employment, rates of employee turnover, etc.) as well as financial assumptions (discount rate, future annual financial assistance, future annual minimum salary and future average railway ticket price).

Due to the complexity of the valuation, the underlying assumptions and its long-term nature, a defined benefit obligation is highly sensitive to changes in these assumptions. All assumptions are reviewed at each reporting date.

Estimation of expected credit losses

The measurement of impairment losses under IFRS 9 across all categories of financial assets requires judgement, in particular, the estimation of the amount and timing of future cash flows and collateral values when determining impairment losses and the assessment of a significant increase in credit risk. These estimates are driven by a number of factors, changes in which can result in different levels of allowances.

The Group’s ECL calculations are outputs of complex models with a number of underlying assumptions regarding the choice of variable inputs and their interdependencies. Elements of the ECL models that are considered accounting judgements and estimates include:

- The Group’s credit grading model, which assigns PDs to the individual grades;
- The segmentation of financial assets when their ECL is assessed on a collective basis;
- Development of ECL models, including the various formulae and the choice of inputs;
- Determination of associations between macroeconomic scenarios and, economic inputs, such as oil price with one year lag, and the effect on PDs, EADs and LGDs.

Accounting treatment of financing arrangements with Industrial Development Fund JSC

The Group, represented by Passenger Transportation JSC and Tulpar Wagon Construction Plant LLP, entered into a number of trilateral purchase-sale and finance lease agreements with Industrial Development Fund JSC, which is under the common control of the Shareholder, to renew its passenger carriage fleet. Under the agreements, Industrial Development Fund JSC finances Tulpar Wagon Construction Plant LLP's construction of passenger carriages on a 100% prepayment basis for ownership with a further finance lease to Passenger Transportation JSC.

Management of the Group concluded that the transaction between Tulpar Wagon Construction Plant LLP and Industrial Development Fund JSC does not meet the requirements of IFRS 15 Revenue from Contracts with Customers to account for the asset sale at the Group level, as control over passenger carriages is not transferred to Industrial Development Fund JSC, but remains with the Group.

Industrial Development Fund JSC finances the construction of the carriages, but is limited in its ability to direct the subsequent use of and obtain all of the remaining benefits from the asset. Accordingly, the Group recognises the obligation to Industrial Development Fund JSC as a financial liability (borrowing) according to IFRS 9 Financial Instruments and recognises passenger carriages and work-in-progress as property, plant and equipment items and construction in progress in accordance with IFRS 16.103 Leases.

Since financing was provided at preferential interest rates and the terms were provided exclusively to finance the upgrade of the Passenger transportation JSC passenger carriage fleet based on a Kazakhstan Government Resolution, the Group considers these transactions as transactions with the Shareholder and recognises fair value adjustments of the loans received at below market rate through equity within retained earnings as other contributions.

Swap transactions

The Group sells part of its uranium products under swap transactions with separate agreements with the same counterparty, being for sales and purchase of the same volume of uranium for the same price at different delivery points or different timeframes. Effectively, this results in the exchange of own uranium (produced or purchased from the Group's entities) with purchased uranium.

Normally, under a swap transaction, the Group delivers physical uranium to one destination point, and purchases the same volume of uranium at a third-party converter for sale to end customers. Swap transactions are entered into primarily to reduce transportation costs for uranium delivery from Kazakhstan to end customers.

Despite the fact that swap agreements are not formally related to each other, management concluded that these transactions are in substance linked and would not have occurred on an isolated basis, driven by the existing market demand and supply forces. In management's view, supply of the same volume of homogeneous product (uranium) for the same price represents an exchange of products, which should be presented on a net basis in the consolidated financial statements, reflecting the economic substance of the transaction. Interpretation of terms and approach to the accounting for swap transactions requires judgement.

In 2022, the Group did not recognise sales revenue from swap transactions of 195,958 million tenge and related cost of sales of 207,789 million tenge. In 2021, the Group did not recognise sales revenue from swap transactions of

146,910 million tenge, and cost of sales of 135,158 million tenge. The Group has recognised liabilities under swap transactions in the amount of 4,709 million tenge as of 31 December 2022 (2021: 15,355 million tenge) for the volume of uranium that would be returned under swap transactions post balance date *(Note 24).*

5. Acquisition of joint venture

PETROSUN LLP (further – Petrosun)

On July 1, 2022, in accordance with the minutes of the meeting of the commission under the chairmanship of the Prime-Minister of RK for the demonopolization of the economy, namely the market of fuels and lubricants, the Group acquired 49% interest in Petrosun, that specializes in the sale of liquefied petroleum gas and petroleum products. The acquisition price was 1 tenge. The difference between the consideration paid and the fair value of identifiable assets and liabilities of Petrosun at the date of acquisition was presented in the line "Acquisition of joint venture" in consolidated statement of changes in equity in the amount of 10,989 million tenge based on instruction in minutes above.

49% interest in Petrosun is recognized as a joint venture and accounts for using the equity method in accordance with IAS 28 Investments in Associates and Joint Ventures. CNPC INTERNATIONAL IN KAZAKHSTAN LLP (the second owner of Petrosun) and the Group have joint control over Petrosun where decisions about the relevant activities of Petrosun require the unanimous consent.

These consolidated financial statements include share in Petrosun's profits for the six months since the acquisition date in the amount of 23,184 million tenge *(Note 32).*

The fair values of the identifiable assets and liabilities of Petrosun as at the date of acquisition are as presented below:

In millions of tenge	
Non-current assets	35
Current assets, including:	103,762
Inventories	33,770
Advanced paid	54,930
Current liabilities, including:	(81,371)
Contract liabilities	*(34,237)*
Borrowings	*(38,198)*
Total identifiable net assets at fair value	**22,426**
Share of ownership	49%
The Group's share in net assets at fair value	**10,989**
Purchase consideration transferred	–
Difference between consideration and fair value of the investment in joint venture recognized in equity	**10,989**

6. Disposals and assets classified as held for sale or distribution to the shareholder

Disposals in 2022

PSA LLP (further PSA)

On December 20, 2022, the Group transferred to Corporate fund Samruk-Kazyna Trust 100% interest in PSA for 1 tenge. Samruk-Kazyna Trust is a non-commercial company, and the Group does not have control over it. As a result, the Group lost control over PSA.

The results of PSA for the period ended December 20, 2022 are presented below:

In millions of tenge	January 1, 2022 – December 20, 2022
General and administrative expenses	(8,950)
Finance costs	(58)
Net foreign exchange loss	(39)
Loss for the period	**(9,047)**

The net cash flows incurred by PSA period ended December 20, 2022 are as follows:

In millions of tenge	January 1, 2022 – December 20, 2022
Operating	(7,702)
Investing	(28)
Financing	11,871
Net increase in cash and cash equivalents	**4,141**

At the date of loss of control net assets of PSA were as follows:

In millions of tenge	Net assets at the date of loss of control
Assets	
Property, plant and equipment	36
Intangible assets	64
Right-of-use assets	255
VAT receivable	12
Other current assets	109
Cash and cash equivalents	4,137
Total assets	**4,613**
Liabilities	
Lease liabilities	286
Trade accounts payable	1,736
Other current liabilities	709
Total liabilities	**2,731**
Net assets directly associated with disposal group	**1,882**

Disposals in 2021

Financial Settlement Center of Renewable Energy LLP

In December 2021, in accordance with the Resolution of the Government of the Republic of Kazakhstan dated November 30, 2021, the Group transferred shares of Financial Settlement Center of Renewable Energy LLP to the State property and privatization committee of the Ministry of Finance of Republic of Kazakhstan with the net assets of 37,122 million tenge free of charge. This transaction was recognized as transfer of assets to the Shareholder in consolidated statement of changes in equity.

Net assets of Financial Settlement Center of Renewable Energy LLP as at the transfer date are as follows:

In millions of tenge	At the date of transfer
Assets	
Property and equipment	28
Intangible assets	15
Deferred tax assets	235
Inventories	155
Trade receivables	25,792
Amounts due from credit institutions	38
Other current financial assets	5,113
Other current assets	2
Cash and cash equivalents	38,848
Assets transferred to the Shareholder	**70,226**
Liabilities	
Trade and other payables	31,602
Income taxes payable	261
Other non-current and current liabilities	1,241
Liabilities directly associated with the assets transferred to the Shareholder	**33,104**
Net assets directly associated with the disposal group	**37,122**

Vostokmashzavod JSC

On December 30, 2020 the Group, represented by its subsidiary Repair Corporation Kamkor LLP, entered into a sale agreement with a third party to sell shares of Vostokmashzavod JSC. The Group classified the assets and liabilities of Vostokmashzavod JSC as at December 31, 2020 as assets held for sale measured at the lower of carrying amount and fair value less costs to sell. On January 8, 2021 the Group completed sale transaction of the shares of Vostokmashzavod JSC, and, as a result, lost control over the subsidiary.

Assets and liabilities in the separate statements of Vostokmashzavod JSC at the date of disposal amounted 6,656 million tenge and 9,980 million tenge, respectively.

The result of disposal of the subsidiary is as follows:

In millions of tenge	
Advance received previously	100
Disposed net liabilities	3,324
Disposed non-controlling interests	(849)
Adjustment to fair value of loans receivable and receivables from a former subsidiary	(2,575)
Net result from disposal of Vostokmashzavod JSC	–

As at the date of disposal Vostokmashzavod JSC had loans and trade payables due to the Group with a carrying value of 5,529 million tenge and 938 million tenge, respectively. Under the transaction for the acquisition of share in Vostokmashzavod JSC, the buyer guaranteed the repayment of this debt. Therefore, as a result of disposal, the Group recognized loans receivable and receivables at their fair value of 3,251 million tenge and 641 million tenge, respectively, reflecting the adjustment to fair value in the reconciliation above.

As a result, the disposal of Vostokmashzavod JSC in 2021 did not have an impact on the financial result.

Shokpar-Gagarinskoye LLP

At December 31, 2020, assets and liabilities of a subsidiary Shokpar-Gagarinskoye LLP were classified as an assets held for sale and liabilities directly associated with the assets held for sale and were equal to 2,056 million tenge and 1 million tenge.

On July 9, 2021, the Group completed the sale of 100% shares of Shokpar-Gagarinskoye LLP to a third party for 4,185 million tenge.

Net assets of Shokpar-Gagarinskoye LLP as at the disposal date are as follows:

In millions of tenge	At the date of disposal
Assets	
Property and equipment	2,056
Cash and cash equivalents	1
Assets held for sale	**2,057**
Liabilities	
Trade payables	2
Other current liabilities	10
Liabilities directly associated with the assets held for sale	**12**
Net assets directly associated with the disposal group	**2,045**

Net cash inflow from disposal of a subsidiary was as follows:

In millions of tenge	
Cash consideration received	2,953
Advance received previously	1,286
Less: cash and cash equivalents of disposed subsidiary	(1)
Total cash inflow	**4,238**

The resulting gain on disposal of Shokpar-Gagarinskoye LLP amounted to 2,140 million tenge.

KT Cloud Lab LLP

On June 17, 2019, the Group concluded an agreement on sale of KT Cloud Lab LLP. At December 31, 2020, assets and liabilities of KT Cloud Lab LLP were classified as an assets held for sale and liabilities directly associated with the assets held for sale and were equal to 1,872 million tenge and 895 million tenge.

In accordance with the agreement, payments shall be made in 3 tranches (the first tranche in the amount of 30% of the purchase price within 30 days after agreement signing date, the second tranche in the amount of 35% of the purchase price within 12 months after signing date and the third tranche in the amount of 35% of the purchase price within 24 months after signing date).

On July 14, 2021, the buyer made the first tranche under the purchase agreement in the amount of 30% of the purchase price. The buyer's intention to exercise his right to early repurchase the remaining stake in KT Cloud Lab LLP allowed the Group to recognize the disposal of KT Cloud Lab LLP from the moment of receipt of the first tranche and to recognize the payment arrears from the winner of the tender in full.

On October 20, 2021, the buyer repaid the remaining part of the purchase price ahead of the repayment schedule.

Net assets of KT Cloud Lab LL as at the disposal date are as follows:

In millions of tenge	At the date of disposal
Assets	
Property and equipment	526
Intangible assets	484
Other non-current financial assets	77
Inventories	9
Trade receivables	916
Other current financial assets	164
Other current assets	39
Cash and cash equivalents	448
Assets held for sale	**2,663**
Liabilities	
Deferred tax liabilities	11
Trade payables	146
Other current liabilities	645
Liabilities directly associated with the assets held for sale	**802**
Net assets directly associated with the disposal group	**1,861**

Following is a schedule of consideration received from the disposal of KT Cloud Lab LLP:

In millions of tenge	
Cash consideration received	1,435
Less: cash disposed	(448)
Total cash consideration received	**987**

As a result of disposal the Group has recognized loss from disposal of the subsidiary of 426 million tenge.

On June 10, 2021 the Group signed an agreement for the sale of the Group's entire interest in Kazakhstan Solar Silicon LLP. The sale was completed on July 12, 2021 upon receipt of full payment of 323 million tenge. At the date of loss of control net assets of Kazakhstan Solar Silicon LLP amounted to 85 million tenge.

On July 16, 2021 the Group signed an agreement for the sale of the Group's entire interest in Astana Solar LLP and on August 23, 2021 signed the act of acceptance after receiving full payment under the contract. The payment received amounted to 380 million tenge. At the date of loss of control net assets of Astana Solar LLP amounted to 115 million tenge.

On October 26, 2021, an agreement for the sale of the Group's entire interest in MK Kazsilicon LLP was signed. On November 19, 2021 after receiving full payment under the contract the Group signed an act of acceptance certificate. The payment received amounted to 652 million tenge. At the date of loss of control net liabilities of MK Kazsilicon LLP amounted to 136 million tenge.

Total proceeds from sales of KazPV entities was 1,355 million tenge less 16 million tenge cash and cash equivalents of disposed entities at the disposal date. Net income from disposal of KazPV subsidiaries amounted 1,291 million tenge.

Assets classified as held for sale or distribution to the Shareholder

Assets classified as held for sale or distribution to the Shareholder comprised the following:

In millions of tenge	Segment	December 31, 2022	December 31, 2021
Assets classified as held for sale, including		**1,139,967**	42,617
Kazakhstan Petrochemical Industries Inc. LLP	*Oil-and-gas and petrochemical*	**1,092,783**	–
Railway Passenger Coach Construction Plant LLP	*Transportation*	**45,825**	–
Other		**1,359**	42,617
Assets classified as held for distribution to Shareholder		**104**	104
		1,140,071	42,721

Liabilities associated with assets classified as held for sale or distribution to the Shareholder comprised the following:

In millions of tenge	Segment	December 31, 2022	December 31, 2021
Liabilities associated with assets classified as held for sale		**(1,045,093)**	–
Kazakhstan Petrochemical Industries Inc. LLP	*Oil-and-gas and petrochemical*	**(1,045,062)**	–
Railway Passenger Coach Construction Plant LLP	*Transportation*	**(31)**	–
		(1,045,093)	–

Kazakhstan Petrochemical Industries Inc. LLP (hereinafter - KPI)

In its consolidated financial statements, the Group had 99% share in KPI during 2022 and as at 31 December 2022 (KPI was a joint venture between two subsidiaries of the Fund, each holding per 49.5% share). On November 7, 2022, the Group signed the contract on sales of 40% share in KPI with the third party for the consideration of 180,000 thousand US dollars (equivalent to 83,601 million tenge) to be paid in installments until November 30, 2026. The sales transaction has not been completed by end of 2022 as certain conditions precedent were not met, therefore the Group retained control over KPI as at 31 December 2022. Upon completion of the transaction the control over KPI will be lost and the investment will be recognized as an investment in joint venture, as decisions about the relevant activities of KPI will require the unanimous consent of the parties sharing control.

Since this subsidiary does not represent a separate major line of business for the Group, the Group did not classify the financial performance of the subsidiary as a discontinued operation. The management of the Group expects the transaction will be completed within 12 months after the reporting date, therefore the assets and respective liabilities were reclassified into assets held for sale as at 31 December 2022.

The assets and liabilities of KPI are presented as follows:

In millions of tenge	December 31, 2022*
Assets	
Property, plant and equipment	**896,180**
Intangible assets	**38,265**
Other non-current assets	**57,448**
Inventories	**12,590**
Income tax prepaid	**475**
Other current financial assets	**23**
Other current assets	**7,182**
Cash and cash equivalents	**80,620**
Assets classified as held for sale	**1,092,783**
Liabilities	
Borrowings	**941,587**
Trade and other payables	**68,161**
Other non-current liabilities	**26,350**
Deferred tax liabilities	**8,964**
Liabilities associated with assets classified as held for sale	**1,045,062**
Net assets held for sale	**47,721**

** Assets and liabilities are presented after eliminations of intergroup transactions.*

Railway Passenger Coach Construction Plant LLP

During 2022, the Group reorganised its subsidiary Tulpar Wagon Construction Plant LLP by spinning off a new legal entity - Railway Passenger Coach Construction Plant LLP with a part of Tulpar Wagon Construction Plant LLP property and employees. On 13 December 2022, the Group, represented by the subsidiary of NC KTZh, Kaztemirtrans JSC, entered into a sale agreement with a third party for a 100% interest in the charter capital of Railway Passenger Coach Construction Plant LLP. As at 31 December 2022, the Group classified the assets and liabilities of Railway Passenger Coach Construction Plant LLP in a disposal group held for sale at the lower of their carrying amount and fair value less costs to sell. Since this subsidiary does not represent a separate major line of business for the Group, the Group did not classify the financial performance of the subsidiary as a discontinued operation. The control over Railway Passenger Coach Construction Plant LLP was lost in January 2023 upon completion of the sales transaction.

The assets and liabilities of Railway Passenger Coach Construction Plant LLP are presented as follows:

In millions of tenge	December 31, 2022*
Assets	
Property, plant and equipment	5,700
Other current assets	40,049
Cash and cash equivalents	76
Assets classified as held for sale	**45,825**
Liabilities	
Trade and other payables	17
Other non-current liabilities	14
Liabilities associated with assets classified as held for sale	**31**
Net assets held for sale	**45,794**

** Assets and liabilities are presented after eliminations of intergroup transactions.*

Chemplus LLP

In December 2022 the Group decided to transfer infrastructure assets of Chemplus LLP (further "Chemplus"), the subsidiary of the "Samruk-Kazyna Ondeu" LLP, with the carrying value of 12,901 million tenge, to the state free of charge. The Group reclassified the infrastructure assets to assets held for sale ande recognized impairment loss of 12,901 million tenge in the consolidated statement of comprehensive income.

Property, plant and equipment classified as held for sale

On May 31, 2022, the Group sold the "Aral" gas compressor station to Beineu-Shymkent Pipeline LLP with carrying value of 40,378 million tenge for consideration of 42,726 million tenge. As a result of the sale of this asset, the Group recognized net income from the disposal of assets held for sale in the amount of 1,174 million tenge, net of elimination of unrealized gain of 1,174 million tenge.

KOREM JSC

On April 14, 2021 in accordance with the Resolution of the Government of the Republic of Kazakhstan dated March 17, 2021 the Group transferred shares of KOREM JSC to the State property and privatization committee of the Ministry of Finance of the Republic of Kazakhstan with net assets of 312 million tenge free of charge. This transaction was recognized as transfer of assets to the Shareholder in consolidated statement of changes in equity.

7. Property, plant and equipment

In millions of tenge	Oil and gas assets	Pipelines and refinery assets	Buildings and premises
Net book value at January 1, 2021	**4,455,419**	**1,986,120**	**1,176,291**
Foreign currency translation	98,734	8,465	1,522
Changes in estimates	11,268	2,710	(2,040)
Additions	55,688	5,238	10,921
Additions through lease agreements	3,570	32,599	6,445
Capitalized repair works on right-of-use assets	–	–	–
Lease modifications	–	(625)	3,949
Disposals	(38,685)	(49,215)	(16,789)
Depreciation charge	(283,824)	(176,588)	(73,995)
Depreciation and impairment on disposals	23,604	20,352	12,224
Impairment, net of reversal of impairment	(3,940)	(8,279)	(15,278)
Reversal of provision under an onerous contract	–	–	–
Transfer from/(to) assets classified as held for sale or distribution to the Shareholder, net	–	(24)	(11,608)
Transfers from/(to) exploration and evaluation assets, investment property, net	16,674	–	2,314
Transfer from/(to) inventories, net	46	1,511	146
Other transfers and reclassifications	163,579	146,890	55,329
Other changes	(5,123)	–	(1)
Net book value at December 31, 2021	**4,497,010**	**1,969,154**	**1,149,430**
Historical cost	6,536,027	3,781,994	1,817,250
Accumulated depreciation and impairment	(2,039,017)	(1,812,840)	(667,820)
Net book value at December 31, 2021	**4,497,010**	**1,969,154**	**1,149,430**
Including right-of-use assets under lease agreements			
Net book value at January 1, 2021	**40,947**	**6,253**	**69,501**
Foreign currency translation	868	148	730
Changes in estimates	–	–	85
Additions through lease agreements	3,570	32,599	6,445
Capitalized repair works	–	–	–
Lease modifications	–	(625)	3,949
Disposals	(11,296)	(9)	(2,992)
Depreciation charge	(6,494)	(32,200)	(16,590)
Depreciation and impairment on disposals	–	9	995
Transfer from property, plant and equipment	–	–	–
Other transfers and reclassifications	–	–	(18)
Net book value at December 31, 2021	**27,595**	**6,175**	**62,105**
Historical cost of right-of-use assets under lease agreements	39,203	39,146	110,231
Accumulated depreciation and impairment of right-of-use assets under lease agreements	(11,608)	(32,971)	(48,126)
Net book value at December 31, 2021	**27,595**	**6,175**	**62,105**

Railway tracks and infra-structure	Machinery,	Mining assets	Other	Construc-tion in progress	Total
1,161,613	**3,315,856**	**154,747**	**198,742**	**1,255,097**	**13,703,885**
19	9,795	–	2,585	4,725	125,845
–	1,219	5,474	1	–	18,632
55	125,910	38,510	5,391	1,144,165	1,385,878
–	89,991	–	4,320	–	136,925
–	8,788	–	–	–	8,788
–	1,001	–	(3,532)	–	793
(4,296)	(63,503)	(950)	(7,094)	(1,378)	(181,910)
(37,228)	(349,006)	(34,186)	(21,869)	–	(976,696)
4,076	53,785	1	6,284	419	120,745
(618)	(28,203)	199	383	16,604	(39,132)
–	–	–	–	1,125	1,125
–	(33,561)	–	(451)	(35)	(45,679)
–	89	1,033	(22)	–	20,088
(4,383)	1,487	7,690	1,463	2,120	10,080
90,669	369,461	2,271	8,266	(836,465)	–
–	(41)	–	(16)	(20,128)	(25,309)
1,209,907	**3,503,068**	**174,789**	**194,451**	**1,566,249**	**14,264,058**
1,516,829	6,319,236	385,966	387,546	1,661,461	22,406,309
(306,922)	(2,816,168)	(211,177)	(193,095)	(95,212)	(8,142,251)
1,209,907	**3,503,068**	**174,789**	**194,451**	**1,566,249**	**14,264,058**
–	**355,064**	**–**	**30,137**	**–**	**501,902**
–	7,691	–	734	–	10,171
–	–	–	–	–	85
–	89,991	–	4,320	–	136,925
–	8,788	–	–	–	8,788
–	1,001	–	(3,532)	–	793
–	(7,665)	–	(507)	–	(22,469)
–	(69,070)	–	(5,007)	–	(129,361)
–	6,944	–	380	–	8,328
–	483	–	–	–	483
–	–	–	18	–	–
–	**393,227**	**–**	**26,543**	**–**	**515,645**
–	680,191	–	36,413	–	905,184
–	(286,964)	–	(9,870)	–	(389,539)
–	**393,227**	**–**	**26,543**	**–**	**515,645**

7. Property, plant and equipment (continued)

In millions of tenge	Oil and gas assets	Pipelines and refinery assets	Buildings and premises
Net book value at January 1, 2022	4,497,010	1,969,154	1,149,430
Foreign currency translation	**277,367**	**23,332**	**8,885**
Changes in estimates	**(106,566)**	**(51,243)**	**(3,476)**
Additions	**86,533**	**2,044**	**47,447**
Additions through lease agreements	**1,907**	**111,361**	**7,343**
Capitalized repair works on right-of-use assets	–	–	–
Lease modifications	**6,134**	**88**	**446**
Disposals	**(54,583)**	**(37,281)**	**(18,671)**
Loss of control over subsidiaries *(Note 6)*	–	–	–
Depreciation charge	**(269,733)**	**(162,932)**	**(67,009)**
Depreciation and impairment on disposals	**48,339**	**36,650**	**14,662**
Impairment, net of reversal of impairment *(Note 29)*	**909**	**(2,366)**	**(19,499)**
Use of provision under an onerous contract	–	–	–
Transfer from/(to) assets classified as held for sale or distribution to the Shareholder, net	–	–	**(15,499)**
Transfers from/(to) exploration and evaluation assets, investment property, net	**3,253**	–	**(150)**
Transfer from/(to) inventories, net	**37**	**(55)**	**(12)**
Other transfers and reclassifications	**176,669**	**96,853**	**56,832**
Other changes	**(669)**	–	–
Net book value at December 31, 2022	**4,666,607**	**1,985,605**	**1,160,729**
Historical cost	**7,013,924**	**4,006,573**	**1,908,673**
Accumulated depreciation and impairment	**(2,347,317)**	**(2,020,968)**	**(747,944)**
Net book value at December 31, 2022	**4,666,607**	**1,985,605**	**1,160,729**
Including right-of-use assets under lease agreements			
Net book value at January 1, 2022	**27,595**	**6,175**	**62,105**
Foreign currency translation	**1,963**	**410**	**1,748**
Additions through lease agreements	**1,907**	**111,361**	**7,343**
Capitalized repair works	–	–	–
Lease modifications	**6,134**	**88**	**446**
Disposals	**(7,994)**	**(31,884)**	**(12,084)**
Loss of control over subsidiaries *(Note 6)*	–	–	–
Depreciation charge	**(5,825)**	**(22,637)**	**(11,581)**
Depreciation and impairment on disposals	**3,863**	**31,884**	**8,643**
Impairment, net of reversal of impairment	–	–	–
Transfer from/(to) property, plant and equipment, net	–	–	**2,346**
Other transfers and reclassifications	–	–	**(945)**
Net book value at December 31, 2022	**27,643**	**95,397**	**58,021**
Historical cost of right-of-use assets under lease agreements	**41,945**	**119,188**	**100,695**
Accumulated depreciation and impairment of right-of-use assets under lease agreements	**(14,302)**	**(23,791)**	**(42,674)**
Net book value at December 31, 2022	**27,643**	**95,397**	**58,021**

As at December 31, 2022 property, plant and equipment with net book value of 822,711 million tenge was pledged as collateral for some of the Group's borrowings (December 31, 2021: 898,485 million tenge).

As at December 31, 2022 the cost of fully amortised property, plant and equipment of the Group was equal to 1,360,113 million tenge (December 31, 2021: 1,228,077 million tenge).

Railway tracks and infra-structure	Machinery,	Mining assets	Other	Construc-tion in progress	Total
1,209,907	3,503,068	174,789	194,451	1,566,249	14,264,058
83	27,281	–	6,690	9,227	352,865
–	(2,311)	1,643	(393)	–	(162,346)
324	110,781	51,572	6,367	1,311,389	1,616,457
–	112,259	–	5,411	–	238,281
–	2,688	–	–	–	2,688
–	102	–	4,343	–	11,113
(178)	(46,414)	(4,444)	(6,071)	(5,169)	(172,811)
–	–	–	(291)	–	(291)
(39,499)	(374,673)	(42,045)	(21,943)	–	(977,834)
166	43,779	–	5,400	725	149,721
(92)	(6,590)	(4,528)	3,363	(12,914)	(41,717)
–	–	–	–	(1,125)	(1,125)
–	(5,922)	–	(1,113)	(891,697)	(914,231)
–	–	–	–	–	3,103
(3,601)	(124)	17,204	388	4,046	17,883
128,393	351,228	2,789	8,559	(821,323)	–
–	9	–	–	790	130
1,295,503	3,715,161	196,980	205,161	1,160,198	14,385,944
1,633,474	6,880,884	450,202	413,550	1,263,122	23,570,402
(337,971)	(3,165,723)	(253,222)	(208,389)	(102,924)	(9,184,458)
1,295,503	3,715,161	196,980	205,161	1,160,198	14,385,944
–	393,227	–	26,543	–	515,645
–	20,836	–	1,133	–	26,090
–	112,259	–	5,411	–	238,281
–	2,688	–	–	–	2,688
–	102	–	4,343	–	11,113
–	(5,030)	–	(399)	–	(57,391)
–	–	–	(255)	–	(255)
–	(84,743)	–	(5,197)	–	(129,983)
–	4,949	–	356	–	49,695
–	–	–	(834)		(834)
–	–	–	(9)	–	2,337
–	945	–	–	–	–
–	445,233	–	31,092	–	657,386
–	836,993	–	46,546	–	1,145,367
–	(391,760)	–	(15,454)	–	(487,981)
–	445,233	–	31,092	–	657,386

In 2022 the Group capitalized borrowing costs at an average interest rate of 6.89% in the amount of 74,087 million tenge *(Note 19)* (2021: at an average interest rate of 6.14% in the amount of 48,624 million tenge).

8. Intangible assets

In millions of tenge	Licenses	Subsur-face use rights
Net book value at January 1, 2021	711,045	832,147
Foreign currency translation	13,110	5,219
Additions	8,287	2,918
Disposals	(3,227)	–
Amortization charge	(43,399)	(39,215)
Accumulated amortization and impairment on disposals	3,196	–
(Impairment)/reversal of impairment, net *(Note 29)*	(566)	–
Transfer from/(to) assets classified as held for sale or distribution to the Shareholder, net	–	–
Transfers from/(to) exploration and evaluation assets, net	–	9,665
Transfers from/(to) other non-current assets, net	2,158	–
Other transfers and reclassifications	1,045	–
Other changes	508	5,123
Net book value at December 31, 2021	692,157	815,857
Foreign currency translation	**36,279**	**14,390**
Additions	**9,404**	**1,077**
Disposals	**(2,805)**	**–**
Loss of control over subsidiaries *(Note 6)*	**–**	**–**
Amortization charge	**(43,754)**	**(36,227)**
Accumulated amortization and impairment on disposals	**2,775**	**–**
(Impairment)/reversal of impairment, net *(Note 29)*	**93**	**–**
Transfer from/(to) assets classified as held for sale or distribution to the Shareholder, net	**(336)**	**–**
Transfers to other non-current assets, net	**–**	**–**
Other transfers and reclassifications	**1,025**	**–**
Other changes	**132**	**669**
Net book value at December 31, 2022	**694,970**	**795,766**
Historical cost	**946,815**	**977,169**
Accumulated amortization and impairment	**(251,845)**	**(181,403)**
Net book value at December 31, 2022	**694,970**	**795,766**
Historical cost	894,480	957,749
Accumulated amortization and impairment	**(202,323)**	**(141,892)**
Net book value at December 31, 2021	**692,157**	**815,857**

Goodwill	Marketing related intangible assets	Software	Other	Total
315,981	24,825	63,930	74,096	2,022,024
284	642	126	685	20,066
–	–	21,495	3,039	35,739
–	–	(2,449)	(1,932)	(7,608)
–	–	(20,858)	(3,354)	(106,826)
–	–	2,285	1,930	7,411
–	–	(3,602)	5	(4,163)
–	–	26	–	26
–	–	–	–	9,665
–	–	231	–	2,389
–	–	5,014	(6,059)	–
–	–	8,267	11,411	25,309
316,265	25,467	74,465	79,821	2,004,032
807	**1,819**	**398**	**1,896**	**55,589**
–	**–**	**6,141**	**16,853**	**33,475**
–	**–**	**(4,139)**	**(910)**	**(7,854)**
–	**–**	**–**	**(64)**	**(64)**
–	**–**	**(20,669)**	**(8,082)**	**(108,732)**
–	**–**	**4,165**	**404**	**7,344**
–	**–**	**35**	**(139)**	**(11)**
–	**–**	**(6,156)**	**(31,773)**	**(38,265)**
–	**–**	**(22)**	**–**	**(22)**
–	**–**	**11,083**	**(12,108)**	**–**
–	**–**	**1,268**	**(2,199)**	**(130)**
317,072	**27,286**	**66,569**	**43,699**	**1,945,362**
432,277	**70,041**	**233,058**	**122,439**	**2,781,799**
(115,205)	**(42,755)**	**(166,489)**	**(78,740)**	**(836,437)**
317,072	**27,286**	**66,569**	**43,699**	**1,945,362**
431,470	65,371	222,313	158,331	2,729,714
(115,205)	**(39,904)**	**(147,848)**	**(78,510)**	**(725,682)**
316,265	**25,467**	**74,465**	**79,821**	**2,004,032**

9. Exploration and evaluation assets

In millions of tenge	Tangible	Intangible	Total
Net book value at January 1, 2021	339,742	27,651	367,393
Foreign currency translation	4,822	–	4,822
Change in estimate	15	–	15
Additions	13,069	831	13,900
Disposals	(5,842)	(5,397)	(11,239)
Impairment/write-off, net of reversal of impairment *(Note 29)*	(76,869)	(2,214)	(79,083)
Depreciation and impairment on disposals	5,842	4,970	10,812
Transfers from/(to) property, plant and equipment, net	(17,707)	–	(17,707)
Transfers from/(to) intangible assets, net	–	(9,665)	(9,665)
Transfer from/(to) inventories, net	(299)	–	(299)
Net book value at December 31, 2021	**262,773**	**16,176**	**278,949**
Foreign currency translation	**13,683**	**–**	**13,683**
Change in estimate	**(195)**	**–**	**(195)**
Additions	**22,606**	**510**	**23,116**
Disposals	**(120)**	**(173)**	**(293)**
Impairment/write-off, net of reversal of impairment *(Note 29)*	**(16,312)**	**(1,694)**	**(18,006)**
Depreciation and impairment on disposals	**120**	**173**	**293**
Transfers from/(to) property, plant and equipment, net	**(3,253)**	**–**	**(3,253)**
Transfer from/(to) inventories, net	**6**	**–**	**6**
Net book value at December 31, 2022	**279,308**	**14,992**	**294,300**
Historical cost	**309,934**	**19,891**	**329,825**
Accumulated impairment	**(30,626)**	**(4,899)**	**(35,525)**
Net book value at December 31, 2022	**279,308**	**14,992**	**294,300**
Historical cost	284,201	19,381	303,582
Accumulated impairment	(21,428)	(3,205)	(24,633)
Net book value at December 31, 2021	**262,773**	**16,176**	**278,949**

As at December 31, 2022 and 2021 the exploration and evaluation assets are represented by the following projects:

In millions of tenge	2022	2021
Kashagan	**206,007**	191,463
NAC KAP projects	**26,543**	24,378
Zhenis	**18,310**	4,692
JSC "NC "QazaqGaz" projects	**16,475**	19,567
Embamunaigas JSC	**14,084**	16,357
Urikhtau	**4,889**	13,726
Other	**7,992**	8,766
	294,300	278,949

10. Investments in joint ventures and associates

As at December 31 investments in joint ventures and associates comprised the following:

In millions of tenge	Main activity	Place of business
Joint ventures		
Tengizchevroil LLP	Oil and gas exploration and production	Kazakhstan
Asia Gas Pipeline LLP	Construction and operation of the gas pipeline	Kazakhstan
Beineu-Shymkent Pipeline LLP	Construction and operation of the gas pipeline	Kazakhstan
Mangistau Investments B.V.	Oil and gas development and production	Kazakhstan
Forum Muider B.V.	Production of coal	Kazakhstan
KazRosGas LLP	Processing and sale of natural gas and refined gas products	Kazakhstan
Kazakhstan – China Pipeline LLP	Oil transportation	Kazakhstan
JV Kazgermunai LLP	Oil and gas exploration and production	Kazakhstan
Ural Group Limited BVI	Oil and gas exploration and production	Kazakhstan
Other		
Total joint ventures		
Associates		
Caspian Pipeline Consortium JSC	Transportation of liquid hydrocarbons	Kazakhstan/Russia
Kazzinc LLP	Mining and processing of metal ores, production of refined metals	Kazakhstan
JV KATCO LLP	Exploration, production,	Kazakhstan
PetroKazakhstan Inc. (“PKI”)	Exploration, production and processing of oil and gas	Kazakhstan
Other		
Total associates		

2022		2021	
Carrying amount	Percentage ownership	Carrying amount	Percentage ownership
3,825,053	20.00%	3,105,942	20.00%
710,273	50.00%	504,807	50.00%
238,236	50.00%	200,338	50.00%
164,716	50.00%	207,410	50.00%
68,159	50.00%	53,747	50.00%
58,812	50.00%	54,317	50.00%
37,138	50.00%	25,355	50.00%
32,070	50.00%	32,289	50.00%
31,490	50.00%	41,453	50.00%
202,832		149,934	
5,368,779		4,375,592	
521,882	20.75%	473,880	20.75%
491,846	29.82%	548,879	29.82%
113,920	49.00%	85,123	49.00%
94,635	33.00%	84,905	33.00%
143,519		112,855	
1,365,802		1,305,642	
6,734,581		5,681,234	

10. Investments in joint ventures and associates (continued)

The following tables illustrate summarized financial information of significant joint ventures, based on IFRS financial statements of these entities for 2022, reflecting equity method accounting adjustments:

In millions of tenge	Tengizchevroil LLP	Asia Gas Pipeline LLP	Beineu-Shymkent Pipeline LLP
Joint ventures			
Non-current assets	25,713,747	1,165,474	623,036
Current assets, including	3,046,293	707,366	183,695
Cash and cash equivalents	1,905,924	466,658	60,340
Non-current liabilities, including	7,808,607	241,387	273,406
Non-current financial liabilities	4,163,850	59,026	261,063
Current liabilities, including	1,826,167	210,907	93,130
Current financial liabilities	–	185,590	46,858
Equity	19,125,266	1,420,546	440,195
Share of ownership	20.00%	50.00%	50.00%
Consolidation adjustments	–	–	18,139
Carrying amount of investment	3.825.053	710.273	238.236
Revenue	10,949,194	912,711	188,975
Depreciation, depletion and amortization	(1,129,895)	(77,695)	(26,893)
Finance income	36,076	5,108	2,901
Finance costs	(99,857)	(24,809)	(16,207)
Income tax expenses	(1,591,414)	(140,490)	–
Profit/(loss) for the year	3,713,299	553,306	101,674
Other comprehensive income/(loss)	1,114,004	(477)	–
Total comprehensive income/(loss)	4,827,303	552,829	101,674
Dividends received	244,579	70,949	11,765

Mangistau Investments B.V.	Forum Muider B.V.	KazRosGas LLP	Kazakhstan – China Pipeline LLP	JV Kazgermunai LLP	Ural Group Limited BVI
464,868	175,947	40,100	137,004	71,787	275,714
111,126	75,715	99,637	42,103	53,303	1,851
28,622	7,687	59,000	17,871	46,729	1,704
144,698	74,123	269	58,417	21,559	171,042
–	72,071	–	32,197	–	133,544
99,344	41,221	21,844	46,415	39,392	3,543
–	8,772	–	33,900	–	–
331,952	136,318	117,624	74,275	64,139	102,980
50.00%	50.00%	50.00%	50.00%	50.00%	50.00%
(1,260)	–	–	–	–	(20,000)
164.716	68.159	58.812	37.138	32.070	31.490
910,069	113,612	192,427	86,319	150,039	223
(26,647)	(9,018)	(323)	(10,269)	(22,550)	(26)
594	7,417	2,765	357	791	–
(9,404)	(1,052)	–	(4,593)	(994)	(8,387)
(38,267)	(8,180)	(4,040)	(8,703)	(39,783)	(3,005)
96,971	29,231	1,107	33,566	41,061	(22,939)
1,784	(408)	7,884	–	4,115	2,746
98,755	28,823	8,991	33,566	45,176	(20,193)
92,071	–	–	5,000	22,826	–

10. Investments in joint ventures and associates (continued)

The following tables illustrate summarized financial information of significant joint ventures, based on IFRS financial statements of these entities for 2021, reflecting equity method accounting adjustments:

In millions of tenge	Tengizchevroil LLP	Asia Gas Pipeline LLP	Beineu-Shymkent Pipeline LLP
Joint ventures			
Non-current assets	21,900,722	1,266,161	588,673
Current assets, including	1,454,491	551,179	159,038
Cash and cash equivalents	331,602	394,184	26,064
Non-current liabilities, including	6,307,907	608,534	304,146
Non-current financial liabilities	3,886,200	404,571	282,759
Current liabilities, including	1,517,597	199,192	81,515
Current financial liabilities	60,529	173,173	64,738
Equity	**15,529,709**	**1,009,614**	**362,050**
Share of ownership	20.00%	50.00%	50.00%
Consolidation adjustments	–	–	19,313
Carrying amount of investment as at December 31, 2021	**3,105,942**	**504,807**	**200,338**
Revenue	6,793,158	857,998	200,362
Depreciation, depletion and amortization	(894,739)	(81,135)	(23,996)
Finance income	2,341	1,082	1,894
Finance costs	(62,409)	(35,232)	(14,916)
Income tax expenses	**(946,429)**	**(128,361)**	**–**
Profit/(loss) for the year	2,208,327	507,108	131,067
Other comprehensive income/(loss)	393,933	765	–
Total comprehensive income/(loss)	**2,602,260**	**507,873**	**131,067**
Dividends received	208,397	40,216	20,700

	Mangistau Investments B.V.	Forum Muider B.V.	KazRosGas LLP	Kazakhstan – China Pipeline LLP	JV Kazgermunai LLP	Ural Group Limited BVI
	480,741	165,165	45,961	149,828	65,184	254,152
	160,802	28,498	80,907	80,675	54,869	911
	101,431	6,907	31,428	58,398	49,531	830
	138,617	53,600	225	122,857	18,405	129,822
	–	48,235	–	94,393	–	95,775
	86,154	32,569	18,009	56,937	37,070	2,335
	–	1,803	–	44,617	–	–
	416,772	**107,494**	**108,634**	**50,709**	**64,578**	**122,906**
	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%
	(976)	–	–	–	–	(20,000)
	207,410	**53,747**	**54,317**	**25,355**	**32,289**	**41,453**
	763,148	103,081	196,978	74,019	118,071	–
	(66,434)	(8,218)	(221)	(10,119)	(59,318)	(61)
	181	3,805	2,908	226	743	–
	(9,296)	(798)	–	(4,750)	(1,752)	(3,918)
	(55,667)	**(6,838)**	**(12,467)**	**(6,889)**	**(27,785)**	**(171)**
	160,308	22,822	41,903	26,927	12,216	(22,120)
	18	(57)	4,394	(1)	1,596	3,995
	160,326	**22,765**	**46,297**	**26,926**	**13,812**	**(18,125)**
	15,338	72	45,532	1,800	7,441	–

10. Investments in joint ventures and associates (continued)

The following tables illustrate summarized financial information of significant associates, based on IFRS financial statements of these entities for 2022 and 2021, reflecting equity method accounting adjustments:

	2022		
In millions of tenge	Caspian Pipeline Consortium JSC	Kazzinc LLP	JV KATCO LLP
Associates			
Non-current assets	**2,240,723**	**1,383,099**	**132,022**
Current assets	**292,198**	**797,108**	**132,298**
Non-current liabilities	**35,730**	**218,044**	**20,139**
Current liabilities	**196,152**	**312,897**	**8,822**
Equity	**2,301,039**	**1,649,266**	**235,359**
Share of ownership	**20.75%**	**29.82%**	**49.00%**
Goodwill	**44,416**	**–**	**68**
Unrecognized gain on transactions with associates	**–**	**–**	**(10,592)**
Additional allocation of profits	**–**	**–**	**9,118**
Impairment of the investment	**–**	**–**	**–**
Carrying amount of investment	**521,882**	**491,846**	**113,920**
Revenue	**976,076**	**1,632,251**	**146,304**
Profit/(loss) for the year	**567,533**	**(21,889)**	**82,891**
Other comprehensive income	**185,893**	**–**	**–**
Total comprehensive income/(loss)	**753,426**	**(21,889)**	**82,891**
Other	**–**	**–**	**(2,141)**
Dividends received	**108,975**	**88,819**	**18,796**

All of the above joint ventures and associates are strategic for the Group's business.

	2021			
Petro-Kazakhstan Inc.	**Caspian Pipeline Consortium JSC**	**Kazzinc LLP**	**JV KATCO LLP**	**Petro-Kazakhstan Inc. ("PKI")**
224,559	2,050,452	1,487,330	85,480	255,912
116,827	229,939	848,662	125,413	88,537
18,489	32,699	302,288	9,873	20,905
15,586	163,712	193,195	10,192	45,717
307,311	2,083,980	1,840,509	190,828	277,827
33.00%	20.75%	29.82%	49.00%	33.00%
–	41,454	–	68	–
–	–	–	(8,451)	–
–				
(6,778)	–	–	–	(6,778)
94,635	473,880	548,879	85,123	84,905
140,901	925,320	1,484,652	116,791	113,185
19,702	438,091	224,656	61,016	24,369
9,782	60,033	–	–	3,149
29,484	498,124	224,656	61,016	27,518
–	–	–	(620)	–
2,890	107,614	63,274	–	2,763

10. Investments in joint ventures and associates (continued)

The following tables illustrate aggregate financial information of individually insignificant joint ventures (the Group's proportional interest):

In millions of tenge	2022	2021
Carrying amount of investments as at December 31	**202,832**	149,935
Net profit for the year	**68,387**	61,121
Other comprehensive loss	**(1,263)**	(295)
Total comprehensive income	**67,124**	60,826

The following tables illustrate aggregate financial information of individually insignificant associates (the Group's proportional interest):

In millions of tenge	2022	2021
Carrying amount of investments as at December 31	**143,519**	112,855
Net profit for the year	**56,099**	49,535
Other comprehensive income	**5,075**	569
Total comprehensive income	**61,174**	50,104

In 2022 dividends received from individually insignificant joint ventures and associates were equal to 67,848 million tenge (2021: 34,300 million tenge).

The following table summarizes the movements in equity investments in joint ventures and associates in 2022 and 2021:

In millions of tenge	2022	2021
Balance as at January 1	**5,681,234**	4,985,676
Share in profit of joint ventures and associates, net *(Note 32)*	**1,449,260**	1,142,082
Dividends received	**(734,518)**	(547,447)
Change in dividends receivable	**4,838**	(3,339)
Additional contributions without change in ownership	**15,418**	1,926
Acquisitions	**11,445**	1,618
Adjustment of unrealized income*	**(3,301)**	(6,294)
Disposals	**–**	(89)
Transfers to assets classified as held for sale or distribution to the Shareholder	**(1,460)**	–
Foreign currency translation	**309,586**	101,309
Other comprehensive income, other than foreign currency translation	**5,170**	2,213
Discount on loans issued	**(2,431)**	8,495
Impairment, net *(Note 29)*	**(660)**	(5,921)
Financial guarantees issued	**–**	672
Other changes in equity of joint ventures and associates	**–**	333
Balance as at December 31	**6,734,581**	5,681,234

** Adjustment of unrealized income represent unrealized income from sale of inventory from joint ventures to Group and capitalized borrowing costs on the loans provided by the Group to joint ventures.*

As at December 31, 2022, the Group's share in unrecognized losses of joint ventures and associates was equal to 25 million tenge (December 31, 2021: 3,661 million tenge).

11. Loans issued and net investment in finance lease

As at December 31, loans issued and net investment in finance lease comprised the following:

In millions of tenge	2022	Weighted average effective interest rate	2021	Weighted average effective interest rate
Loans issued at fair value through profit or loss	**117,511**	**3.5%+12M LIBOR +forex adjustment**	123,161	3.5%+12M LIBOR +forex adjustment
Loans issued at amortized cost	**64,371**	**24.07%**	238,186	15.99%
Net investment in finance lease	**54,017**	**12.14%**	62,003	10.21%
Total loans and net investment in finance lease	**235,899**		423,350	
Less: allowance for expected credit losses	**(17,284)**		(19,234)	
Loans issued and net investment in finance lease, net	**218,615**		404,116	
Less: current portion	**(66,889)**		(46,703)	
Non-current portion	**151,726**		357,413	

Movements in the loan allowance for expected credit losses for the years ended December 31 were as follows:

In millions of tenge	2022	2021
Allowance at January 1	**19,234**	15,624
Charged, net	**(1,373)**	1,046
Disposal of subsidiary	**–**	2,564
Change in accounting estimates	**(577)**	–
Allowance at December 31	**17,284**	19,234

As at December 31 the components of net investment in finance lease are as follows:

In millions of tenge	2022	2021
Within one year	**15,215**	13,781
Later than one year, but not later than five years	**31,436**	36,952
After five years	**30,787**	45,055
Lease payments	**77,438**	95,788
Less: unearned finance income	**(23,421)**	(33,785)
Net investment in finance lease	**54,017**	62,003

In millions of tenge	2022	2021
Loans issued in US dollars	**123,443**	308,483
Loans issued and net investment in finance lease in tenge	**95,172**	94,525
Loans issued in other foreign currencies	**–**	1,108
	218,615	404,116

12. Amounts due from credit institutions

As at December 31 amounts due from credit institutions comprised the following:

In millions of tenge	2022	2021
Bank deposits	**1,638,585**	694,517
Loans to credit institutions	**67,614**	83,585
Less: allowance for expected credit losses	**(2,326)**	(1,440)
Amounts due from credit institutions, net	**1,703,873**	776,662
Less: current portion	**(1,433,305)**	(671,859)
Non-current portion	**270,568**	104,803

In millions of tenge	2022	2021
Rating from A+(A1) to A-(A3)	**966,071**	340,907
Rating from BBB+(Baa1) to BBB(Baa2)	**213,729**	103,874
Rating from BBB-(Baa3) to BB-(Ba3)	**482,486**	271,091
Rating from B+(B1) to B-(B3)	**41,587**	60,790
	1,703,873	776,662

In millions of tenge	2022	Weighted average effective interest rate	2021	Weighted average effective interest rate
Amounts due from credit institutions, denominated in US dollars	**1,197,610**	**2.61%**	646,484	0.35%
Amounts due from credit institutions, denominated in tenge	**506,263**	**6.63%**	130,177	5.66%
Amounts due from credit institutions, denominated in other currencies	**–**	**–**	1	4%
	1,703,873		776,662	

13. Other financial assets

As at December 31 other financial assets comprised the following:

In millions of tenge	2022	2021
Financial assets at fair value through other comprehensive income, including:	**28,322**	21,935
Corporate bonds	**17,931**	694
Treasury bills of the Ministry of Finance of the Republic of Kazakhstan	**7,428**	8,615
Bonds of Kazakhstan financial institutions	**2,051**	11,662
Treasury notes of foreign governments	**839**	904
Equity securities	**73**	60
Financial assets at amortized cost, including:	**915,083**	1,016,884
Bonds of Kazakhstan financial institutions	**355,054**	343,307
Notes of the National Bank of the Republic of Kazakhstan	**176,715**	96,393
Corporate bonds	**115,125**	114,685
Treasury bills of the Ministry of Finance of the Republic of Kazakhstan	**12,966**	–
Eurobonds of the Ministry of Finance of the Republic of Kazakhstan	**1,988**	1,869
Other financial assets at amortized cost, including:		
Restricted cash	**225,060**	183,044
Other accounts receivable	**146,395**	122,136
Amounts due from employees	**9,948**	10,447
Dividends receivable	**630**	6,685
Reservation of cash for repayment of borrowings (Note 19)	**152**	259,459
Other	**12,364**	11,507
Less: allowance for expected credit losses	**(141,314)**	(132,648)
Financial assets at fair value through profit or loss, including:	**143,906**	135,908
Equity securities	**124,960**	106,197
Guaranteed returns from a shareholder of a joint venture	**13,178**	11,750
Corporate bonds	**3,192**	2,993
Options	**1,868**	3,188
Forward and futures contracts	**681**	10,965
Currency swaps	**27**	–
Bonds of Kazakhstan financial institutions	**–**	815
Total financial assets	**1,087,311**	1,174,727
Less: current portion	**(347,700)**	(506,895)
Non-current portion	**739,611**	667,832

Restricted cash

Restricted cash includes payments of 32.3 million US Dollar, or 14,812 million tenge adjusted for foreign exchange gains and amounting to 14,956 million tenge as at 31 December 2022, made by the Group in March 2022 to a uranium enrichment service provider whose Russian bank was subsequently included in the list of legal entities that fell under the sanctions of the Office of Foreign Assets Control of the US Department of the Treasury (OFAC).

On 13 January 2023 the OFAC issued a license to return blocked funds. On 30 January 2023 the correspondent bank returned the funds in the amount of 32.7 million US Dollars (equivalent to 14,884 million tenge), including 0.4 million US Dollars (equivalent to 179 million tenge) of accrued interest.

On November 22, 2021, National Atomic Company "Kazatomprom" (hereinafter – "NAC KAP"), a subsidiary of the Group, signed a Framework Agreement with Genchi Global Limited to participate in ANU Energy OEIC Ltd (hereinafter –"ANU Energy"), created on the Astana International Financial Center, and made an investment of 24.25 million dollars to ANU Energy in March 2022. The purpose of ANU Energy is to store physical uranium as a long-term investment. The Group does not have a representative on the Board of Directors of ANU Energy and does not take part in decision-making on key strategic issues of ANU Energy. Accordingly, the Group does not have significant influence on the management operations of ANU Energy, and therefore the Group recognizes this investment at fair value through profit or loss.

As at December 31 other financial assets by currency, except for derivatives, comprised:

In millions of tenge	2022	2021
Financial assets, denominated in tenge	**765,060**	742,117
Financial assets, denominated in US dollars	**286,794**	387,042
Financial assets, denominated in euro	**15,772**	24,804
Financial assets, denominated in rubles	**301**	12
Financial assets, denominated in other currency	**16,808**	6,599
	1,084,735	1,160,574

14. Other non-current assets

As at December 31 other non-current assets comprised the following:

In millions of tenge	2022	2021
Advances paid for non-current assets	**259,196**	361,269
Long-term VAT receivable	**225,712**	180,022
Prepaid expenses	**16,882**	19,300
Long-term inventories	**12,676**	54,655
Other	**20,726**	21,598
Less: impairment allowance	**(61,467)**	(58,654)
	473,725	578,190

15. Inventories

As at December 31 inventories comprised the following:

In millions of tenge	2022	2021
Uranium products (at lower of cost and net realizable value)	**308,114**	221,613
Production materials and supplies (at lower of cost and net realizable value)	**77,570**	65,354
Crude oil (at cost)	**69,332**	62,326
Work in progress (at lower of cost and net realizable value)	**68,803**	57,477
Oil refined products for sale (at lower of cost and net realizable value)	**60,670**	89,725
Oil and gas industry materials and supplies (at cost)	**44,767**	34,437
Goods for resale (at lower of cost and net realizable value)	**41,139**	34,193
Gas processed products (at cost)	**33,518**	34,538
Fuel (at lower of cost and net realizable value)	**22,922**	24,089
Railway industry materials and supplies (at cost)	**21,738**	17,300
Uranium industry materials and supplies (at lower of cost and net realizable value)	**16,150**	3,828
Aircraft spare parts (at cost)	**15,647**	14,744
Electric transmission equipment spare parts (at cost)	**5,855**	5,499
Telecommunication equipment spare parts (at cost)	**2,248**	2,069
Other materials and supplies (at lower of cost and net realizable value)	**77,011**	61,705
	865,484	728,897

Uranium products and goods for resale as at December 31, 2022 and December 31, 2021 include inventory received under inventory loans in the amount of 8,597 million tenge, which corresponds to the estimated fair value of consideration transferred on the transaction date. A liability corresponding to the obligation to return inventory was recognised in the same amount in other liabilities *(Notes 23, 24)* and further revalued in accordance with the changes of market prices for inventory.

As at December 31, 2022 carrying value of inventories under pledge as collateral amounted to 126,345 million tenge (December 31, 2021: 121,772 million tenge).

16. Trade accounts receivable and other current assets

As at December 31 trade accounts receivable comprised the following:

In millions of tenge	2022	2021
Trade accounts receivable	**1,143,332**	1,074,650
Less: allowance for expected credit losses	**(61,930)**	(49,758)
	1,081,402	1,024,892

As at December 31 other current assets comprised the following:

In millions of tenge	2022	2021
Advances paid and deferred expenses	**141,348**	114,163
Other prepaid taxes	**97,018**	86,740
Other non-financial current assets	**19,986**	21,930
Less: impairment allowance	**(8,330)**	(12,847)
	250,022	209,986

At December 31, 2022 the Group's receivables of 176,000 million tenge were pledged under certain Group borrowings (December 31, 2021: 131,120 million tenge).

Movements in the allowance for expected credit losses for trade accounts receivable for the years ended December 31 were as follows:

In millions of tenge	2022	2021
Allowance at January 1	**49,758**	47,221
Charged, net	**14,271**	5,873
Foreign exchange difference, net	**1,006**	(594)
Change in estimate	**–**	(4)
Transfers from/(to) assets classified as held for sale or	**–**	(1.157)
distribution to the Shareholder, net	**–**	(1,157)
Write-off	**(3,105)**	(1,581)
Allowance at December 31	**61,930**	**49,758**

Movements in the impairment allowance for other current assets for the years ended December 31 were as follows:

In millions of tenge	2022	2021
Allowance at January 1	**12,847**	14,402
Charged, net	**(2,065)**	1,379
Foreign exchange difference, net	**44**	3
Change in estimate	**268**	(29)
Write-off	**(2,764)**	(2,908)
Allowance at December 31	**8,330**	12,847

17. Cash and cash equivalents

As at December 31 cash and cash equivalents comprised the following:

In millions of tenge	2022	2021
Bank deposits – US dollars	**690,834**	999,449
Bank deposits – tenge	**602,992**	661,752
Bank deposits – other currency	**17,550**	32,941
Current accounts with banks – US dollars	**1,004,182**	690,971
Current accounts with banks – tenge	**363,014**	221,834
Current accounts with banks – other currency	**34,729**	34,709
Reverse repurchase agreements and other treasury securities with contractual maturity of three months or less	**164,541**	141,035
Balances on brokerage accounts payable on demand	**35,494**	19,193
Cash in transit	**18,258**	2,290
Cash on hand	**9,186**	7,403
Less: allowance for expected credit losses	**(577)**	(847)
	2,940,203	2,810,730

Within the framework of diversification, the Group continues to place part of its free liquidity in money market instruments, such as automatic repurchase agreements secured by government securities.

Short-term bank deposits are placed for varying periods of between 1 (one) day and 3 (three) months, depending on immediate cash needs of the Group. As at December 31, 2022 the weighted average interest rates for short-term bank deposits were 14.17% in tenge, 1.63% in US dollars, 5.12% in other currency; and current accounts were 1.33% in tenge, 1.17% in USD dollars, 0.77% in other currency, respectively (December 31, 2021: the weighted average interest rates for short-term bank deposits were 8.34% in tenge, 0.26% in US dollars, 5.07% in other currency; and current accounts were 0.7% in tenge, 0.26% in USD dollars, 0.46% in other currency, respectively).

18. Equity

18.1 Share capital

During 2022 and 2021 the Fund issued common shares, which were paid as follows:

Payment for shares	Number of shares authorized and issued	Par value per share, in tenge	Share capital in millions of tenge
As of December 31, 2020	3,481,960,408		5,258,657
Cash contributions	1,000	9,923,089	9,923
As of December 31, 2021	3,481,961,408		5,268,580
Property contributions	**1**	**239,265,541**	**239**
As of December 31, 2022	**3,481,961,409**		**5,268,819**

As at December 31, 2022 3,481,961,409 shares of the Fund were fully paid (December 31, 2021: 3,481,961,408 shares).

Property contributions

On June 28, 2022, the Shareholder contributed property to the Fund's share capital in form of the movable property with a fair value of 239 million tenge. This property was transferred to the share capital of subsidiary NC KTZh.

Cash contributions

In August 2021, the Shareholder made cash contributions to the Fund's share capital of 9,923 million tenge. These amounts were aimed to finance the project " Construction of Infrastructure facilities on the territory of SEZ "National Industrial Petrochemical Technopark".

18.2 Dividends

Dividends attributable to equity holder of the Parent

In September and October 2022 the Fund declared and paid dividends to the Shareholder of 170,024 million tenge based on financial results for 2021 according to the Resolution of the Government dated September 22, 2022.

On November 30, 2021, the Fund declared and paid dividends to the Shareholder of 88,337 million tenge based on financial results of 2020 in accordance with the Resolution of the Government dated November 21, 2021.

Dividends attributable to non-controlling interests

During 2022 the Group declared dividends of 186,073 million tenge to the holders of non controlling interests in National Company "KazMunayGas" JSC ("NC KMG") group, Kazakhtelecom JSC ("KTC"), NAC KAP and Kazakhstan Electricity Grid Operating Company JSC ("KEGOC"). Total amount of dividends paid to the holders of non controlling interests during 2022 equaled 184,145 million tenge.

During 2021 the Group declared dividends of 92,511 million tenge to the holders of non controlling interests in NC KMG group, KTC, NAC KAP and KEGOC. Total amount of dividends paid to the holders of non controlling interests during 2021 equaled 92,076 million tenge.

18.3 Other distributions to the Shareholder

Social projects financing

During 2022 in accordance with the Shareholder's resolutions, the Fund recognised liabilities for financing of various social projects for the amount 23,978 million tenge as other distributions to the Shareholder in the consolidated statement of changes in equity. As at December 31, 2022, the Group made repayment of liabilities for financing of social projects in the amount of 23,978 million tenge.

During 2021 in accordance with the Shareholder's resolution, the Group provided funding for procurement of vaccines against COVID-19 for the total amount of 13,410 million tenge and recognised the funding as other distributions to the Shareholder in the consolidated statement of changes in equity. As of December 31, 2021 these liabilities were fully paid off.

Also, during 2021 in accordance with Shareholder's resolutions, the Fund recognised liabilities for financing of various social projects for the amount of 25,983 million tenge as other distributions to the Shareholder in the consolidated statement of changes in equity. As of December 31, 2021, the Group made repayment of liabilities of 29,878 million tenge.

Financing construction of social facilities

During 2022, in accordance with the Shareholder's resolutions, the Fund recognized liabilities for financing of the construction of National coordination center for emergency medicine in Astana city with 200 beds and National Scientific Center of infectious diseases in Almaty city with 350 beds in the amount of 166,867 million tenge. As of December 31, 2022, the Group made repayment of liabilities in the amount of 104,028 million tenge.

In addition, in accordance with the Shareholder's resolutions, the Fund recognized liabilities for financing of the construction of residential buildings for socially vulnerable segments of the population in Zhetysu region in the amount of 11,600 million tenge.

Also, during 2022, in accordance with the Shareholder's resolutions on the construction of a medical center in Zhana-ozen town and housing for the residents, living in Zhana-ozen town, the Group accrued liabilities and paid for 10,199 million tenge and 2,398 million tenge, respectively.

During 2021 in accordance with the Shareholder's resolutions, the Fund recognized liabilities for financing of the construction of the Center of Kazakhstan Gymnastics Federation in Nur-Sultan city and the construction of the park for the family rest in Nur-Sultan city in the amount of 18,000 million tenge and 8,500 million tenge, respectively. During 2022, the Group made repayment of liabilities in the amount of 1,800 million tenge.

In 2020 in accordance with the Shareholder resolution, the Fund recognized liabilities for financing of the construction of social medical facilities of 50,004 million tenge as other distributions to the Shareholder in the consolidated statement of changes in equity. As of December 31, 2021, the Group made repayment of this liability of 23,750 million tenge.

18.4 Discount on loans from the Government

In 2022, the Fund made partial early repayment of bond obligations to the National Bank in the amount of 137 million tenge (2021: 558 million tenge), and therefore recognized the amortization of the discount on loans from the Government in the amount of 78 million tenge (2021: 278 million tenge) in the consolidated statement of changes in equity.

In December 2022, the Fund placed bonds in the amount of 162,859 million tenge. The difference between nominal and fair value in the amount of 68,762 million tenge was recognized as a discount on loans from the Government in the consolidated statement of changes in equity *(Note 20).*

During 2021, the Group made partial early repayment of bonds with the nominal amount of 558 million tenge purchased by the National Bank of Republic of Kazakhstan. Due to the early redemption of obligations, the Group recognized the decrease in discount on loans from the Government of 278 million tenge in consolidated statement of changes in equity.

18.5 Change in ownership interests of subsidiaries – disposal of interest that does not result in the loss of control

On December 6, 2022, the Fund placed 3% shares of NC KMG on Kazakhstan Stock Exchange (KASE) and international Stock Exchange of Astana (AIX). The price per share is 8,406 tenge.

As a result of share issue, the Group received proceeds of 151,074 million tenge, net of transaction costs of 2,786 million tenge, non-controlling interests increased by 288,571 million tenge, and the difference of 128,297 million tenge and 9,470 million tenge was recognized as decrease of currency translation reserve and retained earnings attributable to the equity holder of the Parent, respectively.

Disposal of 49% interest in PE Ortalyk LLP

The Group and China General Nuclear Power Group, CGNPC, agreed to build a plant for the production of fuel assemblies, Ulba-FA LLP located on the territory of Ulba Metallurgical Plant JSC. CGNPC guaranteed the purchase of Ulba-FA LLP products, and in return the Group agreed to sell a 49% interest in DP Ortalyk LLP to CGNPC or its affiliate.

In April 2021 the parties signed a sale and purchase agreement, where the selling price of a 49% stake in DP Ortalyk LLP was determined in the amount of 435 million US dollars (equivalent to 186,437 million tenge) based on a fair value assessment determined by an independent appraiser.

On July 22, 2021 the sale of the interest in DP Ortalyk LLP was completed after obtaining all state permits and fulfilling all the preliminary conditions of the sale and purchase agreement. The re-registration has been completed and CGNM UK Limited (a subsidiary of CGNPC) became the owner of a 49% interest in DP Ortalyk LLP. The Group retains a 51% ownership interest. The management of the Group has determined that the Group retains control over DP Ortalyk LLP, because the Group has significant rights to manage the enterprise's production activities and influence the profits from them.

In millions of tenge	
Selling price at the exchange rate as of April 22, 2021	186,437
Less: foreign exchange loss	**(579)**
Consideration received	185,858
Net assets of the subsidiary at the date of disposal of the interest	**55,258**
Non-controlling interests, 49%	20,389
Selling price at the exchange rate as of April 22, 2021	186,437
Less: non-controlling interests	(20,389)
Less: corporate income tax	**(33,466)**
Increase in equity attributable to equity holder of the Parent	**132,582**

Mutual cooperation between the Group and CGNM and its related entities involved (CGNM Group) is governed by commercial agreement that contains put and call options.

Call option grants the Group the right to demand CGNM Group to sell their interest in DP Ortalyk LLP and Ulba FA LLP after occurrence of any of the following events: (1) there is a deadlock situation for a decision made by the Group and CGNM Group as participants of DP Ortalyk LLP and Ulba-FA LLP, (2) CGNM Group ceases to own its interest in Ulba-FA LLP, (3) CGNM Group submits a notice of liquidation, (4) CGNM Group causes a material breach of commercial terms of Ulba-FA LLP that has not been addressed, (5) Ulba-FA LLP does not complete any of its planned activities on the specified date because of unfulfilled liabilities by the CGNM Group, including shipment of fuel tablets within 24 months after the first order placed. CGNM Group has 60 days to eliminate an event occurred before the option is exercised. Call option is exercised at fair value of shares as of the date the notice of option exercise.

Put option grants the CGNM Group the right to demand the Group to buy their interest in DP Ortalyk LLP and Ulba FA LLP after occurrence of any of the following events: (1) there is a deadlock situation for a decision made by the Group and CGNM Group as participants of DP Ortalyk LLP and Ulba-FA LLP, (2) CGNM Group ceases to own its interest in DP Ortalyk LLP, (3) the Group submits a notice of liquidation, (4) the Group causes a material breach of commercial terms of Ulba-FA LLP that has not been addressed, (5) Ulba-FA LLP does not complete any of its planned activities on the specified date because of unfulfilled liabilities by the Group, including shipment of fuel tablets within 24 months after the first order placed. The Group has 60 days to eliminate an event occurred before the option is exercised. Put option is exercised at fair value of shares as of the date the notice of option exercise. With respect of valuation of derivative instruments relating to above mentioned put and calls options the Group determined that such value is immaterial as the exercise price is set at the fair value of the shares.

The Group considered the impact of above mentioned call and put options on the financial statements, in particular the Group considered whether the existence of put option requires recognition of financial liabilities at the amount equal to net present value of the redemption amount pursuant to requirement of IAS 32. Consequently, as at the date of transaction and as at September 30, 2021 the Group has recognised a liability in the amount of 185,210 million tenge in accordance with the terms of the sale and purchase agreement of a 49% stake in DP Ortalyk LLP, which provides the right to CGNM to request the Group to buy back that entity's ownership interest in DP Ortalyk LLP at fair value on the date of purchase if DP Ortalyk LLP does not receive a new subsoil use contract on Zhalpak field by December 31, 2021, the Group assessed that obtaining that subsoil use contract was outside of control of the Group. The subsoil use contract was received on December 14, 2021 and then the liability was derecognised in correspondence with equity amount. There was no material change to its fair value between initial recognition date and extinguishment date.

As of December 31, 2021 the Group has not recognised financial liability to purchase shares in DP Ortalyk LLP as required by IAS 32 because management believes that other conditions requiring purchase of shares listed above are under the Group's control, i.e. the Group does not have unavoidable obligation to pay cash.

Disposal of 24% of shares of Kcell JSC

On September 30, 2021, the Group, represented by its subsidiary KTC, sold 24% of shares of Kcell JSC through open trading on Kazakhstan Stock Exchange (KASE). As a result of disposal of shares, the Group recognized proceeds of 55,280 million tenge, non-controlling interests increased by 14,885 million tenge, and the difference of 40,395 million tenge was recognized as an increase in retained earnings.

18.6 Non-controlling interests

The following tables illustrate information of subsidiaries in which there is significant non-controlling interests as at December 31:

	Non-controlling interests			
	2022		2021	
	Share	Carrying amount	Share	Carrying amount
NC KazMunayGas JSC	**12.58%**	**1,198,454**	9.58%	700,873
NAC Kazatomprom JSC	**25.00%**	**713,970**	25.00%	644,719
Kazakhtelecom JSC	**47.97%**	**393,372**	47.97%	344,297
Air Astana JSC	**49.00%**	**34,519**	49.00%	13,536
KEGOC JSC	**10.00% – 1**	**30,741**	10.00% – 1	27,251
Other		**132,960**		186,783
		2,504,016		1,917,459

All significant subsidiaries with non-controlling interests are registered in Kazakhstan.

The following tables illustrate summarized financial information of subsidiaries, in which there are significant non-controlling interests as at December 31, 2022 and for the year then ended::

In millions of tenge	NC KazMunay-Gas JSC	Kazatomprom NAC JSC	Kazakhtelecom JSC	KEGOC JSC	Air Astana JSC
Summarized statement of financial position					
Non-current assets	13,515,455	1,274,813	939,567	441,251	408,965
Current assets	3,135,308	947,720	347,166	112,679	169,752
Non-current liabilities	5,174,219	254,627	335,083	187,040	323,207
Current liabilities	1,603,094	271,403	221,043	59,477	185,064
Total equity	9,873,450	1,696,503	730,607	307,413	70,446
Attributable to:	1.198.454	713.970	394.682	30.741	34.519
Equity holder of the Parent	8,674,996	982,533	335,925	276,672	35,927
Non-controlling interests	1,198,454	713,970	394,682	30,741	34,519
Summarized statement of comprehensive income					
Revenue	8,686,384	1,001,171	621,838	217,256	474,182
Profit for the year	1,317,319	472,963	128,753	65,140	37,583
Other comprehensive income/(loss)	468,745	(510)	(2,916)	–	5,240
Total comprehensive income for the year, net of tax	1,786,064	472,453	125,837	65,140	42,823
Attributable to:	1.058.204	283.859	242.989	80.679	145.845
Equity holder of the Parent	1,756,410	347,590	111,202	65,140	42,823
Non-controlling interests	29,654	124,863	14,635	–	–
Dividends declared to non-controlling interests	(21,445)	(142,145)	(19,421)	(3,023)	–
Summarised cash flow information					
Operating activity	1,058,204	283,859	242,989	80,679	145,845
Investing activity	(1,624,864)	(10,893)	(105,733)	(31,209)	(27,797)
Financing activity	287,753	(268,877)	(119,945)	(33,058)	(101,769)
Net (decrease)/increase in cash and cash equivalents	(278,907)	4,089	17,311	16,412	16,279

The following tables illustrate summarized financial information of subsidiaries, in which there are significant non-controlling interests as at December 31, 2021 and for the year then ended:

In millions of tenge	NC KazMunayGas JSC	Kazatomprom NAC JSC	Kazakhtelecom JSC	KEGOC JSC	Air Astana JSC
Summarized statement of financial position					
Non-current assets	10,545,725	1,179,748	927,854	439,045	330,035
Current assets	3,106,536	771,756	306,731	73,397	145,892
Non-current liabilities	4,121,296	255,581	403,493	194,250	290,765
Current liabilities	1,372,284	158,822	186,915	45,684	157,538
Total equity	**8,158,681**	**1,537,101**	**644,177**	**272,508**	**27,624**
Attributable to:					
Equity holder of the Parent	7,457,808	892,382	299,880	245,257	14,088
Non-controlling interests	700,873	644,719	344,297	27,251	13,536
Summarized statement of comprehensive income					
Revenue	6,546,903	691,011	581,495	186,443	321,139
Profit/(loss) for the year	1,197,340	220,026	97,444	75,494	15,486
Other comprehensive income	130,652	268	(6,304)	–	4,390
Total comprehensive income for the year, net of tax	**1,327,992**	**220,294**	**91,140**	**75,494**	**19,876**
Attributable to:					
Equity holder of the Parent	1,344,408	141,043	84,456	75,494	19,876
Non-controlling interests	(16,416)	79,251	6,684	–	–
Dividends declared to non-controlling interests	**(10,980)**	**(63,668)**	**(13,711)**	**(4,152)**	**-**
Summarised cash flow information					
Operating activity	618,090	118,729	237,180	83,869	96,954
Investing activity	(528,287)	(71,241)	(90,106)	(62,321)	(5,294)
Financing activity	(282,533)	(1,843)	(26,591)	(31,346)	(80,399)
Net (decrease)/increase in cash and cash equivalents	**(192,730)**	**45,645**	**120,483**	**(9,798)**	**11,261**

18.7 Currency translation reserve

The currency translation reserve is used to record exchange differences arising from the translation of financial statements of the subsidiaries, whose functional currency is not tenge and whose financial statements are included in the consolidated financial statements. In 2022 foreign translation difference amounted to 747,358 million tenge (2021: 245,256 million tenge).

Certain borrowings of the Group denominated in US dollars were designated as hedge instrument for the net investment in the foreign operations. As at December 31, 2022 unrealized foreign currency loss of 224,708 million tenge resulting from translation of these borrowings were transferred to currency translation reserve recognized in other comprehensive income (2021: loss of 93,367 million tenge).

18.8 Hedge reserve

NC KTZh

On August 7, 2015, the Group hedged cash flows to reduce the risk of changes in tenge equivalent revenue denominated in Swiss Francs. The principal from Eurobonds issued on June 20, 2014 on the Swiss stock exchange and maturing on June 20, 2022 is used as hedging instrument, which is separately identifiable and reliably estimated. A highly probable revenue stream forecast relating to transit transportation in Swiss Francs, in particular, first sales received in the period from January 1 to June 20, 2022, is the hedged item in this hedging relationship.

As at December 31, 2022, hedge accounting was discontinued due to the receipt of revenue from freight transportation in international (transit) route, which is the hedge item, accordingly, the cumulative deferred loss attributable to this hedging instrument was reclassified from other comprehensive loss to revenue from freight transportation in the amount of 54,442 million tenge.

For the year ended December 31, 2022, the effective portion of 2,445 million tenge was allocated to the hedging reserve in other comprehensive income in the form of a net loss on the hedging instrument (2021: 823 million tenge in the form of net profit).

Air Astana JSC

In 2015 Air Astana JSC entered into a cash flow hedge with finance lease obligations denominated in US dollars, to reduce the risk of changes in sales revenue expressed in US dollars. In connection with the transition of the functional currency to US dollar, this hedge ceased to be economically effective from December 31, 2017.

As a result of the change, the hedge relationship has been discontinued so that starting from January 1, 2018 no further foreign currency translation gains or losses are transferred from profit or loss to hedge reserve, and the hedge reserve recognized in equity as at December 31, 2022 shall remain in equity until the forecasted revenue cash flows are received.

During 2022 amount reclassified from the hedging reserve to foreign exchange loss from inception of the hedge was 5,687 million tenge before tax of 1,137 million tenge (2021: 5,010 million tenge before tax of 1,002 million tenge). Hedge income attributable to non-controlling interests comprised 2,787 million tenge (2021: 2,455 million tenge).

NC KMG

The Group buys crude oil from the market, refines it and later sells the finished products (e.g.: gasoline, diesel, jet fuel etc.). Throughout a given period, the volatility associated with the oil market, both in crudes and in finished products, is transmitted to the Group's refinery margin (difference between the purchase price of crude oil and the selling price of finished products). To reduce this volatility, the Group hedges the margin with a swap on a hedged basket as relevant for the period.

For the year ended December 31, 2022, the effective part of 11,872 million tenge was recorded in the cash flow hedging reserve through other comprehensive income as net fair value loss on cash flow hedging instruments (for the year ended December 31, 2021: 10,055 million tenge as net fair value gain on cash flow hedging instruments).

18.9 Other capital reserves

Other capital reserves include mainly remuneration of employees for the services rendered in the form of share-based payments with equity instruments of a subsidiary in which they are employed. The cost of equity-settled remunerations is recognized, together with a corresponding increase in other capital reserves, over the period in which performance and/or service conditions are fulfilled, ending on the date on which the relevant employees become fully entitled to the award.

18.10 Book value per share

In accordance with the decision of the Exchange Board of Kazakhstan Stock Exchange JSC ("KASE") dated October 4, 2010 financial statements shall disclose book value per share (common and preferred) as of the reporting date, calculated in accordance with the KASE rules.

In millions of tenge	2022	2021
Total assets	**33,574,995**	30,309,758
Less: intangible assets	**(1,945,362)**	(2,004,032)
Less: total liabilities	**(13,831,334)**	(13,136,666)
Net assets for common shares	**17,798,299**	15,169,060
Number of common shares as at December 31	**3,481,961,409**	3,481,961,408
Book value per common share, tenge	**5,112**	4,356
Earnings per share		
Weighted average number of common shares for basic and diluted earnings per share	**3,481,961,408**	3,481,960,762
Basic and diluted share in net profit for the period	**680.33**	548.07

* Presentation of book value per common share is a non-IFRS measure required by KASE.

19. Borrowings

As at December 31 borrowings, including interest payable, comprised the following:

In millions of tenge	2022	Weighted average effective rate	2021	Weighted average effective rate
Fixed interest rate borrowings	**5,517,313**		6,599,170	
Loans received	**1,041,195**	11.12%	1,804,252	13.41%
Debt securities issued	**4,476,118**	6.70%	4,794,918	8.56%
Floating interest rate borrowings	**1,150,362**		1,263,522	
Loans received	**900,560**	9.85%	1,159,936	10.79%
Debt securities issued	**249,802**	15.63%	103,586	9.79%
	6,667,675		7,862,692	
Less: amounts due for settlement within 12 months	**(1,267,512)**		(954,209)	
Amounts due for settlement after 12 months	**5,400,163**		**6,908,483**	
	6,667,675		**7,862,692**	

In millions of tenge	2022	2021
US dollar-denominated borrowings	**3,859,503**	5,037,496
Tenge-denominated borrowings	**2,162,421**	1,896,980
Other currency-denominated borrowings	**645,751**	928,216
	6,667,675	**7,862,692**

As at December 31, the bonds comprised:

In millions of tenge	Issuance amount	Redemption date	Effective interest rate	December 31, 2022	December 31, 2021
Bonds					
Bonds LSE 2018	1.5 billion USD	2048	6.375%	**681,014**	639,046
Bonds LSE 2018	1.25 billion USD	2030	5.375%	**571,508**	535,795
Bonds LSE 2017	1.25 billion USD	2047	5.75%	**561,160**	522,827
Bonds LSE 2017	1 billion USD	2027	4.75%	**460,655**	428,552
Bonds LSE 2020	750 million USD	2033	3.50%	**340,415**	317,667
Bonds ISE 2017	750 million USD	2027	4.375%	**328,757**	307,808
Bonds KASE 2019	0.3 billion KZT	2034	11.50%	**308,433**	308,433
Bonds LSE 2018	500 million USD	2025	4.75%	**232,586**	216,760
Bonds LSE 2021	500 million USD	2026	2.36%	**229,241**	213,291
Bonds LSE 2022	118.9 billion KZT	2024	TONIA Compounded 6M + 3% margin	**128,216**	–
Bonds KASE 2020	129 billion tenge	2023	10.90%	**100,041**	100,041
Bonds SIX Swiss Exchange 2018	170 million Swiss Francs	2023	3.25%	**84,925**	79,713
Bonds KASE 2019	70 billion KZT	2024	4%	**84,161**	78,503
Bonds KASE 2019	80 billion KZT	2026	11.86%	**80,244**	80,226
Bonds KASE 2018	75 billion KZT	2024	9.25%	**76,831**	76,831
Bonds KASE 2016	50 billion KZT	2026	Inflation rate + 2.52%	**53,750**	53,376
Bonds KASE 2016	47.5 billion KZT	2031	14.9%	**51,630**	50,209
Bonds LSE 2012	1,100 million USD	2042	6.95%	**–**	396,207
Bonds SIX Swiss Exchange 2014	185 million Swiss Francs	2022	3.638%	**–**	89,208
Bonds MOEX 2017	15 billion Russian roubles	2022	8.75%	**–**	86,832
Other	–			4.725.920	4.898.504
Total				**4,725,920**	**4,898,504**

Loans received

In January 2022, the Group made early full repayment of the loan from Eximbank for 604 million US dollars (equivalent to 259,459 million tenge), including accrued interest. For the repayment was used the cash reserved in November 2021 *(Note 13).*

In 2012, the Group paid an insurance premium to China Export & Credit Insurance Corporation in the amount of 85 million USD (equivalent to 12,820 million tenge) under a loan Agreement with Eximbank. In connection with the early repayment of the loan, China Export & Credit Insurance Corporation returned the part of the insurance premium in December 2022 in the amount of 16 million USD (equivalent to 7,370 million tenge).

In March 2022, the Group's management made a decision to early repay the principal debt of loans from VTB Bank PJSC and Sberbank SB JSC in the amount of 19,400 million Russian Roubles (equivalent to 93,681 million tenge) and 5,064 million tenge, respectively. In March 2022, the Group made an early repayment of principal and accrued interest on these loans.

In 2022, the Group partially redeemed Syndicated loan (Unicredit Tiriac Bank, ING Bank, BCR, Raiffeisen Bank) used to finance its working capital for the total amount of 191 million US dollars (equivalent to 88,258 million tenge).

In 2022, the Group, under the credit line Agreement with Halyk Bank of Kazakhstan JSC, concluded on 26 February 2015, received 118,000 million tenge with an interest rate of 14.5% to 16% and a maturity of up to 6 months. The Group has made full/partial early repayment of loans received in the total amount of 113,500 million tenge.

In 2022, the Group, concluded on October 22, 2022, received 82,310 million tenge. Interest is repaid quarterly at the interest rate of "base rate of the National Bank of the Republic of Kazakhstan + 2% margin". Principal is repayable in semi-annual installments until full repayment in 2032.

In 2022, the Group, under the credit line Agreement with Halyk Bank of Kazakhstan JSC, concluded on October 20, 2022, received 58,266 million tenge. Interest is repaid quarterly at the interest rate of "base rate of the National Bank of the Republic of Kazakhstan + 2% margin". Principal is repayable in semi-annual installments until full repayment in 2029.

Debt securities issued

In October-November 2022, the Group, made an early repayment of 2012 Eurobonds with a total nominal volume of 1,100 million US Dollars (residual balance of 882,978 thousand US Dollars after partial early repayment in 2020). The total repayment amount was 901,899 thousand US Dollars (equivalent to 419,998 million tenge), including interest accrued of 18,921 thousand US Dollars (equivalent to 8,839 million tenge). As a result of the repayment of the Eurobonds, the Group recognised the non-amortised portion of the transaction costs in the amount of 440 million tenge and the premium in the amount of 16,890 million tenge in finance costs and finance income, respectively.

The increase in carrying value of bonds in 2022, also is due to the effect of the foreign currency exchange rate on bonds placed at the London Stock Exchange (further LSE) and denominated in US dollars for 206,094 million tenge.

On July 22, 2022, the Group, replenished working capital by issuing bonds on Kazakhstan Stock Exchange in the amount of 118,945 million tenge with coupon rate TONIA Compounded 6M+3% margin and maturity date of July 22, 2024. The coupon is paid twice a year.

In June 2022, the Group redeemed the 2014 Eurobonds with a total par value of 185,000 thousand CHF. The amount of the payment was 83,437 million tenge.

State subsidy of the interest rate

In May 2020, the Group, entered into an agreement with the Transport Committee of the Ministry of Industry and Infrastructure Development of Kazakhstan to subsidise a part of the coupon rate in the amount of 307,194 million tenge for bonds issued in 2019 at a coupon rate of 11.5% per annum and used for the early repayment of 2017 Eurobonds in the amount of 780,000 thousand US Dollars, which in turn were attracted and utilised for infrastructure modernisation, updating locomotives and freight cars. The agreement stipulates that the amount of subsidy should be provided for under the Republican budget program "Subsidising the coupon rate on the carrier's Bonds issued for the development of the main railway network and rolling stock of railway transport" (hereinafter – "the Program"). Since the Program is available to all transportation companies that have the status of a "carrier" in accordance with the Law on Railway Transport, the Group's management accounts for the financing under this Program as a government grant recognised within finance income.

During 2022, the Group recognised income from government subsidies under the Program in the amount of 29,183 million tenge as a part of finance income (*Note 31).*

Covenants

Under the terms of some loan agreements, respective subsidiaries of the Group are obliged to comply with certain covenants. The Group reviews compliance with all the Group loan covenants at each reporting date.

Loan received from Halyk Bank of Kazakhstan JSC

In March 2022, the Group represented by its subsidiary JV Alaigyr LLP entered into a loan agreement with Halyk Bank of Kazakhstan JSC for a total amount of 56,000 thousand US dollars. According to the terms of the loan agreement, in 2022, the Group paid a commission for the provision of a loan in the amount of 560 thousand US dollars (equivalent to 277 million tenge). This commission is part of the effective interest rate and is subject to amortization during the term of the loan agreement. Repayment of interest and principal on the credit line is made monthly, while the principal debt is paid starting from 2024.

JV Alaigyr LLP has certain financial and non-financial covenants in accordance with the terms of the loan agreement. In accordance with the terms of the covenants, among other conditions, the lender has the right to demand repayment of loans in advance. As of December 31, 2022, the JV Alaigyr LLP did not comply with the covenant on maintaining the debt-equity ratio and reclassified long-term loans into short-term loans. The JV Alaigyr LLP notified the lender of the violation and, as of the date of these statements, did not receive a vaiwer letter from the fulfillment of financial covenants.

As collateral for the loan agreement, JV Alaigyr LLP pledged to Halyk Bank of Kazakhstan JSC for a period corresponding to the term of the loan agreement the right of subsurface use under Contract #4187 for the extraction of polymetallic ores in the Karaganda region at the Alaigyr deposit.

In 2022, JV Alaigyr LLP received tranches in total amount of 46,161 thousand US dollars (equivalent to 21,897 million tenge) net of commission actually received 45,601 thousand US dollars (equivalent to 21,620 million tenge).

During 2022, JV Alaigyr LLP paid interest in the amount of 1,865 thousand US dollars (equivalent to 863 million tenge).

On February 10, 2023, the JV Alaigyr LLP received a letter from the Bank stating that there were no violations and unfulfilled obligations under the covenants as at December 31, 2022. Since the letter was received after the reporting date, the long-term part of the loans was classified as short-term. Due to the fact that the letter confirms the absence of violations and non-fulfillment of the JV Alaigyr LLP's obligations under the covenants after the reporting date and considering that repayments on the principal debt under the loan agreement begin in 2024, the Group plans to classify loan obligations with the Bank into short-term and long-term starting from February 10, 2023.

Loan received from Bank VTB PJSC

Within the framework of the credit agreement with Bank VTB PJSC, which stipulates compliance with specific financial covenants, such as net debt to EBITDA, interest coverage ratios and coverage ratios (including (a) ratio of total debtors' EBITDA to the Group EBITDA; (b) ratio of total debtors' revenue to the NC KTZ Group revenue; (c) the ratio of the total carrying amount of debtors` assets to the carrying amount of the NC KTZ Group assets) calculated on the basis of consolidated NC KTZ Group data, starting from December 31, 2021 and quarterly thereafter. As at December 31, 2021, these financial covenants had been met.

At the same time, on December 30, 2021, the Group received a waiver from Bank VTB PJSC waiving the right to consider as a breach the non-compliance with cross-default and insolvency terms of the loan agreement, if the value of the assets of any Group entity is less than its liabilities (taking into account contingent and prospective liabilities).

Loans received from Eurasian Development Bank

On December 30, 2016 the Group, represented by its subsidiary JV Alaigyr LLP, received a credit line for a period of 7 years from the EDB in the amount of 56 million US dollars for the construction of a mining and processing plant with interest repayment every six months and repayment of the principal amount of the loan at the maturity of loan agreement.

In accordance with the signed agreement, JV Alaigyr LLP must comply with the loan requirements for compliance with certain financial and non-financial covenants. As at December 31, 2021 and 2020, JV Alaigyr LLP did not comply with these covenants. The Group notified in 2020 about the non-fulfillment of the covenants and received a waiver letter from compliance with these covenants as at December 31, 2021 and 2020 and not to send the Group a claim for call of loan. The EDB resumed issuing new tranches on the credit line.

As of December 31, 2022 and as of December 31, 2021 the Group complied with all financial and non-financial covenants under loan agreements, except those mentioned above.

As at December 31 the carrying amount of borrowings of the Fund and the Group subsidiaries is presented below:

In millions of tenge	**2022**	**2021**
NC KMG and its subsidiaries	**3,708,949**	3,700,776
NC KTZh and its subsidiaries	**1,098,347**	1,448,443
The Fund	**519,370**	578,552
Qazaq Gaz and its subsidiaries	**492,188**	484,709
Kazakhtelecom and its subsidiaries	**205,305**	237,916
Samruk-Energy and its subsidiaries	**190,790**	223,755
KEGOC and its subsidiaries	**156,352**	171,199
NAC KAP and its subsidiaries	**138,270**	89,017
EGRES-2	**97,834**	99,678
National Mining Company "Tau-Ken Samruk" and subsidiaries	**52,319**	21,201
Kazakhstan Petrochemical Industries Inc.	**–**	756,605
Other subsidiaries of the Fund	**7,951**	50,841
Total borrowings	**6,667,675**	7,862,692

Changes in borrowings are as follows:

In millions of tenge	**2022**	**2021**
Balance as at January 1	**7,862,692**	7,459,200
Received by cash	**1,178,196**	1,462,347
Interest accrued	**487,882**	448,533
Discount	**(332)**	(8,486)
Interest capitalized (Note 7)	**74,087**	48,624
Interest paid	**(540,453)**	(505,303)
Repayment of principal	**(1,618,601)**	(1,170,506)
Purchase of property plant and equipment financed by borrowings	**5,706**	27,705
Transfer to assets classified as held for sale or distribution to the Shareholder (Note 6)	**(941,587)**	–
Amortization of discount	**17,347**	18,320
Return of insurance premium in cash	**7,370**	–
Repayment of principal and interest by reserved cash	**(259,459)**	(32,799)
Foreign currency translation	**406,629**	120,106
Other	**(11,802)**	(5,049)
Balance as at December 31	**6,667,675**	7,862,692

20. Loans from the government of the Republic of Kazakhstan

As at December 31 loans from the Government of the Republic of Kazakhstan comprised the following::

In millions of tenge	Redemption date	Effective interest rate	2022	2021
Bonds acquired by the National Bank of the Republic of Kazakhstan using the assets of the National Fund	2035-2063	5.56-13.99%	**672,208**	558,982
Loans from the Government of the Republic of Kazakhstan	2029-2046	5.15-9.6%	**11,396**	20,387
			683,604	579,369
Less: amounts due for settlement within 12 months			**(3,760)**	(10,264)
Amounts due for settlement after 12 months			**679,844**	569,105

The change in loans from the Government of the Republic of Kazakhstan are represented as follows:

In millions of tenge	2022	2021
Balance as at 1 January	**579,369**	593,221
Received by cash	**162,859**	–
Interest accrued	**17,364**	17,445
Discount	**(68,684)**	278
Interest paid*	**(17,448)**	(17,530)
Repayment of principal	**(10,776)**	(34,454)
Amortisation of discount	**20,920**	20,409
Balance as at 31 December	**683,604**	579,369

** Cash repayments of certain borrowings obtained by the Fund are included within cash flows from operating activities because these borrowings are part of the Fund's main activity of assets management.*

Bonds acquired by the National Bank of the Republic of Kazakhstan

In February 2022, in accordance with the corporate decisions made by the Fund and with the edition of the Rules on proceeds to the National Fund of the Republic of Kazakhstan from transfer of assets of national managing holdings, national holdings, national companies and their subsidiaries, affiliates and other legal entities affiliated with them to the competitive environment approved by the Resolution of the Government of the Republic of Kazakhstan No. 323 dated 4 June 2018, effective on the redemption date, the Fund made a partial early redemption of bonds at par value in the amount of 137 million tenge which was carried out within the eleventh bond issue of the Fund purchased by the National Bank of the Republic of Kazakhstan (2021: 558 million tenge). In this regard, the Fund recognized amortization of discount on loans from the Government in the amount of 78 million tenge in the consolidated statement of changes in equity (2021: 278 million tenge) *(Note 18).*

In December 2022, Fund's bonds issue in the amount of 542,863 million tenge with an annual coupon of 7.37% per annum was registered. On December 30, 2022, the Fund's bonds were placed in the amount of 162,859 million tenge. The bonds were purchased by the National Bank of the Republic of Kazakhstan at the expense of the National Fund. The funds received from the sale of these bonds were used to provide a loan to NC KTZin order to finance the construction of the second tracks of the Dostyk-Moiynty railway section with a total length of 836 km, aimed at increasing the transit and export potential of the country. The fair value of consideration received was 94,097 million tenge. The difference between nominal and fair value of the bond in the amount of 68,762 million tenge was recognized as a discount on loan from the government in a consolidated statement of changes in equity *(Note 18)*

21. Provisions

As at December 31 provisions comprised the following:

In millions of tenge	Asset retirement obligations	Provision for environmental remediation	Provision for taxes	Provision for aircraft maintenance	Other	Total
Provision at January 1, 2021	306,100	68,679	10,435	34,965	47,722	467,901
Foreign currency translation	3,082	1,087	118	1,194	940	6,421
Change in estimate	20,317	(4,494)	–	(227)	(327)	15,269
Unwinding of discount	17,728	4,021	–	–	180	21,929
Provision for the year	1,041	5,678	5,138	26,127	9,016	47,000
Use of provision	(519)	(6,776)	(1,834)	(7,149)	(9,402)	(25,680)
Reversal of unused amounts	(1,329)	(1)	(748)	–	(1,908)	(3,986)
Other changes	–	–	4,618	–	9,270	13,888
Provision at December 31, 2021	346,420	68,194	17,727	54,910	55,491	542,742
Foreign currency translation	**9,164**	**3,286**	**238**	**4,030**	**2,928**	**19,646**
Change in estimate	**(162,695)**	**4,514**	**(3,169)**	**(947)**	**2,644**	**(159,653)**
Unwinding of discount	**21,440**	**5,892**	**–**	**–**	**224**	**27,556**
Provision for the year	**60,973**	**12,084**	**3,740**	**38,146**	**48,828**	**163,771**
Use of provision	**(161)**	**(5,594)**	**(2,937)**	**(8,402)**	**(12,021)**	**(29,115)**
Reversal of unused amounts	**(61)**	**(392)**	**(1,327)**	**–**	**(855)**	**(2,635)**
Provision at December 31, 2022	**275,080**	**87,984**	**14,272**	**87,737**	**97,239**	**562,312**

Current portion and non-current portion of provisions are presented as follows:

In millions of tenge	Asset retirement obligations	Provision for environmental remediation	Provision for taxes	Provision for aircraft maintenance	Other	Total
	4.844	7.683	17.727	17.579	52.515	100.348
Current portion	4,844	7,683	17,727	17,579	52,515	100,348
Non-current portion	341,576	60,511	–	37,331	2,976	442,394
Provision at December 31, 2021	346,420	68,194	17,727	54,910	55,491	542,742
Current portion	8,795	10,829	14,272	33,165	88,040	155,101
Non-current portion	266,285	77,155	–	54,572	9,199	407,211
Provision at December 31, 2022	**275,080**	**87,984**	**14,272**	**87,737**	**97,239**	**562,312**

The Group has completed the analysis of changes in the Environmental Code and, based on the results, recognized the additional asset retirement obligations amount of 56,695 million tenge as of December 31, 2022.

22. Lease liabilities

The Group has leases for various items of property, plant and equipment, mainly aircraft.

From 2012 to 2014, Air Astana JSC (further - Air Astana), a subsidiary of the Group, acquired 10 (ten) aircraft on a fixed-rate lease basis with a transfer of ownership at the end of the lease term. The lease term for each aircraft is 12 (twelve) years. Air Astana has the option of purchasing each aircraft at a nominal price at the end of the lease term. Most aircraft leases are for eight years with no option to purchase at the end of the lease term.

Loans provided by financial institutions to the lessor in respect of 5 (five) new Airbus were guaranteed by European Export Credit Agencies, 3 (three) Boeing 767 aircraft were guaranteed by US Export Import Bank.

Air Astana pledged the leased assets with carrying amount of 330,418 million tenge to secure lease liabilities (December 31, 2021: 279,848 million tenge).

The Group's leases are subject to certain covenants. These covenants impose restrictions in respect of certain transactions, including, but not limited to restrictions in respect of indebtedness. These requirements have been met during 2022 and 2021.

As at December 31, 2022 interest calculation was based on effective interest rates ranging from 8% to 17.3% (December 31, 2021: from 4.01% to 15.62%).

As at December 31 future minimum lease payments under leases together with the present value of the net minimum lease payments comprised the following:

	Minimum lease payments		Present value of minimum lease payments	
In millions of tenge	**2022**	**2021**	**2022**	**2021**
Within one year	**176,622**	153,253	**138,192**	129,676
Two to five years inclusive	**474,013**	352,881	**361,654**	275,509
After five years	**197,364**	178,637	**121,314**	104,476
	847,999	684,771	**621,160**	509,661
Less: amounts representing finance costs	**(226,839)**	(175,110)		–
Present value of minimum lease payments	**621,160**	509,661	**621,160**	509,661
Less: amounts due for settlement within 12 months			**(138,192)**	(129,676)
Amounts due for settlement after 12 months			**482,968**	379,985

The Air Astana lease obligations are denominated in US dollars.

Changes in lease liabilities are as follows:

In millions of tenge	2022	2021
Balance as at January 1	**509,661**	515,319
Interest paid	**(48,040)**	(33,999)
Repayment of principal	**(153,822)**	(121,314)
Interest accrued *(Note 30)*	**53,565**	37,903
Foreign currency translation	**23,279**	7,853
Additions of leases	**230,622**	119,229
Lease agreement termination	**(7,856)**	(12,588)
Other	**13,751**	(2,742)
Balance as at December 31	**621,160**	509,661

23. Other non-current liabilities

As at December 31 other current liabilities comprised the following:

In millions of tenge	2022	2021
Other financial liabilities		
Obligations under guarantee agreements	**33,924**	36,527
Accounts payable	**10,440**	11,139
Historical costs associated with obtaining subsoil use rights	**7,741**	10,891
Other	**14,514**	16,016
Other non-financial liabilities		
Contract liabilities to customers	**56,578**	52,404
Advances received and deferred income	**30,290**	27,872
Government grant liability	**20,690**	14,596
Liabilities under inventory loan agreements	**–**	13,461
Other	**4,503**	4,937
	178,680	187,843

Liabilities under inventory loan agreements

In 2020 the Group obtained uranium under commodity loans totalling 21.9 million US Dollars. A liability was initially recognised to return inventory at a cost of 8,597 million tenge. This liability is subsequently remeasured in accordance with changes in market prices for these goods. As of 31 December 2022, the Group reclassified inventory loans from long-term to short-term, as the repayment period is up to May and June 2023. The Group intends to extend the repayment period.

On 19 May 2022 the Group obtained a uranium loan totalling 113.5 million US Dollars from ANU Energy that was concluded under the Framework Agreement between the Group and Genchi Global Limited *(Note 13)*. A liability was initially recognised to return inventory at a cost of 49,089 million tenge and subsequently measured at fair value in accordance with changes in market prices for these goods and foreign exchange rates – the revaluation loss for the year ended December 31, 2022 amounted to 4,712 million tenge. On December 20 the Group returned the inventory, the fair value of which amounted to 53,802 million tenge on the date of return, which was greater than the cost of inventory returned for 8,251 million tenge.

Losses from revaluation of uranium loans to fair value as well as net gain from disposal of the loan returned to ANU Energy are recognised in profit and loss and presented as other loss.

Uranium loans are part of the Group's normal inventory management policy, required to mitigate logistical risks that could affect the timely delivery of Kazakhstan uranium to Western conversion enterprises due to the current unstable geopolitical situation.

Government grant liability

In 2021 the Government of the Republic of Kazakhstan approved the changes to the Rules for the assignment of frequency bands, radio frequencies, operation of radio-electronic means and high-frequency devices ("the Rules"), based on which the Group is eligible for government grants in form of 90% reduction in the annual fee for use of radio frequencies from January 1, 2020 till January 1, 2025. The government grants are subject to conditions, namely financing of the projects related to broadband internet in rural and urban areas. If the financing of the projects related to broadband internet is lower than the amount of the tax incentive received, the Group should pay the annual fee equal for use of radio frequencies to the amount of unfulfilled obligations to the authorities.

The funds released as a result of reduction in the annual fee for use of radio frequencies for 2021 and 2022 in the amount of 13,571 million tenge and 14,391 million tenge, respectively, were used by the Group for the purchase and construction of certain items of property and equipment (mainly base stations). Government grants related to assets are recognized as deferred income that is recognised in profit or loss on a systematic basis over the useful life of the asset. As of December 31, 2021 the balance of government grants was equal to 26,858 million tenge, and part of the government grants released to the profit and loss over the period necessary to match the related depreciation charges equal to 6,332 million tenge.

24. Trade and other payables, and other current liabilities

As at December 31 trade accounts payable comprised the following:

In millions of tenge	2022	2021
Trade accounts payable	**892,690**	937,027
Accounts payable for the supply of property, plant and equipment	**198,983**	164,985
Other accounts payable	**34,305**	16,043
	1,125,978	1,118,055

As at December 31, trade accounts payable were expressed in the following currencies:

In millions of tenge	2022	2021
Tenge-denominated trade accounts payable	**406,353**	441,996
US dollar-denominated trade accounts payable	**350,261**	394,706
Other currency-denominated trade accounts payable	**136,076**	100,325
	892,690	937,027

As at December 31 other current liabilities comprised the following:

In millions of tenge	2022	2021
Other financial liabilities		
Obligations to the Shareholder on the financing of social projects	**127,276**	52,755
Due to employees	**49,738**	32,139
Amounts due to customers	**46,208**	39,980
Payable under repo transactions	**20,469**	11,464
Historical costs associated with obtaining subsoil use rights	**3,453**	2,680
Dividends payable	**2,797**	814
Obligations under guarantee agreements	**1,608**	3,929
Other	**51,996**	27,927
Other non-financial liabilities		
Contract liabilities to customers	**313,070**	297,865
Other taxes payable	**212,990**	188,831
Vacation and other employee benefits allowance	**132,064**	105,774
Advances received and deferred income	**29,969**	14,523
Pension and social contributions liabilities	**27,530**	21,834
Liabilities under inventory loan agreements	**19,147**	99
Government grant liability	**6,167**	4,246
Amounts due under uranium swap contracts	**4,709**	15,355
Joint operations liabilities	**4,569**	4,569
Other	**19,798**	20,701
	1,073,558	845,485

Joint operations liabilities

Joint operations liabilities represent obligations of the Group under the terms of the joint operations contractual agreements that require equal volumes of uranium to be purchased during the period by the participants. In 2022 the Group did not purchase the required volume.

Payable under repo transactions

During 2022, the Group entered into direct repurchase agreements with counterparties on KASE. These agreements relate to treasury bills of the Ministry of Finance of the Republic of Kazakhstan, bonds of Development Bank of Kazakhstan JSC and notes of the National Bank of the Republic of Kazakhstan with a carrying value of 20,469 million tenge as at December 31, 2022 (December 31, 2021: 11,464 million tenge).

Liabilities on financing of other social projects

In 2022, based on the resolutions of the Shareholder, the Fund recognized obligations on financing of various social projects in the total amount of 202,445 million tenge (2021: 65,497 million tenge) *(Note 18).*

Actual amount of cash paid during 2022 totaled to 129,806 million tenge (2021: 67,033 million tenge).

25. Revenue

Revenue comprised the following for the years ended December 31:

In millions of tenge	2022	2021
Revenue from contracts with customers:		
Sales of crude oil	**4,585,784**	3,703,666
Sales of oil refined products	**3,251,802**	2,026,587
Railway cargo transportation	**1,286,854**	1,191,187
Sales of uranium products	**964,390**	666,944
Sales of refined gold	**943,458**	718,828
Sales of gas products	**895,318**	762,571
Telecommunication services	**619,869**	579,528
Air transportation	**492,231**	331,840
Electricity complex	**368,650**	344,980
Oil and gas transportation fee	**296,445**	323,103
Oil processing fees	**204,390**	202,527
Electricity transmission services	**183,646**	314,056
Railway passenger transportation	**91,365**	58,636
Postal services	**45,920**	43,198
Other revenue	**467,792**	369,070
	14,697,914	11,636,721
Interest revenue	**47,845**	47,393
Rental income	**39,525**	25,544
	14,785,284	11,709,658

In millions of tenge	2022	2021
Geographical markets		
Kazakhstan	**5,479,959**	4,747,372
Other countries	**9,305,325**	6,962,286
	14,785,284	11,709,658

26. Cost of sales

Cost of sales comprised the following for the years ended December 31:

In millions of tenge	2022	2021
Materials and supplies	**6,602,943**	5,010,551
Personnel costs, including social taxes and withdrawals	**1,360,723**	1,008,765
Depreciation, depletion and amortization	**1,015,508**	1,000,869
Fuel and energy	**549,336**	447,310
Repair and maintenance	**345,570**	287,066
Production services rendered	**339,266**	264,925
Mineral extraction tax	**192,590**	145,116
Taxes other than social taxes and withdrawals	**176,329**	117,540
Rent	**92,957**	40,954
Interest expense	**58,710**	58,337
Communication services	**48,614**	49,183
Transportation expenses	**44,718**	117,206
Security services	**31,366**	25,293
Other	**422,895**	220,942
	11,281,525	8,794,057

27. General and administrative expenses

General and administrative expenses comprised the following for the years ended December 31:

In millions of tenge	2022	2021
Personnel costs, including social taxes and withdrawals	**246,745**	215,732
Depreciation and amortization	**36,658**	44,133
Audit and consulting services	**31,437**	32,874
Taxes other than social taxes and withdrawals	**30,537**	29,710
Other services by third parties	**20,869**	18,826
Repair and maintenance	**8,485**	8,558
Sponsorship and charitable donations	**7,523**	9,216
Fines and penalties	**7,022**	2,351
Business trips	**6,468**	4,213
Rent	**5,315**	4,682
Utilities expenses and maintenance of buildings	**4,392**	3,765
Professional education and advanced trainings	**3,618**	2,358
Communication services	**3,424**	2,847
Transportation services	**2,781**	2,322
Bank services	**2,445**	2,178
Other	**64,763**	59,854
	482,482	443,619

28. Transportation and selling expenses

Transportation and selling expenses comprised the following for the years ended December 31:

In millions of tenge	2022	2021
Transportation	**448,378**	398,890
Rent tax	**215,765**	129,056
Custom duties	**134,249**	109,151
Personnel costs, including social taxes and withdrawals	**23,918**	17,699
Commission fees to agents and advertising	**23,063**	18,179
Depreciation and amortization	**20,330**	18,445
Rent expenses	**7,112**	6,286
Other	**34,054**	30,625
	906,869	728,331

29. Impairment loss

Impairment loss comprised the following for the years ended December 31:

In millions of tenge	2022	2021
Impairment of property, plant and equipment, exploration and evaluation assets and intangible assets *(Notes 7, 8, 9)*	**55,533**	122,378
Impairment of assets held for sale	**14,401**	4,872
Impairment of investments in joint ventures and associates *(Note 10)*	**660**	5,921
(Reversal)/impairment of VAT receivable, net	**(476)**	(4,602)
Other	**1,564**	2,746
	71,682	**131,315**

For the following non-current assets impairment losses were recognised for years ended:

In millions of tenge	2022	2021
Impairment and write-off expenses		
JV Alaigyr LLP *(Note 4)*	**13,296**	–
Gas turbine power plant and water treatment assets (KUS) *(Note 4)*	**9,876**	–
Southern Urikhtay project *(Note 4)*	**8,895**	
Polymer Production LLP *(Note 4)*	**7,096**	–
Isatay project *(Note 4)*	**3,172**	
Barys, Berkut, Beket Ata and Turkistan sea vessels *(Note 4)*	**1,801**	4,453
Zhambyl project	**–**	59,283
Almaty Electric Power Stations JSC CGU *(Note 4)*	**–**	20,737
Brownfields of KazMunayGas Exploration Production JSC	**–**	19,800
CGUs of KMGI *(Note 4)*	**–**	8,298
Other	**11,397**	9,807
	55,533	122,378

JV Alaigyr LLP

For the year ended December 31, 2022, the Group carried out an assessment of the value of the use of the net assets of JV Alaigyr LLP and recognised an impairment loss on non-financial assets of JV Alaigyr LLP in the amount of 13,296 million tenge.

Gas turbine power plant and water treatment (KUS) assets

The Group has analyzed whether there are indicators of impairment of property, plant and equipment as at 31 December 2022. As a result of management's assessment of the recoverable amount of non-current assets Group impairment was recognized in the amount of 14,077 million tenge, part of which in the amount of 9,876 million tenge was recognized in the consolidated statement of comprehensive loss and in the amount of 4,201 million tenge in the consolidated statement of changes in equity.

Assets of Polymer-Production

As a result of the assessment of the recoverable amount of Polymer-Production carried out by the management of Polymer-Production in the financial statements for the year ended December 31, 2022, the Group recognized an impairment charge of 7,096 million tenge.

Sea vessels

The recoverable amount of the sea vessels of Kazmortransflot LLP was determined on the basis of value-in-use method. Value-in-use was assessed as the present value of the future cash flows expected to be derived from the sea vessels until the end of the existing and probable contracts at the discount rate of 14.00% (2021: 10.70%). As a result of the test, the Group recognized an impairment loss of 1,801 million tenge for the year ended December 31, 2022, in regards of Barys, Turkistan and Beket Ata sea vessels (2021: 4,453 million tenge on Barys and Berkut sea vessels).

Exploration expenses

For the year ended December 31, 2022, the Group has recognized impairment of exploration and evaluation assets in the amount of 8,895 million tenge of Southern Urikhtau project, for which the contract territory was decided to be relinquished to the Government by the Group.

As at 31 December 2022, due to the expiration of the contract for combined exploration and production of hydrocarbons, the Group recognized impairment loss for exploration and evaluation assets for 6 sites and 3 fields of QazaqGas Exploration and Production LLP in the total amount of 5,893 million tenge.

Also, the Group recognized impairment of exploration and evaluation assets in the amount of 3,172 million tenge of Isatay project for which the NC KMG and the second partner, Isatay Operating Company LLP, decided to exit the project and relinquish the contract territory to the Government.

For the year ended December 31, 2021, the Group has recognized exploration expenses in the amount of 59,283 million tenge of Zhambyl project, the subsoil use contract for which was terminated and the contract territory was relinquished to the Government. Also, the Group partially reduced the contract area at Taisoigan site and, accordingly, wrote off exploration and evaluation expenses in the amount of 19,800 million tenge.

Almaty Electric Power Stations JSC CGU

In 2021 the Group performed impairment test of the assets of ALES. The Group has estimated the recoverable amount of property, plant and equipment of ALES based on value in use, which is the sum of the estimated discounted future cash flows that the Group expects to receive from their use. As a result of the test, the Group recognized an impairment loss on property, plant and equipment of 20,737 million tenge.

CGUs of KMGI

On July 2, 2021, an incident occurred at the Petromidia Refinery (further Petromidia), subsidiary of KMGI, that led to fire and resulted in temporarily interruption of the production until damaged facilities are repaired. KMGI conducted assessments to estimate the incident consequences and recognized impairment of property, plant and equipment of Petromidia for 1,615 million tenge. For the year ended December 31, 2021, based on the results of the property, plant and equipment physical inspection, KMGI recognized an impairment loss of property, plant and equipment for 6,683 million tenge. Based on the impairment analysis performed in 2022, no impairment of KMGI CGUs was identified.

30. Finance costs

Finance costs comprised the following for the years ended December 31:

In millions of tenge	**2022**	**2021**
Interest on loans and debt securities issued	**497,667**	446,272
Interest on lease liabilities (Note 22)	**53,565**	37,903
Revaluation loss on financial assets at fair value through profit/loss	**39,796**	10,791
Discount on provisions and other payables	**27,979**	22,517
Discount on assets at rates below market	**5,471**	2,687
Financial guarantees	**1,512**	721
Interest on oil supply agreement	**–**	3,885
Other	**27,999**	30,761
	653,989	555,537

31. Finance income

Finance income comprised the following for the years ended December 31:

In millions of tenge	**2022**	**2021**
Interest income on amounts due from credit institutions and cash and cash equivalents	**175,427**	76,876
Interest income from loans and financial assets	**43,536**	28,477
Revaluation gain on financial assets at fair value through profit/loss	**38,400**	42,419
Income from subsidized interest rates on financial liabilities	**31,398**	2,176
Income from written-off non-amortised portion of the premium on early repayment of bonds (Note 19)	**16,890**	–
Income from financial guarantees	**8,096**	14,839
Discount on liabilities at rates below market	**805**	119
Other	**5,548**	9,992
	320,100	174,898

Income from interest rate state subsidies on financial liabilities mainly represent income from partial coupon rate subsidies on bonds for the amount of 29,183 million tenge *(Note 19)*.

32. Share in profit of joint ventures and associates, net

Share in profit/(loss) of joint ventures and associates comprised the following for the years ended December 31:

In millions of tenge	2022	2021
Joint ventures		
Tengizchevroil LLP	**742,660**	441,665
Asia Gas Pipeline LLP	**276,653**	253,554
Beineu Shymkent Gas Pipeline LLP	**50,837**	65,533
Mangistau Investments B.V.	**48,486**	80,154
Petrosun LLP (Note 5)	**23,184**	–
Valsera Holdings B.V.	**21,009**	11,868
Kazgermunay LLP	**20,530**	6,108
Kazakhstan – China Pipeline LLP	**16,783**	13,464
Ural Group Limited BVI	**(11,470)**	(11,060)
Other	**39,158**	48,452
Associates		
Caspian Pipeline Consortium JSC	**117,763**	90,904
JV KATCO LLP	**47,593**	29,278
JV South Mining Chemical Company LLP	**18,528**	14,334
Transtelecom JSC	**(2,737)**	1,294
Kazzinc LLP	**(6,528)**	66,996
Other	**46,811**	29,538
	1,449,260	1,142,082

33. Income tax expenses

Income tax expenses comprised the following for the years ended December 31:

In millions of tenge	2022	2021
Current income tax expenses		
Corporate income tax ("CIT")	**454,437**	328,309
Withholding tax on dividends and interest income	**55,314**	47,752
Excess profit tax	**2,573**	1,237
Deferred income tax expense/(benefit)		
Corporate income tax ("CIT")	**145,224**	148,782
Withholding tax on dividends and interest income	**113,331**	34,990
Excess profit tax	**239**	(34)
Income tax expenses	**771,118**	561,036

The Romanian government introduced a solidarity contribution on profits in the fossil fuel sector by Emergency Ordinance no. 186 issued on December 28, 2022. The solidarity contribution is payable by companies operating in the crude oil, natural gas, coal, and refinery sectors on taxable profits of 2022 and 2023 exceeding 120% of the average taxable profit of the preceding four years, 2018 to 2021, at a rate of 60%. If the average taxable profit related to the period 2018-2021 is negative, for the purpose of calculating the solidarity contribution, it is considered that the average taxable profit is equal to zero. As of December 31, 2022, KMGI recognized income tax in the amount of 124.9 million US dollars (equivalent to 57,584 million tenge).

A reconciliation of income tax expenses applicable to profit before income tax at the statutory income tax rate (20% in 2022 and 2021) to income tax expenses was as follows for the years ended December 31:

In millions of tenge	2022	2021
Accounting profit before income tax	**3,140,002**	2,469,393
Income tax expenses on accounting profit	**628,000**	493,879
Tax effect of other items, which are not deductible	**101,881**	75,821
Change in unrecognized deferred tax assets	**(43,142)**	(12,034)
Effect of different corporate income tax rates	**89,756**	46,818
Excess profit tax	**2,812**	1,203
Share in non-taxable profit of joint ventures and associates	**(176,218)**	(86,923)
Other differences	**168,029**	42,272
Total corporate income tax expenses	**771,118**	561,036

33. Income tax expenses (continued)

Deferred tax balances, calculated by applying the statutory tax rates effective at the respective reporting dates to the temporary differences between tax basis of assets and liabilities and the amounts reported in the consolidated financial statements, are comprised of the following at December 31:

	2022		
In millions of tenge	**Corporate income tax**	**Excess profit tax**	**Withholding tax**
Deferred tax assets			
Property, plant and equipment	**33,252**	**–**	**–**
Tax loss carryforward	**826,477**	**–**	**–**
Employee related accruals	**25,710**	**–**	**–**
Allowance for expected credit losses	**37.934**	**–**	**–**
of financial assets	**37,934**	**–**	**–**
Provisions	**82,713**	**–**	**–**
Other accruals	**126,307**	**–**	**–**
Other	**68,925**	**–**	**–**
Less: unrecognized deferred tax assets	**(597,317)**	**–**	**–**
Less: deferred tax assets offset with deferred tax liabilities	**(515,033)**	**–**	**–**
Deferred tax assets	**88,968**		
Deferred tax liabilities			
Property, plant and equipment	**1,455,874**	**597**	**–**
Undistributed earnings of joint ventures and associates	**–**	**–**	**615,747**
Other	**97,031**	**–**	**–**
Less: deferred tax assets offset with deferred tax liabilities	**(515,033)**	**–**	**–**
Deferred tax liabilities	**1,037,872**	**597**	**615,747**
Net deferred tax liabilities	**(948,904)**	**(597)**	**(615,747)**

	2022		
In millions of tenge	**Corporate income tax**	**Excess profit tax**	**Withholding tax**
Balance at January 1	**798,220**	**358**	**465,891**
Foreign currency translation	**14,127**	**–**	**36,525**
Recognised to other comprehensive income	**297**	**–**	**–**
Recognised in equity	**–**	**–**	**–**
Transfer to assets classified as held for sale (Note 6)	**(8,964)**	**–**	**–**
Recognised to profit and loss	**145,224**	**239**	**113,331**
Balance at December 31	**948,904**	**597**	**615,747**

A deferred tax asset is recognized only to the extent that it is probable that future taxable profits will be available against which the asset can be utilized. Deferred tax assets are reduced to the extent that it is no longer probable that the related tax benefit will be realized. Unrecognized deferred tax asset arising mainly from tax losses carry forward were equal to 597,317 million tenge as at December 31, 2022 (December 31, 2021: 640,459 million tenge).

Tax losses carryforwards as at December 31, 2022 in the Republic of Kazakhstan expire for tax purposes 10 (ten) years from the date they are incurred.

	2021			
Total	**Corporate income tax**	**Excess profit tax**	**Withholding tax**	**Total**
33,252	35,346	–	–	35,346
826,477	827,839	–	–	827,839
25,710	18,500	–	–	18,500
37.934	34.593	–	–	34.593
37,934	34,593	–	–	34,593
82,713	85,226	–	–	85,226
126,307	159,865	–	–	159,865
68,925	52,470	–	–	52,470
(597,317)	(640,459)	–	–	(640,459)
(515,033)	(504,232)	–	–	(504,232)
88,968	69,148	–	–	69,148
1,456,471	1,287,711	358	–	1,288,069
615,747	–	–	465,891	465,891
97,031	83,889	–	–	83,889
(515,033)	(504,232)	–	–	(504,232)
1,654,216	867,368	358	465,891	1,333,617
(1,565,248)	**(798,220)**	**(358)**	**(465,891)**	**(1,264,469)**

	2021			
Total	**Corporate income tax**	**Excess profit tax**	**Withholding tax**	**Total**
1,264,469	644,514	392	419,083	1,063,989
50,652	2,993	–	11,818	14,811
297	340	–	–	340
–	1,571	–	–	1,571
(8,964)	20	–	–	20
258,794	148,782	(34)	34,990	183,738
1,565,248	798,220	358	465,891	1,264,469

34. Consolidation

Subsidiaries included in the consolidated financial statements are presented as follows:

		Main activity	Country of incorporation	Ownership percentage 2022	Ownership percentage 2021
1	National Company "KazMunayGas" JSC ("NC KMG") and subsidiaries	Exploration, production, processing and transportation of oil and gas	Kazakhstan	**87.42%**	90.42%
2	National Company "QazaqGaz" JSC (former- National Company "KazTransGas" JSC) and subsidiaries	Exploration, production, transportation, sale and storage of natural gas and gas condensate	Kazakhstan	**100.00%**	100.00%
3	National Company "Kazakhstan Temir Zholy" JSC ("NC KTZh") and subsidiaries	Passenger and cargo transportation	Kazakhstan	**100.00%**	100.00%
4	National Atomic Company "Kazatomprom" JSC ("NAC KAP") and subsidiaries	Production and mining of uranium, rare metals	Kazakhstan	**75.00%**	75.00%
5	Samruk-Energy JSC ("Samruk-Energy") and subsidiaries	Electricity and heat production	Kazakhstan	**100.00%**	100.00%
6	Kazakhstan Electricity Grid Operating Company JSC ("KEGOC") and subsidiaries	Electricity transmission services	Kazakhstan	**90.00% + 1**	90.00% + 1
7	Kazpost JSC and subsidiaries	Postal and financial activities	Kazakhstan	**100.00%**	100.00%
8	Kazakhtelecom JSC ("KTC") and subsidiaries	Telecommunication services	Kazakhstan	**52.03%**	52.03%
9	Air Astana JSC ("Air Astana") and subsidiaries	Air transportation	Kazakhstan	**51.00%**	51.00%
10	Samruk-Kazyna Construction JSC and subsidiaries	Construction and real estate management	Kazakhstan	**100.00%**	100.00%
11	National Mining Company "Tau-Ken Samruk" and subsidiaries	Exploration, mining and processing of solid minerals	Kazakhstan	**100.00%**	100.00%
12	Samruk-Kazyna Ondeu LLP (former- United Chemical Company LLP) and subsidiaries	Development and implementation of projects in the chemical industry	Kazakhstan	**100.00%**	100.00%
13	Samruk-Kazyna Invest LLP and subsidiaries	Investments	Kazakhstan	**100.00%**	100.00%
14	Samruk-Kazyna Contract LLP	Procurement activities	Kazakhstan	**100.00%**	100.00%
15	Stantsiya Ekibastuzskaya GRES-2 JSC ("EGRES-2")	Power generation	Kazakhstan	**100.00%**	100.00%
16	SK Business Service LLP and subsidiaries	Transformation services, information and IT services	Kazakhstan	**100.00%**	100.00%
17	Qazaq Air JSC	Air transportation	Kazakhstan	**100.00%**	100.00%
18	Kazakhstan nuclear electric plants LLP	Servicing companies in the electricity sector	Kazakhstan	**100.00%**	100.00%
19	Kazakhstan Petrochemical Industries Inc. JSC	Production of oil-and-gas and petrochemical products	Kazakhstan	**99%**	99%
20	CCGT Turkistan LLP (former – "PVH Development" LLP)	Transmission, distribution and sale of electricity	Kazakhstan	**100.00%**	100.00%
21	Center for Scientific and Technological Initiatives "Samgau" Foundation (former – Private company "Center for Scientific and Technological Initiatives Ltd")	Institutional service for innovative technologies, other research and experimental developments in the natural and technical sciences	Kazakhstan	**100.00%**	–

35. Related party disclosures

In accordance with IAS 24 Related Party Disclosures, parties are considered to be related if one party has the ability to control the other party or exercise significant influence over the other party in making financial or operational decisions. In considering each possible related party relationship, attention is directed to the substance of the relationship, not merely the legal form. Related parties include key management personnel of the Group, enterprises in which a substantial interest in the voting power is owned, directly or indirectly, by the Group's key management personnel and other entities controlled by the Government. Related party transactions were made on terms agreed to between the parties that may not necessarily be at market rates, except for certain regulated services, which are provided based on the tariffs available to related and third parties. The Group recognizes allowances for ECL on amounts owed by related parties.

The following table provides the total amount of transactions, which have been entered into with related parties as at December 31:

In millions of tenge		Associates	Joint ventures	Other state-controlled entities
Trade and other accounts receivable	**2022**	**6,546**	**63,217**	**47,290**
	2021	6,189	28,732	35,262
Trade and other payables	**2022**	**60,264**	**213,335**	**9,681**
	2021	40,544	282,269	8,186
Sale of goods and services	**2022**	**156,034**	**492,406**	**1,106,306**
	2021	215,647	281,751	835,404
Purchase of goods and services	**2022**	**266,454**	**2,669,338**	**108,703**
	2021	206,969	1,816,227	37,443
Other income/(loss), net	**2022**	**6,866**	**24,651**	**2,530**
	2021	714	7,243	3,823
Cash and cash equivalents, and amounts due from credit institutions (assets)	**2022**	**–**	**242**	**278,176**
	2021	–	78	154,768
Loans issued	**2022**	**10,947**	**117,605**	**7,952**
	2021	14,169	300,929	14,100
Borrowings	**2022**	**7,002**	**13,262**	**1,017,795**
	2021	22,438	4	964,744
Other assets	**2022**	**19,023**	**19,218**	**326,227**
	2021	17,204	28,912	160,638
Lease and other liabilities	**2022**	**26,483**	**189,399**	**59,078**
	2021	41,258	59,415	54,610
Interest accrued due from related parties	**2022**	**1,549**	**20,234**	**15,508**
	2021	2,547	32,796	12,753
Interest accrued due to related parties	**2022**	**2,752**	**18,636**	**78,658**
	2021	4,529	5,258	79,655

As at December 31, 2022 some of the Group's borrowings of 16,026 million tenge were guaranteed by the Government of the Republic of Kazakhstan (December 31, 2021: 42,907 million tenge).

Total compensation to key management personnel (members of the Boards of Directors and Management boards of the Fund and its subsidiaries) included in general and administrative expenses in the consolidated statement of comprehensive income was equal to 6,637 million tenge for the year ended December 31, 2022 (December 31, 2021: 6,406 million tenge). Compensation to key management personnel mainly consists of contractual salary and other payments based on achievement of operating results.

36. Financial instruments and financial risk management objectives and policies

The Group's principal financial instruments consist of borrowings, loans from the Government of the Republic of Kazakhstan, lease liabilities, amounts due to the customers, derivatives, cash and cash equivalents, loans issued, amounts due from credit institutions, other financials assets, as well as accounts receivable and accounts payable. The main risks arising from the Group's financial instruments are interest rate risk, foreign currency risk and credit risk. The Group also monitors the liquidity risk arising from all financial instruments.

Interest rate risk

Interest rate risk is the risk that the value of a financial instrument will fluctuate due to changes in market interest rates. The Group limits interest rate risk by monitoring changes in interest rates in the currencies in which its cash, investments and borrowings are denominated.

The Group's exposure to interest risk relates primarily to the Group's long-term and short-term borrowings with variable interest rates *(Note 19)*.

The following table demonstrates the sensitivity of the Group's profit before income tax (through the impact on variable rate borrowings) to a reasonably possible change in variable LIBOR interest rates, with all other variables held constant.

In millions of tenge	Increase/ (decrease) in basis points*	Effect on profit before income tax
2022		
US dollar	**245/(245)**	**(17,871)/17,871**
2021		
US dollar	125/(25)	(12,148)/2,369

** 1 basis point = 0.01%.*

Currency risk

As a result of significant borrowings, lease liabilities, and trade accounts payable, cash and cash equivalents, amounts due from credit institutions and accounts receivable denominated in the US dollars, the Group's consolidated financial position can be affected significantly by movement in the US dollar / tenge exchange rates.

The following table demonstrates the sensitivity of the Group's profit before income tax to a reasonably possible change in the US dollar and euro, with all the variables held constant.

In millions of tenge	Increase/(decrease) in exchange rate	Effect on profit before income tax
2022		
US dollar	**21.00%/(21.00%)**	**(584,346)/584,346**
RUB	**22.05%/(22.05%)**	**(86,858)/86,858**
Euro	**17.99%/(17.99%)**	**(11,277)/11,277**
2021		
US dollar	13.00%/(10.00%)	(353,754)/270,863
RUB	13.00%/(13.00%)	(50,478)/50,478
Euro	13.00%/(10.00%)	(9,977)/7,675

Credit risk

Credit risk arising from the inability of a party to meet the terms of the Group's financial instrument contracts is generally limited to the amounts, if any, by which the counterparty's obligations exceed the obligations of the Group to that party. It is the Group's policy to enter into financial instruments with a diversity of creditworthy parties. The maximum exposure to credit risk is represented by carrying amount of each financial asset.

The Group considers that its maximum exposure is reflected by the amount of loans issued *(Note 11)*, amount due from credit institutions *(Note 12)*, trade accounts receivable and other current assets *(Note 16)*, other financial assets *(Note 13)*, and cash and cash equivalents *(Note 17)*, net of allowances for expected credit losses recognized at the reporting date.

Concentrations of credit risk may arise from exposures to a single debtor or to groups of debtors having similar characteristics such that their ability to meet their obligations is expected to be affected similarly by changes in economic or other conditions.

The Group has a policy that ensures enforcement of constant control procedures for sales to only be made to buyers with an appropriate credit history and that an acceptable credit exposure limit is not exceeded. Credit risk is minimised by the fact that the Group operates on a prepayment basis with the majority of its buyers.

Liquidity risk

Liquidity risk is the risk that the Group will encounter difficulty in raising funds to meet commitments associated with its financial liabilities. Liquidity risk may result from an inability to sell a financial asset quickly at price close to its fair value.

Liquidity requirements are monitored on a regular basis and management ensures that sufficient funds are available to meet any commitments as they arise.

The table shown below summarizes the maturity profile of the Group's financial liabilities at December 31 based on contractual undiscounted payments.

In millions of tenge	On demand	Due later than 1 month but not later than 3 months	Due later than 3 months but not later than 1 year	Due later than 1 year but not later than 5 years	Due after 5 years	Total
At December 31, 2022						
Loans from the Government of the Republic of Kazakhstan	–	24	27,735	204,440	2,028,887	2,261,086
Borrowings	71,945	147,115	1,316,513	4,039,538	6,342,580	11,917,691
Lease liabilities	6,498	35,426	136,844	487,375	162,639	828,782
Due to customers	12,427	–	33,781	12	–	46,220
Financial guarantees	27,785	2,109	12,652	78,467	117,092	238,105
Trade and other payables	332,850	612,897	252,995	10,509	–	1,209,251
	451,505	797,571	1,780,520	4,820,341	8,651,198	16,501,135
At December 31, 2021						
Loans from the Government of the Republic of Kazakhstan	13	24	21,298	173,638	1,851,202	2,046,175
Borrowings	299,900	101,620	928,299	3,572,501	7,752,556	12,654,876
Finance lease liabilities	8,147	31,208	110,723	375,346	135,925	661,349
Due to customers	39,975	–	4	16	–	39,995
Financial guarantees	29,408	16,785	59,393	191,499	106,300	403,385
Trade and other payables	461,775	587,349	72,589	11,679	353	1,133,745
	839,218	736,986	1,192,306	4,324,679	9,846,336	16,939,525

Capital management

The Group manages its capital primarily through capital management of its subsidiaries while conducting its oversight function. Major objective of the capital management is to ensure that subsidiaries of the Group will be able to continue as a going concern while maximising the return to shareholders through the optimisation of the debt and equity balance. The Group manages capital of its subsidiaries by setting various performance indicators tailored to the business need and industry specific matters of each subsidiary.

The Group manages capital of its subsidiaries by setting various performance indicators tailored to the business need and industry specific matters of each subsidiary. Key performance indicators ("KPI") used by the Group to manage capital of its subsidiaries are ratios of: Debt to Earnings before Interest, Taxes, Depreciation and Amortization, and Interest ("D/EBITDA") from continuing and discontinued operations; and Debt to Equity ("D/E"). Debt is considered to be equal to all borrowings, debt securities, guarantee and finance lease liabilities of relevant subsidiaries reduced by value of cash and cash equivalents. Equity is considered to be equal to the entire equity of the subsidiary attributable to majority shareholders.

Allowed maximum for the indicator is approved for each subsidiary based on the needs and specifics of its business and varies within following ranges (consolidated KPI's for the Group have been presented for reference purposes as the Group does not monitor KPI's on the consolidated level):

Key Performance Indicators	**2022**	**2021**
D/EBITDA	**1.73**	2.32
D/E	**0.41**	0.54
In billions of tenge	**2022**	2021
Borrowings *(Note 19)*	**6,668**	7,863
Loans from the Government of the Republic of Kazakhstan *(Note 20)*	**684**	579
Lease liabilities *(Note 22)*	**621**	510
Derivative instruments	**2**	2
Guaranteed principal amount of liabilities of entities outside the Group	**154**	341
Total debt	**8,129**	9,295
Less: cash and cash equivalents	**(2,940)**	(2,811)
Net debt	**5,189**	6,484
EBITDA	**4,690**	3,998
Total equity	**19,744**	17,173

Fair values of financial instruments

The Group uses the following hierarchy for determining and disclosing the fair value of financial instruments by valuation technique:

- Level 1: quoted (unadjusted) prices in active markets for identical assets or liabilities;
- Level 2: other techniques for which all inputs which have a significant effect on the recorded fair value are observable, either directly or indirectly;
- Level 3: techniques which use inputs which have a significant effect on the recorded fair value that are not based on observable market data.

There were no transfers between Level 1 and Level 2 during the reporting period, and no transfers into or out of Level 3 category.

As at December 31, 2022 and 2021 the carrying amount of the following Group's financial instruments is a reasonable estimate of their fair value:

In millions of tenge	Level 1	Level 2	Level 3	December 31, 2022
Financial instruments category				
Assets				
Loans issued at fair value through profit and loss	–	–	117,511	117,511
Financial assets measured at fair value through OCI	1,121	27,127	74	28,322
Financial assets at fair value through profit and loss	81,709	32,342	27,279	141,330
Derivative financial assets	–	1,477	1,099	2,576

In millions of tenge	Level 1	Level 2	Level 3	December 31, 2021
Financial instruments category				
Assets				
Loans issued at fair value through profit and loss	–	–	123,161	123,161
Financial assets measured at fair value through OCI	1,134	20,741	60	21,935
Financial assets at fair value through profit and loss	74,356	14,486	32,913	121,755
Derivative financial assets	–	14,153	–	14,153

	December 31, 2022				
			Fair value by level of assessment		
In millions of tenge	Carrying amount	Fair value	Quotations in an active market (Level 1)	From the observed market (Level 2)	Based on the significant amount of unobserved (Level 3)
Financial assets					
Loans issued at amortized cost and net investment in finance lease	101,104	83,451	–	10,392	73,059
Amounts due from credit institutions	1,703,873	1,694,238	1,206,833	487,386	19
Financial liabilities					
Borrowings	7,609,261	6,917,679	3,546,266	2,192,828	1,178,585
Loans from the Government of the Republic of Kazakhstan	683,604	500,904	–	500,904	–
Guarantee obligations	35,532	38,873	–	37,565	1,308

In millions of tenge	Carrying amount	Fair value	Quotations in an active market (Level 1)	From the observed market (Level 2)	Based on the significant amount of unobserved (Level 3)
	December 31, 2021				
			Fair value by level of assessment		
Financial assets					
Loans issued at amortized cost and net investment in finance lease	280,955	273,189	–	14,800	258,389
Amounts due from credit institutions	776,662	770,714	546,900	215,651	8,163
Financial liabilities					
Borrowings	7,862,692	8,575,232	5,039,417	2,484,584	1,051,231
Loans from the Government of the Republic of Kazakhstan	579,369	374,861	–	374,861	–
Guarantee obligations	40,456	38,655	–	33,330	5,325

The fair value of the above financial instruments has been calculated by discounting the expected future cash flows at prevailing interest rates.

Except for the financial instruments stated above as at December 31, 2022 and December 31, 2021 the management assessed that the fair value of financial instruments of the Group, such as trade and other accounts receivable and payable, cash and cash equivalents, short-term bank deposits and other current liabilities approximates their carrying amounts largely due to the short-term maturites of these instruments.

Reconciliation of fair value measurements:

In millions of tenge	Loans issued at fair value through profit and loss	Financial assets measured at fair value through profit and loss
As at January 1, 2021	138,024	22,127
Remeasurement	–	–
Income/(loss)	11,597	8,921
Disposal and acquisition	–	1,865
Receipt and redemption	(22,818)	–
Other	(3,642)	–
As at December 31, 2021	123,161	32,913
Remeasurement	–	–
Income/(loss)	**16,254**	**(6,567)**
Receipt and redemption	**(27,119)**	**–**
Other	**5,215**	**933**
As at December 31, 2022	**117,511**	**27,279**

The significant unobservable inputs used in the fair value measurements categorized within Level 3 of the fair value hierarchy are shown below:

	Valuation technique	Significant unobservable inputs	Range as of December 31 2022	2021
Loans issued at amortized cost and net investment in finance lease	Discounted cash flow method	Interest/discount rate	**8.05%-32%**	3.1%-30%
Financial assets at fair value through profit and loss	WACC	Interest/discount rate		12,72%
Loans issued at fair value through profit and loss	Discounted cash flow method	Interest/discount rate indexed to changes in the US dollar exchange rate	**16.21%**	12.72%
Amounts due from credit institutions	Discounted cash flow method	Interest/discount rate	**3.5%+12M LIBOR+forex adjustment**	3.5%+12M
Borrowings	Discounted cash flow method	Interest/discount rate	**Libor+ forex adjustment**	3,5-17%
Financial guarantee issued	Discounted cash flow method	Interest/discount rate	**14.1%**	6.94%
			5.7%-17%	**3.5%-17%**
			12.31%-16.68%	**4.5%-5.25%**

The quantitative sensitivity analysis of the fair value measurements categorised within Level 3 of the fair value hierarchy, as at 31 December 2022 and 2021 are shown below:

	Valuation technique	Fair value	Sensitivity of the input to fair value
Financial assets at fair value through profit and loss	WACC	**2022: 27,279** 2021: 32,913	1% (2021: 1%) increase/ (decrease) in the discount rate would result in an increase/ (decrease) in fair value by (280)/565 (2021: (2,151)/3,347)
Loans issued at fair value through profit and loss	Discounted cash flow method	**2022: 117,511** 2021: 123,161	1% (2021: 1%) increase/ (decrease) in the discount rate would result in an increase/ (decrease) in fair value by (2,474)/2,614 (2021: (2,334)/2,492)

37. Commitments and contingencies

Operating environment

Kazakhstan continues economic reforms and development of its legal, tax and regulatory frameworks as required by a market economy. The future stability of the kazakhstan economy is largely dependent upon these reforms and developments and the effectiveness of economic, financial and monetary measures undertaken by the government.

Commodity price risk

The Group generates most of its revenue from the sale of commodities, primarily crude oil and oil products. Historically, the prices of these products have been volatile and have fluctuated widely in response to changes in supply and demand, market uncertainty, the performance of the global or regional economies and cyclicality in industries.

Prices may also be affected by government actions, including the imposition of tariffs and import duties, speculative trades, an increase in capacity or an oversupply of the Group's products in its main markets. These external factors and the volatility of the commodity markets make it difficult to estimate future prices.

A substantial or extended decline in commodity prices would materially and adversely affect the Group's business and the consolidated financial results and cash flows of operations. The Group does not hedge significantly its exposure to the risk of fluctuations in the price of its products.

Transfer pricing control

Transfer pricing control in Kazakhstan has a very wide scope and applies to many transactions that directly or indirectly relate to international business regardless of whether the transaction participants are related or not. The transfer pricing legislation requires that all taxes applicable to transaction participants are related or not. The transfer pricing legislation requires that all taxes applicable to a transaction should be calculated based on market price determined in accordance with the arm's length principle. The new law on transfer pricing came into effect in Kazakhstan from January 1, 2009. The new law is not explicit and there is little precedence with some of its provisions. Moreover, the law is not supported by detailed guidance, which is still under development. As a result, application of transfer pricing control to various types of transactions is not clearly regulated.

Because of the uncertainties associated with the Kazakhstan transfer pricing legislation, there is a risk that the tax authorities may take a position that differs from the Group's position, which could result in additional taxes, fines and interest at December 31, 2022.

As at December 31, 2022 management believes that its interpretation of the transfer pricing legislation is appropriate and that it is probable that the Group's positions with regard to transfer pricing will be sustained.

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. The Group has the strategic goal to reduce the carbon footprint of the Group 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:

- 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; and
- 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 21).*

Taxation

Kazakhstan's tax legislation and regulations are subject to ongoing changes and varying interpretations. Instances of inconsistent opinions between local, regional and national tax authorities are not unusual, including opinions with respect to IFRS treatment of revenues, expenses and other items in the financial statements. The current regime of penalties and interest related to reported and discovered violations of Kazakhstan's tax laws are severe. Due to uncertainties associated with Kazakhstan's tax system, the ultimate amount of taxes, penalties and interest, if any, may be in excess of the amount expensed to date and accrued at December 31, 2022. As at December 31, 2022, Management believes that its interpretation of the relevant legislation is appropriate and that it is probable that the Group's tax positions will be sustained, except as provided for or otherwise disclosed in these consolidated financial statements.

Comprehensive tax audit at oil refineries of the Group

All three major oil refineries in the Group, Atyrau Refinery, Pavlodar Refinery and Shymkent Refinery were subject to a comprehensive tax audit covering periods of a few years (up to 2020) in 2020-2022. As a result of the audits, the total amount of additional charges for VAT for 37,728 million tenge, for income tax for 17,830 million tenge, for other taxes for 476 million tenge, including penalties for all additional charges of 8,959 million tenge and reduction in tax carry-forward losses for 119,871 million tenge. Atyrau Refinery, Pavlodar Refinery and Shymkent Refinery did not agree with the assessment and appealed to the Ministry of Finance of RK. The consideration of the appeals remains suspended by the Ministry of Finance of RK until the circumstances are clarified. The Group believes that additional tax assessment is not probable, as such, the Group did not recognize any provisions as of December 31, 2022.

Comprehensive tax audit at EGRES-1 for 2016-2020

In September 2022, based on 2016-2020 comprehensive tax audit, EGRES-1 received additional tax assessment for CIT and property tax for 51,066 million tenge, including penalties. The results of the tax audit of EGRES-1 were appealed to the Appeal Commission under the Ministry of Finance of the Republic of Kazakhstan, which on November 13 of this year informed the company of the suspension of the period for considering the complaint in connection with the appointment of a thematic audit in relation to EGRES-1.

On January 13, 2023, EGRES-1 received the Decision of the Ministry of Finance and the Notification on the results of the consideration of the complaint, according to which the tax authorities canceled the Documentary Tax Audit Act in terms of recognizing the non-compliance of fixed assets by belonging to asset groups according to the Classifier of fixed assets.

Comprehensive tax audit at JV KATCO LLP

According to the results of the thematic audit of income tax at the source of payment from the income of non-residents for 2014-2018, completed in 2021, additional charges of JV KATCO LLP, an associate of NAC KAP, amounted to CIT on payments of dividends and loyalties in the amount of 10,482 million tenge and penalties of 9,441 million tenge. By decision of the Appellate Commission of the Ministry of Finance, the amount of the fine was reduced to 5,358 million tenge. In 2022, JV KATCO LLP continued to appeal to the judiciary, and by the decisions of the court of first instance and the court of appeal, the amount of additional charges was reduced by 15,761 million tenge. In November 2022, the State Revenue Department filed a complaint with the Supreme Court to overturn the decision of the Court of Appeal, and the issue is currently being considered. As at December 31, 2022, the entity or the Group did not record any liability in respect of these contested assessments.

The case of an administrative offense of the Pavlodar Refinery initiated by the Department of Agency for protection and development of competition of RK (hereafter – Antimonopoly agency) of the Pavlodar region

During February-July 2022 the Prosecutor's Office of the Pavlodar region together with the Antimonopoly agency conducted an inspection of the Pavlodar Refinery operations for compliance with the legislation of the RK in the field of oil and petroleum products turnover, labor, tax and antimonopoly legislation for 2020-2021. On March 16, 2022 Antimonopoly agency issued the Conclusion which stated that Pavlodar Refinery set monopolistically high tariff for oil refining services. On July 25, 2022, Antimonopoly agency of the Pavlodar region initiated an administrative offence and issued a Protocol to the Specialized Court for Administrative Offenses of Pavlodar city for setting by the Pavlodar Refinery monopolistically high tariff for oil refining services in 2021 and to confiscate revenue for 2021 of 21,961 million tenge and impose fine of 6,226 million tenge. During August-September 2022, Pavlodar Refinery appealed several times to terminate Protocol and Conclusion. However, all appeals of Pavlodar Refinery were rejected. Pavlodar Refinery is planning to further follow the appealing process in higher judiciaries. In September 2022, after rejection of initial appeals the Group recognized a provision in the amount of 28,187 million tenge.

Inspection of the Prosecutor's Office of the Atyrau region with the involvement of Antimonopoly agency of the Atyrau Refinery

During February-September 2022 the Prosecutor's Office of the Atyrau region with the involvement of the Antimonopoly agency conducted an inspection of the Atyrau Refinery operations. On September 22, 2022 the Prosecutor's Office of the Atyrau region provided a conclusion of setting monopolistically high tariff for oil refining services in 2020-2021. The Atyrau Refinery has sent an official letter with justifying the approved tariff for oil refining services in 2020-2021. The Group believes that the risk of revenue confiscation and fine imposing are not probable, as such, the Group did not recognize any provisions as of December 31, 2022.

The proceedings initiated against Mr, Stati and his related parties on the suit of the Fund due to the arrest of shares KMG Kashagan B.V. belonging to the Fund

On 14 September 2017, the pre-judgement attachment in respect of the Fund's rights on management of 50% KMG Kashagan B.V. in amount of 5.2 billion US dollars, shares was imposed with regard to the decision of Amsterdam Court (the "Pre-judgement Attachment").

The named Pre-judgement Attachment was imposed as part of the claim for recognition and enforcement of arbitral award in Netherlands on the matter of Anatolie Stati, Gabriel Stati, Ascom Group SA and Terra Raf Trans Trading Ltd, against the Republic of Kazakhstan issued in 2013 by the Arbitration Tribunal at the Arbitration Institute of the Stockholm Chamber of Commerce.

On 14 July 2020, the Court of Appeal of Amsterdam decided to recognise in the Netherlands an arbitral award rendered in 2013 against the Republic of Kazakhstan, while rejecting Stathi's claim to enforce the award against the Fund.

On December 18, 2020, the Supreme Court overturned the decision of the Amsterdam Court of Appeal of May 7, 2019 to maintain the arrest and referred the case to the Court of Appeal in The Hague.

On 14 June 2022, the Court of Appeal of The Hague issued a decision, according to which the arrest of Kashagan shares owned by the Fund, imposed in September 2017, was lifted. On August 8, Stati filed an appeal against the decision of the Court of Appeal of The Hague of 14 June 2022. The process is currently ongoing.

Main proceedings in the Stati claim filed on December 7, 2017, in which the Stati asks the court to recognize the Fund as part of the Republic of Kazakhstan and oblige the Fund to comply with the Arbitral Award

On 17 March 2021, a hearing in the main proceedings was held.

On 28 April 2021, the Court of Appeal granted the Fund's request to postpone this process until the decision of the Court of Appeal in The Hague to appeal the restriction on shares of KMG Kashagan B.V.

On November 2, 2022, the Fund filed an application to terminate the trial, in connection with the decision of the Court of Appeal of The Hague dated June 14, 2022, according to which the arrest of Kashagan shares owned by the Fund, imposed in September 2017, was lifted.

On February 8, 2023, the District Court of Amsterdam ruled that the claims of Anatole and Gabriel Stati and their companies ("Stati") against the Fund were inadmissible and, as a result, the proceedings were dismissed. However, the Stati has the right to appeal this decision.

The civil litigation at KMGI

Faber Invest & Trade Inc. (further Faber), the non-controlling shareholder of KMGI subsidiaries, resumed several previous civil filings in 2020, one of which challenged the increase in the Rompetrol Rafinare Constanta, the KMGI subsidiary, share capital in 2003-2005. The hearings have been held periodically, but no final decisions were made. On July 13, 2021, the court rejected the complaint of Faber. However, Faber appealed against this decision. Based on the results of the hearing in December 2021, the court granted the complaint and returned the case for reconsideration.

Most of Faber's lawsuits were dismissed by the Supreme Court in May and September 2022, including an appeal filed by Faber challenging Faber's corporate documents approving the bond issue and paying off historical budget debts as filed after the deadline. In January 2023, hearings were held on the claims filed by Faber. Faber withdrew its claims in two cases, and the court dismissed the third. Faber has filed the same lawsuit for the third time, but now in the Constanta court. The first hearing is scheduled for April 2023.

The Group believes that its position regarding Faber's new application will be resolved in a similar manner to other similar proceedings resolved in favor of the Group. Accordingly, the Group did not recognize a provision in this case as of December 31, 2022.

Civil legal dispute between the National Mineral Resources Agency (ANRM) and Oilfield Exploration Business Solutions S.A (OEBS), subsidiary of KMGI, at the Focsani field

On December 17, 2019 OEBS has been noticed by the ANRM that a Request for Arbitration would have been filed in to ICC Paris for an alleged breach by OEBS of the Concession Agreement as regards the exploration block near Focsani. Starting from that period, OEBS was in dispute with ANRM. On July 29, 2022 the Court decided to oblige OEBS to pay 10.1 million U.S. dollars from a total ANRM claim of 20 million U.S. dollars. As of December 31, the Group recognized a provision in the amount of 10.1 million dollars (equivalent to 4,673 million tenge).

Competition investigation Moldova

Since the beginning of 2021, Rompetrol Moldova (further RPM), a subsidiary of KMGI operating in Moldova, is involved in an investigation and related court proceedings initiated by the Competition Council of Moldova (further CCM) alleging RPM agreed with other industry players on retail prices for petroleum products. RPM is challenging the competition report prepared by the CCM investigation division that forms the basis for the allegations in accordance with applicable regulations. A few attempts to dismiss the said report were unsuccessful with the latest ruling rejecting RPM's request to dismiss the report issued by the local court on 26 May 2022. RPM has filed an appeal and a first hearing is scheduled for 21 March 2023. Due to the replacement of the jury, the hearing was postponed to October 2023. As of December 31, 2022, the Group recognized a provision in the amount of 12 million dollars (equivalent to 5,552 million tenge).

The case of arbitration between KazRosGas LLP (further KRG) and Karachaganak Petroleum Operating B.V. (further KPO)

On August 23, 2022, the Notice of Initiation of Arbitration Proceedings of KPO was submitted to the KRG by the Secretariat of the International Chamber of Commerce in Paris. KPO intends to increase the gas sale price under the existing Karachaganak Gas Purchase and Sale Agreement. If the gas price is agreed later than October 1, 2022, KRG and KPO shall recalculate the gas price for the period from October 1, 2022 to the date of the price agreement. In October 2022, a working group was established to develop a negotiating position of the Kazakh side on the peaceful settlement of the dispute over the arbitration process between the KRG and KPO, chaired by the First Vice Minister of Energy of RK. The working group also includes representatives of the Ministry of Energy of RK, JSC "NC "QazaqGaz", NC KMG and KRG.

In order to ensure a stable supply of gas to the domestic market of the RK, KRG and the Ministry of Energy of RK sent letters to KPO contractors with a proposal to suspend arbitration proceedings until 2024-2025. In December 2022, the KPO informed about the readiness to hold further discussions to achieve a potential settlement of the price revision process. In January 2023, the KRG sent to the KPO a proposal to conclude an agreement on the suspension of arbitration proceedings for a period of 3 months, during which the parties will appoint a "negotiation period" of 2 months to resolve the dispute. As of December 31, 2022 and on the date of issue of the financial statements the parties are negotiating to resolve the dispute on mutually beneficial terms. The Group believes that the risk of loss is not probable as of December 31, 2022.

Cost recovery audits

Under the base principles of the production sharing agreements, the Government transferred to contractors the exclusive rights to conduct activities in the subsurface use area, but did not transfer rights to this subsurface use area either to ownership or lease. Thus, all extracted and processed oil (i.e. the hydrocarbons produced) are the property of the Government. Works are carried out on the basis of compensation and the Government pays to the contractors not in cash but in the form of the portion of oil production, thereby allowing the contractors to recover their costs and earn profit.

In accordance with the production sharing agreements, not all costs incurred by the contractors could be reimbursed. Certain expenditures need to be approved by the authorized bodies. The authorized bodies conduct the cost recovery audits. In accordance with the cost recovery audits completed prior to December 31, 2022, certain amounts of the costs incurred by contractors were assessed as non-recoverable. The parties to the production sharing agreements are in negotiations with respect to the recoverability of those costs.

As of December 31, 2022 the Group's share in the total disputed amounts of costs is 1,200,386 million tenge (as of December 31, 2021: 979,556 million tenge).

Kazakhstan local market obligation

The Government requires oil companies in the RK to supply a portion of the products to meet the Kazakhstan domestic energy requirement on an annual basis, mainly to maintain oil products supply balance on the local market and to support agricultural producers during the spring and autumn sowing and harvest campaigns.

Kazakhstan local market oil prices are significantly lower than export prices and even lower than the normal domestic market prices determined in an arm-length transaction. If the Government does require additional crude oil to be delivered over and above the quantities currently supplied by the Group, such supplies will take precedence over market sales and will generate substantially less revenue than crude oil sold on the export market, which may materially and adversely affect the Group's business, prospects, consolidated financial position and performance.

In 2022, in accordance with its obligations, the Group delivered 7,951 thousand tonnes of crude oil (2021: 7,114 thousand tonnes), including its share in the joint ventures and associates, to the Kazakhstan market.

Oil supply commitments

As of December 31, 2022, Kashagan had commitments under the oil supply agreements in the total amount of 6.6 million tonnes (December 31, 2021: 8.6 million tonnes).

Commitments under oilfield and mining field licenses and subsurface use contracts

As at December 31, 2022 the Group had following commitments on fulfillment of minimal work programs with respect to the requirements of their oilfield and mining licenses and related subsurface use contracts with the Government (in millions of tenge):

Year	Capital expenditures	Operational expenditures
2023	492,142	209,018
2024	415,624	108,241
2025	521,594	111,407
2026	571,355	116,473
2027-2059	3,175,007	1,710,300
Total	**5,175,722**	**2,255,439**

Unconditional gas purchase obligations to the joint ventures

As at 31 December 2022, the Group has unconditional purchase obligation to Asia Gas Pipeline LLP and Beineu-Shymkent Gas Pipeline LLP of 95,558 mln tenge and 216,131 mln tenge excluding VAT for gas transportation services (31 December 2021: 126,292 mln tenge and 201,629 mln tenge).

Capital commitments

As at December 31, 2022 the Group, including its joint ventures and associates, had capital commitments of approximately 1,418,761 million tenge related to acquisition and construction of property, plant and equipment, excluding VAT (as at December 31, 2021: 2,252,306 million tenge, excluding VAT).

As at December 31, 2022, the Group had commitments in the total amount of 1,387,680 million tenge (as at December 31, 2021: 592,889 million tenge) under the investment programs approved by the joint order of Ministry of Energy of the Republic of Kazakhstan and CRNM to facilitate production units.

38. Segment reporting

For management purposes, the Group is organized into organizational business units based on their products and services, and has 8 (eight) reportable operating segments *(Note 1).*

Certain of operating segments have been formed by aggregation of smaller reportable segments in line with the organizational structure of the Group. Each reportable segment maintains its accounting records in line with IFRS. Financial performance of each segment prepared in line with IFRS is reported to the chief operating decision maker for the purposes of making decisions about allocating resources to the segment and assessing its performance.

Eliminations represent the exclusion of intra-group turnovers. Inter-segment transactions were made on terms agreed to between the segments that may not necessarily be at market rates, except for certain regulated services, which are provided based on the tariffs available to related and third parties.

The following table represents information about profit and loss, assets and liabilities of operating segments of the Group for 2022:

In millions of tenge	Oil-and-gas and petrochemical segment	Mining	Transportation	Communication
Revenues from sales to external customers	**9,576,916**	**1,945,888**	**1,926,051**	**666,830**
Revenue from contracts with customers	**9,565,441**	**1,945,530**	**1,904,011**	**666,830**
Interest revenue	**–**	**–**	**–**	**–**
Rental income	**11,475**	**358**	**22,040**	**–**
Revenues from sales to other segments	**61,751**	**41**	**11,806**	**4,856**
Total revenue	**9,638,667**	**1,945,929**	**1,937,857**	**671,686**
Geographical markets				
Kazakhstan	**1,633,769**	**1,054,350**	**1,591,421**	**649,049**
Other countries	**8,004,898**	**891,579**	**346,436**	**22,637**
Gross profit	**2,221,350**	**531,637**	**373,025**	**225,338**
General and administrative expenses	**(223,284)**	**(45,354)**	**(115,410)**	**(50,461)**
Transportation and selling expenses	**(853,650)**	**(25,683)**	**(10,772)**	**(16,979)**
Finance income	**156,368**	**22,955**	**70,256**	**23,880**
Finance costs	**(372,488)**	**(9,176)**	**(168,296)**	**(43,783)**
Share in profits/(loss) of joint ventures and associates	**1,337,127**	**82,460**	**8,546**	**–**
Foreign exchange (loss)/gain, net	**(6,551)**	**15,404**	**22,680**	**8,949**
Depreciation, depletion and amortization	**(571,203)**	**(82,469)**	**(210,591)**	**(122,960)**
Impairment of property, plant and equipment, exploration and evaluation assets and intangible assets	**(19,642)**	**(13,297)**	**(170)**	**(2,751)**
Reversal/(impairment) of other assets,net	**1,373**	**1,304**	**644**	**(493)**
Income tax (expenses)/benefit	**(518,783)**	**(111,977)**	**(47,028)**	**(35,696)**
Total net profit/(loss) for the year	**1,653,779**	**456,132**	**131,062**	**115,919**
Other segment information				
Total assets of the segment	**19,835,479**	**2,969,563**	**4,632,180**	**1,593,990**
Total liabilities of the segment	**7,774,919**	**610,219**	**3,077,764**	**835,531**
Allowances for expected credit losses on trade receivables, loans and other current financial assets	**(4,412)**	**331**	**(5,560)**	**(8,373)**
Investments in joint ventures and associates	**5,896,273**	**689,774**	**28,799**	**–**
Capital expenditures	**(1,006,194)**	**(89,710)**	**(472,722)**	**(134,616)**

Energy	Industrial	Corporate center	Other	Elimination	Total
580,429	28,120	40,935	20,115	–	14,785,284
580,420	28,120	–	7,562	–	14,697,914
–	–	40,935	6,910	–	47,845
9	–	–	5,643	–	39,525
85,941	9,366	825,085	13,667	(1,012,513)	–
666,370	37,486	866,020	33,782	(1,012,513)	14,785,284
631,695	32,386	866,020	33,782	(1,012,513)	5,479,959
34,675	5,100	–	–	–	9,305,325
216,388	8,909	802,293	15,413	(837,202)	3,557,151
(29,732)	(3,659)	(20,873)	(4,426)	10,717	(482,482)
(13,265)	(745)	–	(16)	14,241	(906,869)
10,834	2,027	53,761	46,863	(66,844)	320,100
(54,723)	(6,017)	(60,628)	(61,250)	122,372	(653,989)
14,304	(216)	7,018	21	–	1,449,260
6,437	(790)	(48,050)	(9,528)	1,551	(9,898)
(81,771)	(7,172)	(728)	(3,251)	3,533	(1,076,612)
(2,700)	(16,973)	–	–	–	(55,533)
(7,706)	(14,361)	(228,919)	(455)	232,464	(16,149)
(37,232)	422	(17,445)	3,044	(6,423)	(771,118)
103,782	(33,685)	815,069	(9,309)	(863,865)	2,368,884
1,702,435	179,461	9,603,793	337,055	(7,278,961)	33,574,995
795,445	73,385	2,527,357	201,901	(2,065,187)	13,831,334
167	(102)	31,789	908	(34,134)	(19,386)
103,247	3,788	45,006	35	(32,341)	6,734,581
(149,945)	(20,786)	(382)	(6,447)	468	(1,880,334)

38. Segment reporting (continued)

The following table represents information about profit and loss, assets and liabilities of operating segments of the Group for 2021:

In millions of tenge	Oil-and-gas and petrochemical segment	Mining	Transportation	Communication
Revenues from sales to external customers	7,314,716	1,415,150	1,619,200	624,383
Revenue from contracts with customers	7,304,770	1,414,821	1,611,571	624,383
Interest revenue	–	–	–	–
Rental income	9,946	329	7,629	–
Revenues from sales to other segments	47,846	79	4,026	4,184
Total revenue	**7,362,562**	**1,415,229**	**1,623,226**	**628,567**
Geographical markets				
Kazakhstan	1,343,883	749,320	1,399,420	607,216
Other countries	6,018,679	665,909	223,806	21,351
Gross profit	1,896,249	288,594	407,454	222,481
General and administrative expenses	(212,200)	(37,415)	(109,818)	(54,687)
Transportation and selling expenses	(692,357)	(15,784)	(6,950)	(13,769)
Finance income	117,541	11,108	22,062	9,004
Finance costs	(304,745)	(7,425)	(151,194)	(49,417)
Share in profits/(loss) of joint ventures and associates	999,424	118,554	10,826	–
Foreign exchange (loss)/gain, net	110,922	3,131	3,727	2,349
Depreciation, depletion and amortization	(595,203)	(69,949)	(195,162)	(121,822)
Impairment of property, plant and equipment, exploration and evaluation assets and intangible assets	(95,961)	4,885	(1,860)	(5,961)
Reversal/(impairment) of other assets,net	1,097	(2,295)	(72)	30
Income tax (expenses)/benefit	(388,631)	(61,510)	(36,617)	(30,196)
Total net profit/(loss) for the year	**1,456,260**	**291,732**	**150,356**	**89,760**
Other segment information				
Total assets of the segment	18,592,151	2,739,861	4,133,241	1,341,590
Total liabilities of the segment	6,790,420	469,838	2,820,223	667,222
Allowances for expected credit losses on trade receivables, loans and other current financial assets	(4,202)	(487)	957	(3,193)
Investments in joint ventures and associates	4,851,977	703,195	27,688	–
Capital expenditures	(535,515)	(71,066)	(412,021)	(123,986)

Energy	Industrial	Corporate center	Other	Elimination	Total
649,753	30,567	41,144	14,745	–	11,709,658
649,748	30,567	–	861	–	11,636,721
–	–	41,144	6,249	–	47,393
5	–	–	7,635	–	25,544
87,462	5,529	297,783	22,320	(469,229)	–
737,215	**36,096**	**338,927**	**37,065**	**(469,229)**	**11,709,658**
712,787	27983	338,927	37,065	(469,229)	4,747,372
24,428	8,113	–	–	–	6,962,286
190,305	6,959	275,203	18,122	(335,152)	2,970,215
(25,178)	(6,720)	(24,419)	(4,088)	30,906	(443,619)
(12,249)	(1,151)	–	(5)	13,934	(728,331)
11,290	1,863	28,152	34,919	(61,041)	174,898
(54,315)	(6,173)	(37,786)	(34,576)	90,094	(555,537)
11,509	(219)	1,986	2	–	1,142,082
2,390	(28,979)	(93,264)	(363)	(690)	(777)
(76,816)	(6,240)	(2,147)	(2,658)	3,800	(1,066,197)
(20,849)	(2,542)	–	(90)	–	(122,378)
(1,092)	(581)	(18,057)	(167)	12,200	(8,937)
(30,806)	(468)	(2,942)	(4,370)	(5,496)	(561,036)
76,273	**(38,795)**	**130,893**	**10,467**	**(258,589)**	**1,908,357**
1,616,981	1,128,970	8,309,598	373,645	(7,926,279)	30,309,758
788,374	884,803	1,790,290	217,503	(1,292,007)	13,136,666
696	207	(270)	904	1,047	(4,341)
90,472	5,215	35,013	15	(32,341)	5,681,234
(97,574)	(336,848)	(307)	(4,883)	9,758	(1,572,442)

39. Impacts of war in Ukraine

Since February 2022, due to the conflict between the Russian Federation and Ukraine, numerous sanctions have been announced by a majority of western countries against the Russian Federation. These sanctions are targeted to have a negative economic impact on the Russian Federation.

Due to the growing geopolitical tensions, since February 2022, there has been a significant increase in volatility in the securities and currency markets, as well as a significant depreciation of the tenge against the US dollar and the euro. There has also been a significant increase in the key rate of the NB RK from 9.75% to 16.75% during the year.

The Group has assessed the consequences of the sanctions and interest rate rises on the consolidated financial statements of the Group and continues to monitor these areas of increased risk for material changes.

Borrowings

The Group has 2 borrowings from VTB Bank PJSC (a Russian bank) of 10.4 billion ruble (equivalent to 68.1 billion tenge) with maturity in 2023 and 37.5 billion ruble (equivalent to 225 billion tenge) with maturity in 2027. Interest rates on borrowings are 'Key Rate of Central Bank of Russian Federation (key rate) + 1.75% and + 2.25%' per annum as at December 31, 2022. There were significant fluctuations in key rate from 8.00% to 20.00% and then to 7.50% during the year. Scheduled payments of this loan's interest and principle amount were made in Russian rubles without any issue in 2022.

Assessment of significant influence

In accordance with IAS 28 Investments in associates and joint ventures, the Group has assessed and confirmed that the changes in the legal and operating environment of Russia and Ukraine have not impacted the ability to exercise significant influence over the CPC, NC KMG's associate, in Russia.

Operating environment of Caspian Pipeline Consortium (CPC)

On March 23, 2022, CPC, stopped loading oil at the Black Sea terminal due to damage of two out of three single-point moorings (SPM) caused by a storm. On April 24, 2022, oil loading at the second of three SPM systems on the CPC network at Novorossiysk was resumed.

On April 27, 2022, a Russian Court (the Arbitration Court of the Krasnodar Territory) fully satisfied the claim of Rosprirodnadzor (a Russian regulator) to recover from the CPC damage from an oil spill at the CPC Marine Terminal (occurred in August 2021), of 5.2 billion Russian ruble (equivalent to 30 billion tenge). The CPC recognized a provision for the full amount. In the consolidated financial statements of the Group, the provision was reflected in share in profit of associate for the 2022.

On July 6, 2022, a Russian Court (Primorsky District Court) ordered CPC to suspend operations for 30 days. Later the month-long suspension was replaced by a 200,000 Russian rubles fine (equivalent to 3,300 US dollars). CPC reflected this fine in its accounting books in July 2022. The operations of CPC were not stopped during the above period.

On August 22, 2022 while performing scheduled maintenance on SPM-1 and SPM-2, divers discovered cracks in subsea hose attachments to buoyancy tanks. On November 12 and 29, 2022, both SPM-1 and SPM-2 on the CPC network at Novorossiysk have resumed their operations.

All matters occurred during 2022 are resolved during the year, no further developments.

Impact of sanctions

On March 4, 2022, the European Union disconnected seven Russian banks from SWIFT. The Group have oil transportation contracts with Russian entities. To avoid risks on settlements the Group changed the bank counterparties to the banks which are not under sanctions. Additionally, the currency of certain contracts has been changed from US Dollars to Russian rubles. Currency settlements were made without any issue during 2022.

Starting February 5, 2023, the European Union imposed a ban on imports of Russian diesel, jet fuel and other oil products transported via sea. This measure is not applicable to Group's operations in Kazakhstan or internationally.

[15] *On December 07, 2022, the Government of the Republic of Kazakhstan by the Decree "On Amendments and Additions to Decree of the Government of the Republic of Kazakhstan dated December 29, 2020, No. 908 "On Some Issues of Privatization for 2021-2025, replaced Tulpar Car Building Plant LLP by Passenger Car Building Plant LLP.*

40. Subsequent events

Changes in legislation

In January 2023, amendments to the Law of the Republic of Kazakhstan dated July 20, 2011 No. 463-IV *"On state regulation of the production and circulation of certain types of petroleum products"* came into force. According to these amendments, refineries have the right to sell petroleum products. The sale of oil products by the oil refineries will be carried out independently after a full or partial transition to a marketing scheme of work, which implies an independent purchase of oil and the sale of oil products produced from this oil. The Group does not expect significant impact of changes in legislation on its operations.

In accordance with the Decree of the Government of the Republic of Kazakhstan dated January 25, 2023 No. 45, the changes were made to the Law on Sovereign Wealth Fund. According to the changes, by decision of the sole Shareholder and in a way approved by him, the Fund annually distributes not less than seven percent of net income of the Fund to a non-profit organization represented by the public fund "Kazakhstan Khalkyna".

Disposal of a subsidiary

In January 2023, the Group, represented by subsidiary of NC KTZh, Kaztemirtrans JSC, completed the sale of a 100% interest in the charter capital of Railway Passenger Coach Construction Plant LLP to the third party for 12,000 million tenge and as a result lost control over this subsidiary.

Hydrocarbon production contract

On February 27, 2023, the Group entered into a contract with the Ministry of Energy of RK for the production of hydrocarbons at the Kalamkas-Sea, Khazar and Auezov subsoil blocks located in the Kazakhstan sector of the Caspian Sea.

Financing of national project "Comfortable School"

In March 2023, the Group received a portion of cash related to the financing of the pilot national project "Comfortable School" implementation in the amount of 245.290 million tenge in accordance with the Decree of the Government of the Republic of Kazakhstan dated November 30, 2022 No. 963.

Dividends received from joint venture

In April 2023 the Group received dividends from the joint venture Petrosun LLP in the amount of 19,600 million tenge.

Share capital

On April 14 and 19, 2023 the Shareholder contributed assets to the Fund's share capital with a fair value of 16,915 million tenge and 59,628 million tenge, respectively.