

Contents

I.	Auditor’s Report	Page F-3
II.	Financial Statements	Page F-8
	(I) Consolidated Balance Sheet	Page F-8
	(II) Parent Company Balance Sheet	Page F-10
	(III) Consolidated Income Statement	Page F-12
	(IV) Parent Company Income Statement	Page F-14
	(V) Consolidated Cash Flow Statement	Page F-16
	(VI) Parent Company Cash Flow Statement	Page F-18
	(VII) Consolidated Statement of Changes in Equity	Page F-20
	(VIII) Parent Company Statement of Changes in Equity	Page F-26
III.	Notes to Financial Statements	Page F-29

Auditor's Report

PCCPAAR [2022] No. 10426

To the Shareholders of Zhejiang Huayou Cobalt Co., Ltd.:

I. Audit Opinion

We have audited the accompanying financial statements of Zhejiang Huayou Cobalt Co., Ltd. (the "Company"), which comprise the consolidated and parent company balance sheets as at December 31, 2019, December 31, 2020, and December 31, 2021, the consolidated and parent company income statements, the consolidated and parent company cash flow statements, and the consolidated and parent company statements of changes in equity for the years then ended, as well as notes to financial statements.

In our opinion, the attached financial statements present fairly, in all material respects, the financial position of the Company as at December 31, 2019, December 31, 2020, and December 31, 2021, and of its financial performance and its cash flows for the years then ended in accordance with China Accounting Standards for Business Enterprises.

II. Basis for Audit Opinion

We conducted our audit in accordance with China Standards on Auditing. Our responsibilities under those standards are further described in the Certified Public Accountant's Responsibilities for the Audit of the Financial Statements section of our report. We are independent of the Company in accordance with the China Code of Ethics for Certified Public Accountants, and we have fulfilled other ethical responsibilities. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

III. Other Matters

Without qualifying our opinion, this report is intended solely for the Company in connection with the issuance of global depository receipts (GDRs) and shall not be used for any other purposes.

IV. Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements for the years respectively ended December 31, 2019, December 31, 2020, and December 31, 2021. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not express a separate opinion on these matters.

(I) Revenue recognition

Relevant accounting periods: Year 2019, Year 2020 and Year 2021

1. Key audit matters

Please refer to section III (XXV) and V (II) 1 of notes to the financial statements for details.

The Company is mainly engaged in sales of cobalt products, copper products, nickel products, ternary precursors and cathode materials. The operating revenue in 2019, 2020 and 2021 respectively amounted to 18,852.83 million yuan, 21,186.84 million yuan and 35,316.55 million yuan.

As operating revenue is one of the key performance indicators of the Company, there might be inherent risks that the Company's management (the "Management") adopts inappropriate revenue recognition to achieve specific goals or expectations, we have identified revenue recognition as a key audit matter.

2. Responsive audit procedures

Our main audit procedures for revenue recognition are as follows:

- (1) We obtained understandings of key internal controls related to revenue recognition, assessed the design of these controls, determined whether they had been executed, and tested the effectiveness of the operation;
- (2) We checked main sale contracts, identified terms related to transfer of control over goods, and assessed whether the revenue recognition policies were in compliance with regulations of China Accounting Standards for Business Enterprises;
- (3) We performed analysis procedure on operating revenue and gross margin by month, product, etc., so as to identify whether there are significant or abnormal fluctuations and find out the reason of fluctuations;
- (4) For revenue from domestic sales, we checked supporting documents related to revenue recognition by sampling method, including sales contracts, sales invoices, client acceptance receipts, etc.; for revenue from overseas sales, we obtained information from Electron Port and checked it with accounting records, and checked supporting documents including sales contracts, bills of clearance, waybills, sales invoices, etc. by sampling method;
- (5) We performed confirmation procedures on current sales amount of major customers by sampling method in combination with confirmation procedure of accounts receivable;
- (6) We checked the operating revenue recognized around the balance sheet date with supporting documents including client acceptance receipts, waybills, etc. by sampling method, and assessed whether the operating revenue was recognized in the appropriate period; and
- (7) We checked whether information related to operating revenue had been presented appropriately in the financial statements.

(II) Net realizable value of inventories

Relevant accounting periods: Year 2019, Year 2020 and Year 2021

1. Key audit matters

Please refer to section III (XI) and V (I) 7 of notes to the financial statements for details.

As of December 31, 2019, the book balance of inventories amounted to 3,532.92 million yuan, with provision for write-down of 143.01 million yuan, and the carrying amount amounted to 3,389.92 million yuan; as of December 31, 2020, the book balance of inventories amounted to 4,089.60 million yuan, with provision for write-down of 20.44 million yuan, and the carrying amount amounted to 4,069.16 million yuan; as of December 31, 2021, the book balance of inventories amounted to 9,086.58 million yuan, with provision for write-down of 51.62 million yuan, and the carrying amount amounted to 9,034.96 million yuan.

At the balance sheet date, inventories are measured at the lower of cost and net realizable value, with provisions for inventory write-down made on the excess of its cost over the net realizable value on an individual basis. Based on the Management's consideration over purposes that the inventories were held for, the estimated selling price is determined based on actual selling price, contractual selling price, etc., and the net realizable value of these inventories is determined based on the amount of the estimated selling price less the cost to be incurred upon completion, estimated selling expenses and relevant taxes and surcharges.

As the amount of inventories is significant and determination of net realizable value involves significant judgment of the Management, we have identified net realizable value of inventories as a key audit matter.

2. Responsive audit procedures

Our main audit procedures for net realizable value of inventories are as follows:

- (1) We obtained understandings of key internal controls related to net realizable value of inventories, assessed the design of these controls, determined whether they had been executed, and tested the effectiveness of their operation;
- (2) We reviewed the net realizable value estimated by the Management in previous years and the actual operating results, and assessed the accuracy of the Management's historical estimations;
- (3) We assessed the reasonableness of estimation on cost to be incurred upon completion, selling expenses and relevant taxes and surcharges made by the Management;
- (4) We tested whether the calculation of net realizable value of inventories made by the Management was accurate;
- (5) We checked whether there existed situations such as inventories with long stock age, fluctuation of production cost or selling price, and assessed whether the net realizable value of inventories was reasonably estimated by the Management; and
- (6) We checked whether information related to net realizable value of inventories had been presented appropriately in the financial statements.

V. Responsibilities of the Management and Those Charged with Governance for the Financial Statements

The Management is responsible for preparing and presenting fairly the financial statements in accordance with China Accounting Standards for Business Enterprises, as well as designing, implementing and maintaining internal control relevant to the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Management is responsible for assessing the Company'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 the Management either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so.

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

VI. Certified Public Accountant's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the 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 China Standards on Auditing will always detect a material misstatement when it exists. Misstatement 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 financial statements.

We exercise professional judgment and maintain professional skepticism throughout the audit performed in accordance with China Standards on Auditing. We also:

- (I) Identify and assess the risks of material misstatement of the 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.
- (II) 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 Company's internal control.
- (III) Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the Management.
- (IV) Conclude on the appropriateness of the 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 Company'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 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 Company to cease to continue as a going concern.

- (IV) Evaluate the overall presentation, structure and content of the financial statements, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- (V) Obtain sufficient and appropriate audit evidence regarding the financial information of the entities or business activities within the Company to express an opinion on the financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain sole responsibility for our audit opinion.

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

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

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the financial statements for the years respectively ended December 31, 2019, December 31, 2020, and December 31, 2021, 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.

**Pan-China Certified Public Accountants LLP Chinese Certified Public Accountant:
(Engagement Partner)**

Hangzhou • China Chinese Certified Public Accountant:

Date of Report: October 28, 2022

Zhejiang Huayou Cobalt Co., Ltd.
Consolidated balance sheet
(Expressed in Renminbi Yuan)

Assets	Note No.	Dec. 31, 2021	Dec. 31, 2020	Dec. 31, 2019
Current assets:				
Cash and bank				
balances	1	9,769,484,655.14	2,334,257,628.92	2,885,760,539.30
Held-for-trading				
financial assets	2	332,752,951.53	30,317,180.12	103,543,722.85
Derivative financial				
assets				
Notes receivable				
Accounts receivable . . .	3	4,383,773,614.34	1,140,540,116.91	867,924,954.21
Receivables financing . .	4	1,319,017,850.74	762,316,046.62	460,537,826.62
Advances paid	5	1,049,734,368.35	780,865,279.18	1,048,052,428.35
Other receivables	6	235,190,761.21	181,857,238.14	189,336,924.76
Inventories	7	9,034,956,960.99	4,069,164,628.61	3,389,917,333.97
Contract assets				
Assets held for sale . . .				
Non-current assets due				
within one year				
Other current assets . . .	8	866,475,159.52	526,706,101.00	504,566,357.71
Total current assets . .		26,991,386,321.82	9,826,024,219.50	9,449,640,087.77
Non-current assets:				
Debt investments				
Other debt investments . .				
Long-term receivables . .	9	336,406,346.60	344,278,709.93	263,554,594.54
Long-term equity				
investments	10	3,427,752,883.98	2,078,498,062.56	1,331,485,724.88
Other equity instrument				
investments	11	34,552,445.81	5,653,575.00	21,930,092.52
Other non-current				
financial assets	12	6,573,600.00	6,573,600.00	6,573,600.00
Investment property . . .				
Fixed assets	13	12,124,449,718.54	8,321,024,911.82	6,439,087,372.66
Construction in				
progress	14	9,820,436,881.46	3,389,252,982.28	3,184,015,454.84
Productive biological				
assets				
Oil & gas assets				
Right-of-use assets	15	63,712,856.39		
Intangible assets	16	1,191,817,338.35	801,561,461.77	779,772,449.65
Development				
expenditures				
Goodwill	17	460,480,461.08	95,136,198.86	95,136,198.86
Long-term prepayments . .	18	98,737,858.92	126,053,970.09	61,117,884.74
Deferred tax assets	19	370,773,758.46	257,504,055.08	261,969,285.09
Other non-current				
assets	20	3,061,975,877.53	1,693,756,276.09	1,372,701,582.24
Total non-current assets.		30,997,670,027.12	17,119,293,803.48	13,817,344,240.02
Total assets		57,989,056,348.94	26,945,318,022.98	23,266,984,327.79

Legal representative:

Officer in charge of
accounting:

Head of accounting
department:

Zhejiang Huayou Cobalt Co., Ltd.
Consolidated balance sheet (continued)
(Expressed in Renminbi Yuan)

Liabilities & Equity	<i>Note No.</i>	Dec. 31, 2021	Dec. 31, 2020	Dec. 31, 2019
Current liabilities:				
Short-term borrowings . . .	21	8,083,779,844.70	5,862,436,627.54	5,914,977,746.01
Held-for-trading financial liabilities	22	360,612.00	23,939,270.26	
Derivative financial liabilities	23	104,821,710.25		
Notes payable	24	4,810,797,623.12	1,075,293,852.29	1,711,684,225.38
Accounts payable	25	6,233,172,410.76	1,789,437,189.88	1,457,846,829.84
Advances received	26	644,739,400.90	13,203,500.00	49,481,999.73
Contract liabilities	27	78,968,534.53	259,399,312.53	
Employee benefits payable.	28	477,791,587.03	246,927,241.56	150,675,728.77
Taxes and rates payable . .	29	1,053,002,433.60	498,051,676.99	180,632,990.49
Other payables	30	1,434,593,185.87	769,409,094.84	622,534,152.84
Liabilities held for sale . . .				
Non-current liabilities due				
within one year	31	2,635,957,985.64	1,448,009,624.78	1,210,911,594.48
Other current liabilities . . .	32	4,147,523.95	4,503,600.24	
Total current liabilities . . .		25,562,132,852.35	11,990,610,990.91	11,298,745,267.54
Non-current liabilities:				
Long-term borrowings . . .	33	6,738,260,645.42	1,422,004,973.18	1,053,257,446.93
Bonds payable	34			
Including: Preferred shares				
Perpetual bonds				
Lease liabilities	35	32,788,255.14		
Long-term payables	36	1,061,226,074.03	588,947,562.96	539,591,156.88
Long-term employee benefits payable				
Provisions	37	26,769,294.11	13,842,559.43	6,676,814.98
Deferred income	38	518,873,112.92	410,473,311.89	238,813,222.82
Deferred tax liabilities . . .	19	148,328,994.62	67,633,648.10	39,007,391.77
Other non-current liabilities				
Total non-current liabilities		8,526,246,376.24	2,502,902,055.56	1,877,346,033.38
Total liabilities		34,088,379,228.59	14,493,513,046.47	13,176,091,300.92
Equity:				
Share capital	39	1,221,228,483.00	1,141,261,526.00	1,078,671,471.00
Other equity instruments . .				
Including: Preferred shares				
Perpetual bonds				
Capital reserve	40	10,218,296,584.42	3,879,698,604.43	2,606,657,306.83
Less: Treasury shares	41	339,232,639.00		
Other comprehensive income	42	-419,363,343.56	-145,993,159.83	175,226,158.57
Special reserve	43	16,648,561.11	16,061,509.89	20,947,308.81
Surplus reserve	44	309,732,264.90	223,433,020.86	187,336,331.51
General risk reserve				
Undistributed profit	45	8,376,281,013.68	4,807,657,608.58	3,678,911,443.81
Total equity attributable to the parent company		19,383,590,924.55	9,922,119,109.93	7,747,750,020.53
Non-controlling interest . .		4,517,086,195.80	2,529,685,866.58	2,343,143,006.34
Total equity		23,900,677,120.35	12,451,804,976.51	10,090,893,026.87
Total liabilities & equity . .		57,989,056,348.94	26,945,318,022.98	23,266,984,327.79

Legal representative:

Officer in charge of
accounting:

Head of accounting
department:

Zhejiang Huayou Cobalt Co., Ltd.
Parent company balance sheet
(Expressed in Renminbi Yuan)

<u>Assets</u>	<u>Note No.</u>	<u>Dec. 31, 2021</u>	<u>Dec. 31, 2020</u>	<u>Dec. 31, 2019</u>
Current assets:				
Cash and bank balances		1,694,042,366.45	215,035,409.69	386,302,926.28
Held-for-trading financial assets				
Derivative financial assets				
Notes receivable		338,000,000.00	123,000,000.00	
Accounts receivable	1	360,607,458.85	239,687,872.09	306,577,198.32
Receivables financing		186,875,403.82	146,244,337.36	55,940,740.61
Advances paid		897,497,170.40	652,165,324.97	91,413,539.51
Other receivables	2	3,114,862,819.44	283,760,430.65	110,082,180.38
Inventories		379,710,012.03	273,887,607.37	228,428,258.15
Contract assets				
Assets held for sale				
Non-current assets due within one year				
Other current assets				21,323,108.80
Total current assets		6,971,595,230.99	1,933,780,982.13	1,200,067,952.05
Non-current assets:				
Debt investments				
Other debt investments				
Long-term receivables		324,095,320.53	333,654,112.32	510,207,969.56
Long-term equity investments	3	13,636,514,032.15	8,818,071,591.35	6,874,482,929.58
Other equity instrument investments		29,000,000.00	4,103,575.00	11,311,510.76
Other non-current financial assets		6,573,600.00	6,573,600.00	6,573,600.00
Investment property				
Fixed assets		199,313,758.31	218,563,971.75	179,080,430.57
Construction in progress		271,762,878.54	190,287,842.13	148,152,515.99
Productive biological assets				
Oil & gas assets				
Right-of-use assets		16,352,766.96		
Intangible assets		32,174,400.64	16,706,697.99	14,595,214.67
Development expenditures				
Goodwill				
Long-term prepayments		73,839,323.13	83,035,285.89	
Deferred tax assets		27,550,321.65	5,325,980.32	12,053,026.05
Other non-current assets		29,901,240.37	17,913,525.83	4,350,083.55
Total non-current assets		14,647,077,642.28	9,694,236,182.58	7,760,807,280.73
Total assets		21,618,672,873.27	11,628,017,164.71	8,960,875,232.78

Legal representative:

Officer in charge of accounting:

Head of accounting department:

Zhejiang Huayou Cobalt Co., Ltd.
Parent company balance sheet (continued)
(Expressed in Renminbi Yuan)

<u>Liabilities & Equity</u>	<u>Note No.</u>	<u>Dec. 31, 2021</u>	<u>Dec. 31, 2020</u>	<u>Dec. 31, 2019</u>
Current liabilities:				
Short-term borrowings		2,639,971,647.59	1,650,158,261.73	2,080,462,059.02
Held-for-trading financial liabilities			8,254,968.09	
Derivative financial liabilities				
Notes payable		410,442,595.35	31,638,302.39	124,648,428.46
Accounts payable		421,128,317.38	1,087,142,893.30	365,214,728.30
Advances received				11,646,730.13
Contract liabilities		415,554,178.36	200,891,243.91	
Employee benefits payable		81,890,998.78	51,881,430.77	36,587,676.24
Taxes and rates payable		151,071,536.68	57,088,643.93	1,532,044.47
Other payables		2,681,855,326.77	1,289,604,110.88	1,357,445,462.90
Liabilities held for sale				
Non-current liabilities due within one year		389,561,438.44	76,436,004.27	137,412,141.59
Other current liabilities		52,595,430.92	25,832,079.78	
Total current liabilities		7,244,071,470.27	4,478,927,939.05	4,114,949,271.11
Non-current liabilities:				
Long-term borrowings		1,137,636,001.55	406,589,263.89	240,348,333.31
Bonds payable				
Including: Preferred shares				
Perpetual bonds				
Lease liabilities		9,838,354.99		
Long-term payables		9,126,129.25	207,690,801.32	
Long-term employee benefits payable				
Provisions				
Deferred income		9,824,515.54	11,287,964.18	14,025,455.36
Deferred tax liabilities		1,360,543.62	1,634,879.86	
Other non-current liabilities				
Total non-current liabilities		1,167,785,544.95	627,202,909.25	254,373,788.67
Total liabilities		8,411,857,015.22	5,106,130,848.30	4,369,323,059.78
Equity:				
Share capital		1,221,228,483.00	1,141,261,526.00	1,078,671,471.00
Other equity instruments				
Including: Preferred shares				
Perpetual bonds				
Capital reserve		9,954,138,998.99	3,619,336,124.36	2,095,772,744.87
Less: Treasury shares		339,232,639.00		
Other comprehensive income		-40,000,000.00	-35,896,425.00	-28,688,489.24
Special reserve		22,627.13	6,938,266.87	16,516,515.70
Surplus reserve		309,732,264.90	223,433,020.86	187,336,331.51
General risk reserve				
Undistributed profit		2,100,926,123.03	1,566,813,803.32	1,241,943,599.16
Total equity attributable to the parent company				
Non-controlling interest				
Total equity		13,206,815,858.05	6,521,886,316.41	4,591,552,173.00
Total liabilities & equity		21,618,672,873.27	11,628,017,164.71	8,960,875,232.78

Legal representative:

Officer in charge of
accounting:

Head of accounting
department:

Zhejiang Huayou Cobalt Co., Ltd.
Consolidated income statement
(Expressed in Renminbi Yuan)

Items	Note No.	Year 2021	Year 2020	Year 2019
I. Operating revenue	1	35,316,548,999.96	21,186,843,965.75	18,852,828,463.22
Less: Operating cost	1	28,131,068,440.83	18,014,062,384.77	16,748,261,571.90
Taxes and surcharges	2	303,960,188.10	193,966,925.99	253,765,969.12
Selling expenses	3	37,945,024.34	27,276,620.21	163,772,106.10
Administrative expenses	4	1,179,657,989.91	665,041,408.67	467,600,989.69
R&D expenses	5	816,270,207.36	370,784,128.95	267,610,711.83
Financial expenses	6	484,339,894.16	402,527,873.65	427,102,612.32
Including: Interest expenses		502,298,446.61	394,032,889.30	375,408,861.86
Interest income		74,079,354.47	23,232,304.04	19,536,813.86
Add: Other income	7	50,782,020.25	62,974,326.30	86,295,997.91
Investment income (or less: losses)	8	635,964,514.58	72,834,490.78	-46,412,288.07
Including: Investment income from associates and joint ventures		599,789,831.39	58,862,496.59	-9,014,236.77
Gains from derecognition of financial assets at amortized cost		-11,847,935.72	-3,683,035.79	-11,603,265.73
Gains on net exposure to hedging risk (or less: losses)				
Gains on changes in fair value (or less: losses)	9	-14,588,816.50	-28,580,084.57	-37,127,376.99
Credit impairment loss	10	-83,189,523.03	-59,163,312.39	-37,637,572.84
Assets impairment loss	11	-47,853,810.51	-46,346,618.09	-328,850,640.46
Gains on asset disposal (or less: losses)	12	-3,122,487.58	296,741.07	
II. Operating profit (or less: losses)		4,901,299,152.47	1,515,200,166.61	160,982,621.81
Add: Non-operating revenue	13	2,560,253.32	2,582,256.99	9,711,493.33
Less: Non-operating expenditures	14	75,580,542.84	39,060,181.07	11,428,407.01
III. Profit before tax (or less: total loss)		4,828,278,862.95	1,478,722,242.53	159,265,708.13
Less: Income tax expenses	15	804,638,930.77	353,069,064.61	51,141,792.63
IV. Net profit (or less: net loss)		4,023,639,932.18	1,125,653,177.92	108,123,915.50
(I) Categorized by the continuity of operations				
1. Net profit from continuing operations (or less: net loss)		4,023,639,932.18	1,125,653,177.92	108,123,915.50
2. Net profit from discontinued operations (or less: net loss)				
(II) Categorized by the portion of equity ownership				
1. Net profit attributable to owners of parent company (or less: net loss)		3,897,503,525.74	1,164,842,854.12	119,534,808.82
2. Net profit attributable to non-controlling shareholders (or less: net loss)		126,136,406.44	-39,189,676.20	-11,410,893.32
V. Other comprehensive income after tax	16	-294,048,690.02	-374,516,346.16	109,471,448.57
Items attributable to the owners of the parent company		-273,370,183.73	-321,219,318.40	98,121,833.27

Zhejiang Huayou Cobalt Co., Ltd.
Consolidated income statement (continued)
(Expressed in Renminbi Yuan)

Items	Note No.	Year 2021	Year 2020	Year 2019
(I) Not to be reclassified subsequently to profit or loss . . .		-4,103,575.00	-16,276,517.52	-28,688,489.24
1. Remeasurements of the net defined benefit plan				
2. Items under equity method that will not be reclassified to profit or loss				
3. Changes in fair value of other equity instrument investments . . .		-4,103,575.00	-16,276,517.52	-28,688,489.24
4. Changes in fair value of own credit risk				
5. Others				
(II) To be reclassified subsequently to profit or loss		-269,266,608.73	-304,942,800.88	126,810,322.51
1. Items under equity method that may be reclassified to profit or loss		-40,330,076.10	-63,418,820.75	5,075,457.94
2. Changes in fair value of other debt investments				
3. Profit or loss from reclassification of financial assets into other comprehensive income				
4. Provision for credit impairment of other debt investments				
5. Cash flow hedging reserve (the effective portion of profit or loss on cash flow hedging)				
6. Translation reserve		-228,936,532.63	-241,523,980.13	121,734,864.57
7. Others				
Items attributable to non-controlling shareholders		-20,678,506.29	-53,297,027.76	11,349,615.30
VI. Total comprehensive income . . .		3,729,591,242.16	751,136,831.76	217,595,364.07
Items attributable to the owners of the parent company		3,624,133,342.01	843,623,535.72	217,656,642.09
Items attributable to non-controlling shareholders		105,457,900.15	-92,486,703.96	-61,278.02
VII. Earnings per share (EPS):				
(I) Basic EPS (yuan per share)		3.25	1.03	0.11
(II) Diluted EPS (yuan per share) . .		3.24	1.03	0.11

Legal representative:

Officer in charge of
accounting:

Head of accounting
department:

Zhejiang Huayou Cobalt Co., Ltd.
Parent company income statement
(Expressed in Renminbi Yuan)

Items	Note No.	Year 2021	Year 2020	Year 2019
I. Operating revenue	1	3,336,415,796.19	2,156,799,651.82	2,654,640,029.92
Less: Operating cost	1	2,024,129,134.26	1,280,463,979.94	2,130,027,655.51
Taxes and surcharges		8,731,409.47	2,618,404.52	7,172,319.62
Selling expenses		4,350,060.34	2,426,372.86	11,270,218.28
Administrative expenses		357,922,675.89	190,024,233.58	150,872,538.77
R&D expenses	2	136,031,825.10	108,564,076.27	134,890,710.27
Financial expenses		123,147,032.84	222,471,349.47	182,756,641.37
Including: Interest expenses . . .		148,201,610.85	156,928,524.38	162,191,053.07
Interest income		41,938,422.64	6,604,889.14	2,978,476.75
Add: Other income		6,518,959.11	15,010,388.99	11,119,873.73
Investment income (or less: losses)	3	263,037,586.70	46,192,071.04	-5,061,395.89
Including: Investment income from associates and joint ventures		-3,406,932.38	-40,710.10	-2,080,415.06
Gains from derecognition of financial assets at amortized cost		-7,209,802.76	-7,503,599.99	-609,097.22
Gains on net exposure to hedging risk (or less: losses) . . .				
Gains on changes in fair value (or less: losses)		8,254,968.09	-8,254,968.09	6,529,248.16
Credit impairment loss		1,557,346.12	252,397.51	-3,452,367.96
Assets impairment loss		-130,024.83		-9,569,192.58
Gains on asset disposal (or less: losses)				
II. Operating profit (or less: losses) . .		961,342,493.48	403,431,124.63	37,216,111.56
Add: Non-operating revenue		980,241.49	700,417.94	399,476.05
Less: Non-operating expenditures		6,453,835.66	2,989,266.07	2,146,054.75
III. Profit before tax (or less: total loss)		955,868,899.31	401,142,276.50	35,469,532.86
Less: Income tax expenses		92,876,458.96	40,175,382.99	3,996,390.88
IV. Net profit (or less: net loss)		862,992,440.35	360,966,893.51	31,473,141.98
(I) Categorized by the continuity of operations				
1. Net profit from continuing operations (or less: net loss)		862,992,440.35	360,966,893.51	31,473,141.98
2. Net profit from discontinued operations (or less: net loss)				
(II) Categorized by the portion of equity ownership				
1. Net profit attributable to owners of parent company (or less: net loss)				
2. Net profit attributable to non- controlling shareholders (or less: net loss)				
V. Other comprehensive income after tax		-4,103,575.00	-7,207,935.76	-28,688,489.24
Items attributable to the owners of the parent company				

Zhejiang Huayou Cobalt Co., Ltd.
Parent company income statement (continued)
(Expressed in Renminbi Yuan)

Items	Note No.	Year 2021	Year 2020	Year 2019
(I) Not to be reclassified subsequently to profit or loss		-4,103,575.00	-7,207,935.76	-28,688,489.24
1. Remeasurements of the net defined benefit plan				
2. Items under equity method that will not be reclassified to profit or loss				
3. Changes in fair value of other equity instrument investments		-4,103,575.00	-7,207,935.76	-28,688,489.24
4. Changes in fair value of own credit risk				
5. Others				
(II) To be reclassified subsequently to profit or loss				
1. Items under equity method that may be reclassified to profit or loss				
2. Changes in fair value of other debt investments				
3. Profit or loss from reclassification of financial assets into other comprehensive income				
4. Provision for credit impairment of other debt investments				
5. Cash flow hedging reserve (the effective portion of profit or loss on cash flow hedging)				
6. Translation reserve				
7. Others				
Items attributable to non-controlling shareholders				
VI. Total comprehensive income		858,888,865.35	353,758,957.75	2,784,652.74
Items attributable to the owners of the parent company				
Items attributable to non-controlling shareholders				
VII. Earnings per share (EPS):				
(I) Basic EPS (yuan per share)				
(II) Diluted EPS (yuan per share)				

Legal representative:

Officer in charge of
accounting:

Head of accounting
department:

Zhejiang Huayou Cobalt Co., Ltd.
Consolidated cash flow statement
(Expressed in Renminbi Yuan)

Items	Note No.	Year 2021	Year 2020	Year 2019
I. Cash flows from operating activities:				
Cash receipts from sale of goods and rendering of services				
		33,881,429,836.01	21,282,495,559.31	19,077,277,790.83
Receipts of tax refund				
		716,467,651.26	413,372,074.40	223,124,813.45
Other cash receipts related to operating activities				
	1	567,993,256.40	810,557,295.64	601,944,077.09
Subtotal of cash inflows from operating activities				
		35,165,890,743.67	22,506,424,929.35	19,902,346,681.37
Cash payments for goods purchased and services received				
		30,666,445,867.15	18,570,337,086.40	15,075,935,152.35
Cash paid to and on behalf of employees				
		1,368,459,638.39	918,380,931.58	702,935,677.97
Cash payments for taxes and rates				
		913,510,701.74	411,572,282.03	550,738,837.98
Other cash payments related to operating activities				
	2	2,279,183,126.07	746,365,509.46	973,065,436.29
Subtotal of cash outflows from operating activities				
		35,227,599,333.35	20,646,655,809.47	17,302,675,104.59
Net cash flows from operating activities				
		-61,708,589.68	1,859,769,119.88	2,599,671,576.78
II. Cash flows from investing activities:				
Cash receipts from withdrawal of investments				
		1,347,806,343.53	629,898,750.87	3,067,834,116.92
Cash receipts from investment income				
		391,832,308.50	20,309,020.43	21,516,907.59
Net cash receipts from the disposal of fixed assets, intangible assets and other long-term assets				
		2,278,141.40	15,822,488.15	412,792.00
Net cash receipts from the disposal of subsidiaries & other business units				
		219,898,356.92		
Other cash receipts related to investing activities				
	3	1,144,868,360.92	317,163,773.28	206,404,479.70
Subtotal of cash inflows from investing activities				
		3,106,683,511.27	983,194,032.73	3,296,168,296.21
Cash payments for the acquisition of fixed assets, intangible assets and other long-term assets				
		6,847,230,648.34	3,640,498,433.35	2,641,455,455.23
Cash payments for investments				
		2,748,614,889.83	598,919,351.14	3,811,692,013.31
Net cash payments for the acquisition of subsidiaries & other business units				
		680,207,424.28		755,458,263.67
Other cash payments related to investing activities				
	4	1,591,192,031.65	672,902,891.62	1,173,201,769.12
Subtotal of cash outflows from investing activities				
		11,867,244,994.10	4,912,320,676.11	8,381,807,501.33
Net cash flows from investing activities				
		-8,760,561,482.83	-3,929,126,643.38	-5,085,639,205.12

Zhejiang Huayou Cobalt Co., Ltd.
Consolidated cash flow statement (continued)
(Expressed in Renminbi Yuan)

Items	Note No.	Year 2021	Year 2020	Year 2019
III. Cash flows from financing activities:				
Cash receipts from absorbing investments		6,596,635,884.32	1,204,746,609.41	1,563,724,352.85
Including: Cash received by subsidiaries from non-controlling shareholders as investments		298,609,257.76	410,466,611.67	1,563,724,352.85
Cash receipts from borrowings		14,585,409,166.59	10,926,568,980.92	10,969,374,637.73
Other cash receipts related to financing activities.	5	3,126,476,739.88	2,560,525,502.47	1,984,855,492.52
Subtotal of cash inflows from financing activities		24,308,521,790.79	14,691,841,092.80	14,517,954,483.10
Cash payments for the repayment of borrowings.		7,061,305,981.48	10,039,226,609.35	10,569,634,929.20
Cash payments for distribution of dividends or profits and for interest expenses		775,505,700.11	377,902,779.30	504,319,113.97
Including: Cash paid by subsidiaries to non-controlling shareholders as dividend or profit.			2,230,636.64	
Other cash payments related to financing activities.	6	3,193,246,446.60	2,815,986,450.25	875,851,578.10
Subtotal of cash outflows from financing activities.		11,030,058,128.19	13,233,115,838.90	11,949,805,621.27
Net cash flows from financing activities.		13,278,463,662.60	1,458,725,253.90	2,568,148,861.83
IV. Effect of foreign exchange rate changes on cash and cash equivalents		162,720,298.96	115,531,175.47	72,678,380.96
V. Net increase in cash and cash equivalents		4,618,913,889.05	-495,101,094.13	154,859,614.45
Add: Opening balance of cash and cash equivalents		1,489,479,506.70	1,984,580,600.83	1,829,720,986.38
VI. Closing balance of cash and cash equivalents		6,108,393,395.75	1,489,479,506.70	1,984,580,600.83

Legal representative:	Officer in charge of accounting:	Head of accounting department:
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Zhejiang Huayou Cobalt Co., Ltd.
Parent company cash flow statement
(Expressed in Renminbi Yuan)

Items	Year 2021	Year 2020	Year 2019
I. Cash flows from operating activities:			
Cash receipts from sale of goods and rendering of services	2,923,758,364.85	2,405,472,760.95	2,688,935,040.23
Receipts of tax refund	820,908.58	14,473,280.16	1,358,660.62
Other cash receipts related to operating activities	99,572,443.46	102,941,933.69	18,452,224.00
Subtotal of cash inflows from operating activities	3,024,151,716.89	2,522,887,974.80	2,708,745,924.85
Cash payments for goods purchased and services received	2,932,882,430.46	1,411,826,061.92	965,972,749.91
Cash paid to and on behalf of employees	209,351,045.00	161,430,461.51	123,087,570.59
Cash payments for taxes and rates	86,337,100.72	13,128,903.65	108,867,420.22
Other cash payments related to operating activities	183,077,128.98	170,381,324.97	206,719,765.74
Subtotal of cash outflows from operating activities	3,411,647,705.16	1,756,766,752.05	1,404,647,506.46
Net cash flows from operating activities	-387,495,988.27	766,121,222.75	1,304,098,418.39
II. Cash flows from investing activities:			
Cash receipts from withdrawal of investments	1,016,306,343.53	3,701,301.12	121,600,000.00
Cash receipts from investment income	279,400,408.01	96,628,301.60	7,972,752.68
Net cash receipts from the disposal of fixed assets, intangible assets and other long-term assets	16,295,053.73	357,322.61	340,342.98
Net cash receipts from the disposal of subsidiaries & other business units			
Other cash receipts related to investing activities	13,147,440.89	174,327,191.91	751,334,493.77
Subtotal of cash inflows from investing activities	1,325,149,246.16	275,014,117.24	881,247,589.43
Cash payments for the acquisition of fixed assets, intangible assets and other long-term assets	96,189,296.82	151,718,476.22	74,746,406.56
Cash payments for investments	5,876,244,293.92	1,176,616,176.26	1,991,591,112.01
Net cash payments for the acquisition of subsidiaries & other business units			
Other cash payments related to investing activities	2,710,098,444.61	167,918,073.15	
Subtotal of cash outflows from investing activities	8,682,532,035.35	1,496,252,725.63	2,066,337,518.57
Net cash flows from investing activities	-7,357,382,789.19	-1,221,238,608.39	-1,185,089,929.14

Zhejiang Huayou Cobalt Co., Ltd.
Parent company cash flow statement (continued)
(Expressed in Renminbi Yuan)

Items	Year 2021	Year 2020	Year 2019
III. Cash flows from financing activities:			
Cash receipts from absorbing investments	6,298,026,626.56	794,279,997.74	
Including: Cash received by subsidiaries from non-controlling shareholders as investments			
Cash receipts from borrowings . .	5,363,137,898.51	2,680,858,282.23	3,758,166,044.22
Other cash receipts related to financing activities	2,289,101,342.07	2,569,053,894.84	10,419,511.36
Subtotal of cash inflows from financing activities	13,950,265,867.14	6,044,192,174.81	3,768,585,555.58
Cash payments for the repayment of borrowings	3,339,664,360.99	3,032,237,454.45	3,698,764,611.70
Cash payments for distribution of dividends or profits and for interest expenses	381,653,218.14	110,974,854.17	256,929,441.98
Including: Cash paid by subsidiaries to non-controlling shareholders as dividend or profit			
Other cash payments related to financing activities	1,037,648,020.89	2,613,026,409.80	43,200,690.68
Subtotal of cash outflows from financing activities	4,758,965,600.02	5,756,238,718.42	3,998,894,744.36
Net cash flows from financing activities	9,191,300,267.12	287,953,456.39	-230,309,188.78
IV. Effect of foreign exchange rate changes on cash and cash equivalents	31,396,598.09	-37,665,883.33	-14,349,795.43
V. Net increase in cash and cash equivalents	1,477,818,087.75	-204,829,812.58	-125,650,494.96
Add: Opening balance of cash and cash equivalents	92,432,863.70	297,262,676.28	422,913,171.24
VI. Closing balance of cash and cash equivalents	1,570,250,951.45	92,432,863.70	297,262,676.28

Legal representative:

Officer in charge of
accounting:

Head of accounting
department:

Zhejiang Huayou Cobalt Co., Ltd.
Consolidated statement of changes in equity (continued)
(Expressed in Renminbi Yuan)

Year 2021

Items	Equity attributable to parent company										Total equity	
	Other equity instruments			Less: Treasury shares	Other comprehensive income	Special reserve	Surplus reserve	General risk reserve	Undistributed profit	Non-controlling interest		
	Share capital	Preferred shares	Perpetual bonds									Others
(V) Special reserve						587,051.22						587,051.22
1. Appropriation of current period						50,659,375.38						50,659,375.38
2. Application of current period						(50,072,324.16)						(50,072,324.16)
(VI) Others										1,571,647,348.65		1,571,647,348.65
IV. Balance at the end of current period	1,221,228,483.00				10,218,296,584.42	339,232,639.00	(419,363,343.56)	16,648,561.11	309,732,264.90	8,376,281,013.68	4,517,086,193.80	23,900,677,120.35

Legal representative:

Officer in charge of accounting:

Head of accounting department:

Zhejiang Huayou Cobalt Co., Ltd.
Consolidated statement of changes in equity (continued)
(Expressed in Renminbi Yuan)

Year 2020

Items	Equity attributable to parent company							Total equity		
	Other equity instruments			Other comprehensive income	Special reserve	Surplus reserve	General risk reserve		Undistributed profit	Non-controlling interest
	Share capital	Preferred shares	Perpetual bonds							
I. Balance at the end of prior year	1,078,671,471.00			2,606,657,306.83	20,947,308.81	187,336,331.51	3,678,911,443.81	2,343,143,006.34	10,090,893,026.87	
Add: Cumulative changes of accounting policies										
Error correction of prior period										
Business combination under common control										
Others										
II. Balance at the beginning of current year	1,078,671,471.00			2,606,657,306.83	20,947,308.81	187,336,331.51	3,678,911,443.81	2,343,143,006.34	10,090,893,026.87	
III. Current period increase (or less: decrease)	62,590,055.00			1,273,041,297.60	-4,885,798.92	36,096,689.35	1,128,746,164.77	186,542,860.24	2,360,911,949.64	
(I) Total comprehensive income					-321,219,318.40		1,164,842,854.12	-92,486,703.96	751,136,831.76	
(II) Capital contributed or withdrawn by owners	62,590,055.00			1,273,041,297.60				230,447,128.98	1,566,078,481.58	
1. Ordinary shares contributed by owners	62,590,055.00			1,523,563,379.49					1,586,153,434.49	
2. Capital contributed by holders of other equity instruments										
3. Amount of share-based payment included in equity				-250,522,081.89					-20,074,952.91	
4. Others									230,447,128.98	
(III) Profit distribution							-36,096,689.35	-2,230,636.64	-2,230,636.64	
1. Appropriation of surplus reserve										
2. Appropriation of general risk reserve										
3. Appropriation of profit to owners										
4. Others							-36,096,689.35	-36,096,689.35		
(IV) Internal carry-over within equity										
1. Transfer of capital reserve to capital										
2. Transfer of surplus reserve to capital										
3. Surplus reserve to cover losses										
4. Changes in defined benefit plan carried over to retained earnings										
5. Other comprehensive income carried over to retained earnings										
6. Others										

Zhejiang Huayou Cobalt Co., Ltd.
Consolidated statement of changes in equity (continued)
(Expressed in Renminbi Yuan)

Year 2020

Items	Equity attributable to parent company										Total equity	
	Other equity instruments			Less: Treasury shares	Other comprehensive income	Special reserve	Surplus reserve	General risk reserve	Undistributed profit	Non-controlling interest		
	Share capital	Preferred shares	Perpetual bonds									Others
(V) Special reserve						-4,885,798.92						-4,885,798.92
1. Appropriation of current period						42,879,053.58						42,879,053.58
2. Application of current period						-47,764,852.50						-47,764,852.50
(VI) Others											50,813,071.86	50,813,071.86
IV. Balance at the end of current period	1,141,261,526.00				3,879,698,604.43	-145,993,159.83	16,061,509.89	223,433,020.86		4,807,657,608.58	2,529,685,866.58	12,451,804,976.51

Legal representative:

Officer in charge of accounting:

Head of accounting department:

Zhejiang Huayou Cobalt Co., Ltd.
Consolidated statement of changes in equity (continued)
(Expressed in Renminbi Yuan)

Year 2019

Items	Equity attributable to parent company										Total equity	
	Other equity instruments			Less: Treasury shares	Other comprehensive income	Special reserve	Surplus reserve	General risk reserve	Undistributed profit	Non-controlling interest		
	Share capital	Preferred shares	Perpetual bonds									Others
(V) Special reserve					3,800,783.66							3,800,783.66
1. Appropriation of current period					43,456,974.57							43,456,974.57
2. Application of current period					(39,656,190.91)							(39,656,190.91)
(VI) Others												
IV. Balance at the end of current period	1,078,671,471.00				175,226,158.57	20,947,308.81	187,336,331.51		3,678,911,443.81		(19,501,000.10)	10,090,893,026.87

Legal representative:

Officer in charge of accounting:

Head of accounting department:

Zhejiang Huayou Cobalt Co., Ltd.
Parent company statement of changes in equity
(Expressed in Renminbi Yuan)

Year 2021

Items	Other equity instruments				Less: Treasury shares	Other comprehensive income	Special reserve	Surplus reserve	Undistributed profit	Total equity
	Share capital	Preferred shares	Perpetual bonds	Others						
I. Balance at the end of prior year	1,141,261,526.00				3,619,336,124.36	-35,896,425.00	6,938,266.87	223,433,020.86	1,566,813,803.32	6,521,886,316.41
Add: Cumulative changes of accounting policies										
Error correction of prior period										
Others										
II. Balance at the beginning of current year	1,141,261,526.00				3,619,336,124.36	-35,896,425.00	6,938,266.87	223,433,020.86	1,566,813,803.32	6,521,886,316.41
III. Current period increase (or less: decrease)	79,966,957.00				6,334,802,874.63	-4,103,575.00	-6,915,639.74	86,299,244.04	534,112,319.71	6,684,929,541.64
(I) Total comprehensive income						-4,103,575.00			862,992,440.35	858,888,865.35
(II) Capital contributed or withdrawn by owners	79,966,957.00				6,334,802,874.63	339,232,639.00				6,075,537,192.63
1. Ordinary shares contributed by owners	79,966,957.00				6,214,269,336.14	339,232,639.00				5,955,003,654.14
2. Capital contributed by holders of other equity instruments										
3. Amount of share-based payment included in equity					113,786,486.15					113,786,486.15
4. Others					6,747,052.34					6,747,052.34
(III) Profit distribution										
1. Appropriation of surplus reserve								86,299,244.04	-328,880,120.64	-242,580,876.60
2. Appropriation of profit to owners								86,299,244.04	-86,299,244.04	
3. Others										
(IV) Internal carry-over within equity										
1. Transfer of capital reserve to capital										
2. Transfer of surplus reserve to capital										
3. Surplus reserve to cover losses										
4. Changes in defined benefit plan carried over to retained earnings										
5. Other comprehensive income carried over to retained earnings										
6. Others										
(V) Special reserve										
1. Appropriation of current period										
2. Application of current period										
(VI) Others										
IV. Balance at the end of current period	1,221,228,483.00				9,954,138,998.99	-40,000,000.00	22,627.13	309,732,264.90	2,100,926,123.03	13,206,815,858.05

Legal representative:

Officer in charge of accounting:

Head of accounting department:

Zhejiang Huayou Cobalt Co., Ltd.
Parent company statement of changes in equity (continued)
(Expressed in Renminbi Yuan)

Items	Year 2020							Total equity		
	Other equity instruments			Less: Treasury shares	Other comprehensive income	Special reserve	Surplus reserve		Undistributed profit	
	Share capital	Preferred shares	Perpetual bonds							Others
I. Balance at the end of prior year	1,078,671,471.00			2,095,772,744.87		-28,688,489.24	16,516,515.70	187,336,331.51	1,241,943,599.16	4,591,552,173.00
Add: Cumulative changes of accounting policies										
Error correction of prior period										
Others										
II. Balance at the beginning of current year	1,078,671,471.00			2,095,772,744.87		-28,688,489.24	16,516,515.70	187,336,331.51	1,241,943,599.16	4,591,552,173.00
III. Current period increase (or less: decrease)	62,590,055.00			1,523,563,379.49		-7,207,935.76	-9,578,248.83	36,096,689.35	324,870,204.16	1,930,334,143.41
(I) Total comprehensive income	62,590,055.00			1,523,563,379.49		-7,207,935.76			360,966,893.51	353,738,937.75
(II) Capital contributed or withdrawn by owners	62,590,055.00			1,523,563,379.49						1,586,153,434.49
1. Ordinary shares contributed by owners	62,590,055.00			1,523,563,379.49						1,586,153,434.49
2. Capital contributed by holders of other equity instruments										
3. Amount of share-based payment included in equity										
4. Others										
(III) Profit distribution										
1. Appropriation of surplus reserve								36,096,689.35	-36,096,689.35	
2. Appropriation of profit to owners								36,096,689.35	-36,096,689.35	
3. Others										
(IV) Internal carry-over within equity										
1. Transfer of capital reserve to capital										
2. Transfer of surplus reserve to capital										
3. Surplus reserve to cover losses										
4. Changes in defined benefit plan carried over to retained earnings										
5. Other comprehensive income carried over to retained earnings										
6. Others										
(V) Special reserve										
1. Appropriation of current period										
2. Application of current period										
(VI) Others										
IV. Balance at the end of current period	1,141,261,526.00			3,619,336,124.36		-35,896,425.00	6,938,266.87	223,433,020.86	1,566,813,803.32	6,521,886,316.41

Legal representative:

Officer in charge of accounting:

Head of accounting department:

Zhejiang Huayou Cobalt Co., Ltd.
Parent company statement of changes in equity (continued)
(Expressed in Renminbi Yuan)

Year 2019

Items	Other equity instruments					Capital reserve	Less: Treasury shares	Other comprehensive income	Special reserve	Surplus reserve	Undistributed profit	Total equity
	Share capital	Preferred shares	Perpetual bonds	Others	Others							
I. Balance at the end of prior year	829,747,285.00				2,344,696,930.87			16,416,325.60	182,633,133.09	1,282,589,541.87	4,656,083,216.43	
Add: Cumulative changes of accounting policies								1,555,884.22		14,002,938.01	15,558,842.23	
Error correction of prior period												
Others												
II. Balance at the beginning of current year	829,747,285.00				2,344,696,930.87			16,416,325.60	184,189,017.31	1,296,592,499.88	4,671,642,058.66	
III. Current period increase (or less: decrease)	248,924,186.00				-248,924,186.00		-28,688,489.24	100,190.10	3,147,314.20	-54,648,900.72	-80,089,885.66	
(I) Total comprehensive income							-28,688,489.24			31,473,141.98	2,784,652.74	
(II) Capital contributed or withdrawn by owners												
1. Ordinary shares contributed by owners												
2. Capital contributed by holders of other equity instruments												
3. Amount of share-based payment included in equity												
4. Others												
(III) Profit distribution												
1. Appropriation of surplus reserve									3,147,314.20	-86,122,042.70	-82,974,728.50	
2. Appropriation of profit to owners									3,147,314.20	-3,147,314.20		
3. Others										-82,974,728.50	-82,974,728.50	
(IV) Internal carry-over within equity	248,924,186.00				-248,924,186.00							
1. Transfer of capital reserve to capital	248,924,186.00				-248,924,186.00							
2. Transfer of surplus reserve to capital												
3. Surplus reserve to cover losses												
4. Changes in defined benefit plan carried over to retained earnings												
5. Other comprehensive income carried over to retained earnings												
6. Others												
(V) Special reserve								100,190.10			100,190.10	
1. Appropriation of current period								11,349,206.64			11,349,206.64	
2. Application of current period								-11,249,016.54			-11,249,016.54	
(VI) Others												
IV. Balance at the end of current period	1,078,671,471.00				2,095,772,744.87		-28,688,489.24	16,516,515.70	187,336,331.51	1,241,943,599.16	4,591,552,173.00	

Legal representative:

Officer in charge of accounting:

Head of accounting department:

Zhejiang Huayou Cobalt Co., Ltd.
Notes to Financial Statements
For the years respectively ended December 31, 2019, 2020, and 2021

Monetary unit: RMB Yuan

I. Company profile

Zhejiang Huayou Cobalt Co., Ltd. (the “Company”) was established by Great Mountain Enterprise Pte. Ltd. (the “Great Mountain Company”), Huayou Holding Group Co., Ltd. (formerly known as Zhejiang Huayou Holding Group Co., Ltd., hereinafter referred to as “Huayou Holding”), etc. under the approval from the Ministry of Commerce of the People’s Republic of China. The Company was registered at Zhejiang Administration for Industry and Commerce on April 14, 2008 and headquartered in Jiaxing City, Zhejiang Province. The Company currently holds a business license with unified social credit code of 913300007368873961, with registered capital of 1,221,228,483.00 yuan, total share of 1,221,228,483 shares (each with par value of one yuan), of which, 10,466,957 shares are restricted outstanding A shares, and 1,210,761,526 shares are unrestricted outstanding A shares. The Company’s shares were listed on the Shanghai Stock Exchange on January 29, 2015.

The Company belongs to non-ferrous metal smelting and rolling processing industry and is mainly engaged in R&D, production and sales of cobalt, copper, nickel, ternary precursors, cathode materials and other products. The Company’s main products are cobalt products, copper products, nickel products, ternary precursors, cathode materials, etc.

The Company has brought subsidiaries including the first-tier subsidiaries Zhejiang Like Cobalt Nickel Co., Ltd. (the “Like Cobalt”), Zhejiang Huayou Import & Export Co., Ltd. (the “Huayou Import & Export”), Quzhou Huayou Cobalt New Material Co., Ltd. (the “Huayou Quzhou”), Huayou (Hong Kong) Co., Limited (the “Huayou Hong Kong”), Orient International Minerals & Resource (Proprietary) Limited (the “OIM Company”), Congo Dongfang International Mining SAS (the “CDM Company”), La Miniere de Kasombo SAS (the “MIKAS Company”), Sino-Congo Hiag Development SAS (the “SHAD Company”), Huayou International Mining (Hong Kong) Limited (the “Huayou Mining Hong Kong”), Huayou New Energy Technology (Quzhou) Co., Ltd. (the “New Energy Quzhou”), Zhejiang Huayou Recycling Technology Co., Ltd. (the “Huayou Recycling”), Zhejiang Huayou Power Technology Co., Ltd. (the “Huayou Power”), Zhejiang Huayou New Energy Technology Co., Ltd. (the “Huayou New Energy”), Zhejiang Youqing Trading Co., Ltd. (the “Youqing Trading”), Tongxiang Huashi Import & Export Co., Ltd. (the “Tongxiang Huashi”), Tongxiang Hua’ang Trading Co., Ltd. (the “Tongxiang Hua’ang”), Beijing Youhong Yongsheng Technology Co., Ltd. (the “Beijing Youhong”), Guangxi Huayou Engineering Project Management Co., Ltd. (the “Guangxi Huayou Engineering”), Huashan Import & Export (Tongxiang) Co., Ltd. (the “Tongxiang Huashan”), Beijing Huashan Yongsheng Technology Co., Ltd. (the “Beijing Huashan”), Huashan Import & Export (Wenzhou) Co., Ltd. (the “Wenzhou Huashan”), Huake Import & Export (Wenzhou) Co., Ltd. (the “Wenzhou Huake”), Guangxi B&M Science and Technology Co., Ltd. (the “Guangxi B&M”), Tianjin B&M Science and Technology Co., Ltd. (the “Tianjin B&M”), Huaxun Import & Export (Tongxiang) Co., Ltd. (the “Tongxiang Huaxun”), Guangxi Huayou New Material Co., Ltd. (the “Guangxi Huayou New Material”), Guangxi Huayou New Energy Technology Co., Ltd. (the “Guangxi Huayou New Energy”), Huawang Import & Export (Tongxiang) Co., Ltd. (the “Tongxiang Huawang”), and Hualing Import & Export (Tongxiang) Co., Ltd. (the “Tongxiang Hualing”), the second-tier subsidiaries Feza Mining SAS (the “Feza Mining”), Quzhou Huayou Resource Recycling Technology Co., Ltd. (the “Resource Recycling”), Huayou

International Recycling Resources Co., Ltd. (the “Huayou International Recycling”), Huayou America, Inc. (the “Huayou America”), Salta Exploraciones S.A. (the “SESA Company”), HANARI S.A. (the “HANARI Company”), Huayou Resources Pte. Ltd. (the “Huayou Singapore”), Shanghai FC Metal Materials Co., Ltd. (the “Shanghai FC”), Heishui Huayou Recycling Technology Co., Ltd. (the “Heishui Recycling”), Huajin New Energy Materials (Quzhou) Co., Ltd. (the “Huajin Company”), Zhejiang HUAYOU-POSCO New Energy Materials Co., Ltd. (the “HUAYOU-POSCO”), Quzhou Huahai New Energy Technology Co., Ltd. (the “Huahai New Energy”), Huaqing Cobalt & Nickel Co., Ltd. (the “Huaqing Cobalt & Nickel”), Huachuang International Investment Co., Ltd. (the “Huachuang International”), Huawei Nickel Resources Development Co., Ltd. (the “Huawei Nickel Resources”), Huawei Nickel Industry Co., Ltd. (the “Huawei Nickel Industry”), Huake Nickel Co., Ltd. (the “Huake Nickel”), Huayou International Cobalt (Hong Kong) Co., Ltd. (the “Huayou International Cobalt”), Huayuan Copper Co., Ltd. (the “Huayuan Copper”), Jiangsu Huayou Energy Technology Co., Ltd. (the “Jiangsu Huayou”), Huatuo International Development Pte. Ltd. (the “Huatuo International”), Chengdu B&M Science and Technology Co., Ltd. (the “Chengdu B&M”), Zhejiang B&M Science and Technology Co., Ltd. (the “Zhejiang B&M”), Guangxi Huayou Import & Export Co., Ltd. (the “Guangxi Huayou Import & Export”), Huaneng Asia International Co., Limited (the “Huaneng Asia International”), Huacai (Hong Kong) Limited (the “Huacai Hong Kong”), and Huayong International (Hong Kong) Limited (the “Huayong International”), the third-tier subsidiaries Huayou International (Holdings) Co., Ltd. (the “Huayou International Holdings”), Huayou International Recycling Resources Holding Co., Ltd. (the “International Recycling Holding”), Huayou International Resource Recycling Technology Holding Co., Ltd. (the “International Resource Recycling”), PT. Huayue Nickel Cobalt (the “Huayue Company”), PT. Huake Nickel Indonesia (the “Huake Indonesia”), Huatuo Cobalt Co., Ltd. (the “Huatuo Cobalt”), PT. Huashan Nickel Cobalt (the “Huashan Indonesia”), and Huayou Shixing (Beijing) New Energy Technology Co., Ltd. (the “Huayou Shixing”), and the fourth-tier subsidiary Town Mining Co., Ltd. (the “TMC Company”) into the consolidation scope. Please refer to section VI and VII of notes to the financial statements for details.

II. Preparation basis of the financial statements

(I) Preparation basis

The financial statements have been prepared on the basis of going concern.

(II) Assessment of the ability to continue as a going concern

The Company has no events or conditions that may cast significant doubts upon the Company’s ability to continue as a going concern within the 12 months after the balance sheet date.

III. Significant accounting policies and estimates

(I) Statement of compliance

The financial statements have been prepared in accordance with the requirements of China Accounting Standards for Business Enterprises (CASBEs), and present truly and completely the financial position, financial performance and cash flows of the Company.

(II) Accounting period

The accounting year of the Company runs from January 1 to December 31 under the Gregorian calendar. The accounting period of the financial information contained in the financial statements is from January 1, 2019 to December 31, 2021.

(III) Operating cycle

The Company has a relatively short operating cycle for its business, an asset or a liability is classified as current if it is expected to be realized or due within 12 months.

(IV) Functional currency

The functional currency of the Company and its domestic subsidiaries is Renminbi (RMB) Yuan, while the functional currency of subsidiaries engaged in overseas operations including Huayou Hong Kong, Huayou Singapore, CDM Company, MIKAS Company, Huayue Company and Huake Indonesia is the currency of the primary economic environment in which they operate.

(V) Accounting treatments of business combination under and not under common control

1. Accounting treatment of business combination under common control

Assets and liabilities arising from business combination are measured at carrying amount of the combined party included in the consolidated financial statements of the ultimate controlling party at the combination date. Difference between carrying amount of the equity of the combined party included in the consolidated financial statements of the ultimate controlling party and that of the combination consideration or total par value of shares issued is adjusted to capital reserve, if the balance of capital reserve is insufficient to offset, any excess is adjusted to retained earnings.

2. Accounting treatment of business combination not under common control

When combination cost is in excess of the fair value of identifiable net assets obtained from the acquiree at the acquisition date, the excess is recognized as goodwill; otherwise, the fair value of identifiable assets, liabilities and contingent liabilities, and the measurement of the combination cost are reviewed, then the difference is recognized in profit or loss.

(VI) Compilation method of consolidated financial statements

The parent company brings all its controlled subsidiaries into the consolidation scope. The consolidated financial statements are compiled by the parent company according to “CASBE 33—Consolidated Financial Statements”, based on relevant information and the financial statements of the parent company and its subsidiaries.

(VII) Classification of joint arrangements and accounting treatment of joint operations

1. Joint arrangements include joint operations and joint ventures.

2. When the Company is a joint operator of a joint operation, it recognizes the following items in relation to its interest in a joint operation:
 - (1) its assets, including its share of any assets held jointly;
 - (2) its liabilities, including its share of any liabilities incurred jointly;
 - (3) its revenue from the sale of its share of the output arising from the joint operation;
 - (4) its share of the revenue from the sale of the assets by the joint operation; and
 - (5) its expenses, including its share of any expenses incurred jointly.

(VIII) Recognition criteria of cash and cash equivalents

Cash as presented in cash flow statement refers to cash on hand and deposit on demand for payment. Cash equivalents refer to short-term, highly liquid investments that can be readily converted to cash and that are subject to an insignificant risk of changes in value.

(IX) Foreign currency translation

1. Translation of transactions denominated in foreign currency

Transactions denominated in foreign currency are translated into RMB yuan at the approximate exchange rate similar to the spot exchange rate at the transaction date at initial recognition. At the balance sheet date, monetary items denominated in foreign currency are translated at the spot exchange rate at the balance sheet date with difference, except for those arising from the principal and interest of exclusive borrowings eligible for capitalization, included in profit or loss; non-cash items carried at historical costs are translated at the approximate exchange rate similar to the spot exchange rate at the transaction date, with the RMB amounts unchanged; non-cash items carried at fair value in foreign currency are translated at the spot exchange rate at the date when the fair value was determined, with difference included in profit or loss or other comprehensive income.

2. Translation of financial statements measured in foreign currency

The assets and liabilities in the balance sheet are translated into RMB at the spot exchange rate at the balance sheet date; the equity items, other than undistributed profit, are translated at the spot exchange rate at the transaction date; the revenues and expenses in the income statement are translated into RMB at the approximate exchange rate similar to the spot exchange rate at the transaction date. The difference arising from the aforementioned foreign currency translation is included in other comprehensive income.

(X) Financial instruments

1. Classification of financial assets and financial liabilities

Financial assets are classified into the following three categories when initially recognized: (1) financial assets at amortized cost; (2) financial assets at fair value through other comprehensive income; (3) financial assets at fair value through profit or loss.

Financial liabilities are classified into the following four categories when initially recognized: (1) financial liabilities at fair value through profit or loss; (2) financial liabilities that arise when a transfer of a financial asset does not qualify for derecognition

or when the continuing involvement approach applies; (3) financial guarantee contracts not fall within the above categories (1) and (2), and commitments to provide a loan at a below-market interest rate, which do not fall within the above category (1); (4) financial liabilities at amortized cost.

2. *Recognition criteria, measurement method and derecognition condition of financial assets and financial liabilities*

(1) Recognition criteria and measurement method of financial assets and financial liabilities

When the Company becomes a party to a financial instrument, it is recognized as a financial asset or financial liability. The financial assets and financial liabilities initially recognized by the Company are measured at fair value; for the financial assets and liabilities at fair value through profit or loss, the transaction expenses thereof are directly included in profit or loss; for other categories of financial assets and financial liabilities, the transaction expenses thereof are included into the initially recognized amount. However, at initial recognition, for accounts receivable that do not contain a significant financing component or in circumstances where the Company does not consider the financing components in contracts within one year, the Company measures the transaction price in accordance with “CASBE 14—Revenues”.

(2) Subsequent measurement of financial assets

1) Financial assets measured at amortized cost

The Company measures its financial assets at the amortized costs using effective interest method. Gains or losses on financial assets that are measured at amortized cost and are not part of hedging relationships shall be included into profit or loss when the financial assets are derecognized, reclassified, amortized using effective interest method or recognized with impairment loss.

2) Debt instrument investments at fair value through other comprehensive income

The Company measures its debt instrument investments at fair value. Interests, impairment gains or losses, and gains and losses on foreign exchange that calculated using effective interest method shall be included into profit or loss, while other gains or losses are included into other comprehensive income. Accumulated gains or losses that initially recognized as other comprehensive income should be transferred out into profit or loss when the financial assets are derecognized.

3) Equity instrument investments at fair value through other comprehensive income

The Company measures its equity instrument investments at fair value. Dividends obtained (other than those as part of investment cost recovery) shall be included into profit or loss, while other gains or losses are included into other comprehensive income. Accumulated gains or losses that initially recognized as other comprehensive income should be transferred out into retained earnings when the financial assets are derecognized.

4) Financial assets at fair value through profit or loss

The Company measures its financial assets at fair value. Gains or losses arising from changes in fair value (including interests and dividends) shall be included into profit or loss, except for financial assets that are part of hedging relationships.

(3) Subsequent measurement of financial liabilities

1) Financial liabilities at fair value through profit or loss

Financial liabilities at fair value through profit or loss include held-for-trading financial liabilities (including derivatives that are liabilities) and financial liabilities designated as at fair value through profit or loss. The Company measures such kind of liabilities at fair value. The amount of changes in the fair value of the financial liabilities that are attributable to changes in the Company's own credit risk shall be included into other comprehensive income, unless such treatment would create or enlarge accounting mismatches in profit or loss. Other gains or losses on those financial liabilities (including interests, changes in fair value that are attributable to reasons other than changes in the Company's own credit risk) shall be included into profit or loss, except for financial liabilities that are part of hedging relationships. Accumulated gains or losses that originally recognized as other comprehensive income should be transferred out into retained earnings when the financial liabilities are derecognized.

2) Financial liabilities that arise when a transfer of a financial asset does not qualify for derecognition or when the continuing involvement approach applies

The Company measures its financial liabilities in accordance with "CASBE 23—Transfer of Financial Assets".

3) Financial guarantee contracts not fall within the above categories 1) and 2), and commitments to provide a loan at a below-market interest rate, which do not fall within the above category 1)

The Company measures its financial liabilities at the higher of: a. the amount of loss allowances in accordance with impairment requirements of financial instruments; b. the amount initially recognized less the amount of accumulated amortization recognized in accordance with "CASBE 14—Revenues".

4) Financial liabilities at amortized cost

The Company measures its financial liabilities at amortized cost using effective interest method. Gains or losses on financial liabilities that are measured at amortized cost and are not part of hedging relationships shall be included into profit or loss when the financial liabilities are derecognized and amortized using effective interest method.

(4) Derecognition of financial assets and financial liabilities

(1) Financial assets are derecognized when:

- a. the contractual rights to the cash flows from the financial assets expire; or
- b. the financial assets have been transferred and the transfer qualifies for derecognition in accordance with "CASBE 23—Transfer of Financial Assets".

- (2) Only when the underlying present obligations of a financial liability are relieved totally or partly may the financial liability be derecognized accordingly.

3. Recognition criteria and measurement method of financial assets transfer

Where the Company has transferred substantially all of the risks and rewards related to the ownership of the financial asset, it derecognizes the financial asset, and any right or liability arising from such transfer is recognized independently as an asset or a liability. If it retained substantially all of the risks and rewards related to the ownership of the financial asset, it continues recognizing the financial asset. Where the Company does not transfer or retain substantially all of the risks and rewards related to the ownership of a financial asset, it is dealt with according to the circumstances as follows respectively: (1) if the Company does not retain its control over the financial asset, it derecognizes the financial asset, and any right or liability arising from such transfer is recognized independently as an asset or a liability; (2) if the Company retains its control over the financial asset, according to the extent of its continuing involvement in the transferred financial asset, it recognizes the related financial asset and recognizes the relevant liability accordingly.

If the transfer of an entire financial asset satisfies the conditions for derecognition, the difference between the amounts of the following two items is included in profit or loss: (1) the carrying amount of the transferred financial asset as of the date of derecognition; (2) the sum of consideration received from the transfer of the financial asset, and the accumulative amount of the changes of the fair value originally included in other comprehensive income proportionate to the transferred financial asset (financial assets transferred refer to debt instrument investments at fair value through other comprehensive income). If the transfer of financial asset partially satisfies the conditions to derecognition, the entire carrying amount of the transferred financial asset is, between the portion which is derecognized and the portion which is not, apportioned according to their respective relative fair value, and the difference between the amounts of the following two items is included into profit or loss: (1) the carrying amount of the portion which is derecognized; (2) the sum of consideration of the portion which is derecognized, and the portion of the accumulative amount of the changes in the fair value originally included in other comprehensive income which is corresponding to the portion which is derecognized (financial assets transferred refer to debt instrument investments at fair value through other comprehensive income).

4. Fair value determination method of financial assets and liabilities

The Company uses valuation techniques that are appropriate in the circumstances and for which sufficient data and information are available to measure fair value. The inputs to valuation techniques used to measure fair value are arranged in the following hierarchy and used accordingly:

- (1) Level 1 inputs are unadjusted quoted prices in active markets for identical assets or liabilities that the Company can access at the measurement date;
- (2) Level 2 inputs are inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly. Level 2 inputs include: quoted prices for similar assets or liabilities in active markets; quoted prices for identical or similar assets or liabilities in markets that are not active; inputs other than quoted prices that are observable for the asset or liability, for example, interest rates and yield curves observable at commonly quoted intervals; market-corroborated inputs;

- (3) Level 3 inputs are unobservable inputs for the asset or liability. Level 3 inputs include interest rate that is not observable and cannot be corroborated by observable market data at commonly quoted intervals, historical volatility, future cash flows to be paid to fulfill the disposal obligation assumed in business combination, financial forecast developed using the Company's own data, etc.

5. *Impairment of financial instruments*

(1) Measurement and accounting treatment

The Company, on the basis of expected credit loss, recognizes loss allowances of financial assets at amortized cost, debt instrument investments at fair value through other comprehensive income, contract assets, leases receivable, loan commitments other than financial liabilities at fair value through profit or loss, financial guarantee contracts not belong to financial liabilities at fair value through profit or loss or financial liabilities that arise when a transfer of a financial asset does not qualify for derecognition or when the continuing involvement approach applies.

Expected credit losses refer to the weighted average of credit losses with the respective risks of a default occurring as the weights. Credit loss refers to the difference between all contractual cash flows that are due to the Company in accordance with the contract and all the cash flows that the Company expects to receive (i.e. all cash shortfalls), discounted at the original effective interest rate. Among which, purchased or originated credit-impaired financial assets are discounted at the credit-adjusted effective interest rate.

At the balance sheet date, the Company shall only recognize the cumulative changes in the lifetime expected credit losses since initial recognition as a loss allowance for purchased or originated credit-impaired financial assets.

For leases receivable, and accounts receivable and contract assets resulting from transactions regulated in "CASBE 14—Revenues", the Company chooses simplified approach to measure the loss allowance at an amount equal to lifetime expected credit losses.

For financial assets other than the above, on each balance sheet date, the Company shall assess whether the credit risk on the financial instrument has increased significantly since initial recognition. The Company shall measure the loss allowance for the financial instrument at an amount equal to the lifetime expected credit losses if the credit risk on that financial instrument has increased significantly since initial recognition; otherwise, the Company shall measure the loss allowance for that financial instrument at an amount equal to 12-month expected credit loss.

Considering reasonable and supportable forward-looking information, the Company compares the risk of a default occurring on the financial instrument as at the balance sheet date with the risk of a default occurring on the financial instrument as at the date of initial recognition, so as to assess whether the credit risk on the financial instrument has increased significantly since initial recognition.

The Company may assume that the credit risk on a financial instrument has not increased significantly since initial recognition if the financial instrument is determined to have relatively low credit risk at the balance sheet date.

The Company shall estimate expected credit risk and measure expected credit losses on an individual or a collective basis. When the Company adopts the collective basis, financial instruments are grouped with similar credit risk features.

The Company shall remeasure expected credit loss on each balance sheet date, and increased or reversed amounts of loss allowance arising therefrom shall be included into profit or loss as impairment losses or gains. For a financial asset measured at amortized cost, the loss allowance reduces the carrying amount of such financial asset presented in the balance sheet; for a debt investment measured at fair value through other comprehensive income, the loss allowance shall be recognized in other comprehensive income and shall not reduce the carrying amount of such financial asset.

- (2) Financial instruments with expected credit risk assessed on a collective basis and expected credit losses measured using three-stage model

<u>Items</u>	<u>Basis for determination of portfolio</u>	<u>Method for measuring expected credit loss</u>
Other receivables—Portfolio grouped with government funds receivable	Nature of receivables	Based on historical credit loss experience, the current situation and the forecast of future economic conditions, the Company calculates expected credit loss through exposure at default and 12-month or lifetime expected credit loss rate.
Other receivables—Portfolio grouped with balances due from related parties within the consolidation scope		
Other receivables—Portfolio grouped with interest receivable		
Other receivables—Portfolio grouped with dividend receivable		
Other receivables—Portfolio grouped with ages	Ages	

- (3) Accounts receivable and contract assets with expected credit losses measured using simplified approach on a collective basis

1) Specific portfolios and method for measuring expected credit loss

<u>Items</u>	<u>Basis for determination of portfolio</u>	<u>Method for measuring expected credit loss</u>
Bank acceptance receivable . . .	Type of notes	Based on historical credit loss experience, the current situation and the forecast of future economic conditions, the Company calculates expected credit loss through exposure at default and lifetime expected credit loss rate.
Trade acceptance receivable . . .		Based on historical credit loss experience, the current situation and the forecast of future economic conditions, the Company prepares the comparison table of ages and lifetime expected credit loss rate of notes receivable, so as to calculate expected credit loss.

<u>Items</u>	<u>Basis for determination of portfolio</u>	<u>Method for measuring expected credit loss</u>
Accounts receivable—Portfolio grouped with ages	Ages	Based on historical credit loss experience, the current situation and the forecast of future economic conditions, the Company prepares the comparison table of ages and lifetime expected credit loss rate of accounts receivable, so as to calculate expected credit loss.
Accounts receivable—Portfolio grouped with balances due from related parties within the consolidation scope	Nature of receivables	Based on historical credit loss experience, the current situation and the forecast of future economic conditions, the Company calculates expected credit loss through exposure at default and lifetime expected credit loss rate.

2) Accounts receivable—comparison table of ages and lifetime expected credit loss rate of portfolio grouped with ages

<u>Ages</u>	<u>Expected credit loss rate</u>
	(%)
Within 1 year (inclusive, the same hereinafter)	5.00
1-2 years	20.00
2-3 years	50.00
Over 3 years	100.00

In addition, as the age of portfolio grouped with trade acceptance receivable is all within one year, its expected credit loss rate is determined at 5%.

6. *Offsetting financial assets and financial liabilities*

Financial assets and financial liabilities are presented separately in the balance sheet and are not offset. However, the Company offsets a financial asset and a financial liability and presents the net amount in the balance sheet when, and only when, the Company: (1) currently has a legally enforceable right to set off the recognized amounts; and (2) intends either to settle on a net basis, or to realize the asset and settle the liability simultaneously.

For a transfer of a financial asset that does not qualify for derecognition, the Company does not offset the transferred asset and the associated liability.

(XI) Inventories

1. *Classification of inventories*

Inventories include finished goods or goods held for sale in the ordinary course of business, work in process in the process of production, materials or supplies, etc. to be consumed in the production process or in the rendering of services.

2. *Accounting method for dispatching inventories:*

Inventories dispatched from storage are accounted for with weighted moving average method.

3. *Basis for determining net realizable value*

At the balance sheet date, inventories are measured at the lower of cost and net realizable value; provisions for inventory write-down are made on the excess of its cost over the net realizable value. The net realizable value of inventories held for sale is determined based on the amount of the estimated selling price less the estimated selling expenses and relevant taxes and surcharges in the ordinary course of business; the net realizable value of materials to be processed is determined based on the amount of the estimated selling price less the estimated costs of completion, selling expenses and relevant taxes and surcharges in the ordinary course of business; at the balance sheet date, when only part of the same item of inventories have agreed price, their net realizable value are determined separately and are compared with their costs to set the provision for inventory write-down to be made or reversed.

4. *Inventory system*

Perpetual inventory method is adopted.

5. *Amortization method of low-value consumables and packages*

(1) Low-value consumables

Low-value consumables are amortized with one-off method.

(2) Packages

Packages are amortized with one-off method.

(XII) Contract costs

Assets related to contract costs including costs of obtaining a contract and costs to fulfil a contract.

The Company recognizes as an asset the incremental costs of obtaining a contract if those costs are expected to be recovered. The costs of obtaining a contract shall be included into profit or loss when incurred if the amortization period of the asset is one year or less.

If the costs incurred in fulfilling a contract are not within the scope of standards related to inventories, fixed assets or intangible assets, etc., the Company shall recognize the costs to fulfil a contract as an asset if all the following criteria are satisfied:

1. The costs relate directly to a contract or to an anticipated contract, including direct labor, direct materials, manufacturing overhead cost (or similar cost), cost that are explicitly chargeable to the customer under the contract, and other costs that are only related to the contract;
2. The costs enhance resources of the Company that will be used in satisfying performance obligations in the future; and

3. The costs are expected to be recovered.

An asset related to contract costs shall be amortized on a systematic basis that is consistent with related goods or services, with amortization included into profit or loss.

The Company shall make provision for impairment and recognize an impairment loss to the extent that the carrying amount of an asset related to contract costs exceeds the remaining amount of consideration that the Company expects to receive in exchange for the goods or services to which the asset relates less the costs expected to be incurred. The Company shall recognize a reversal of an impairment loss previously recognized in profit or loss when the impairment conditions no longer exist or have improved. The carrying amount of the asset after the reversal shall not exceed the amount that would have been determined on the reversal date if no provision for impairment had been made previously.

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

1. Classification of non-current assets or disposal groups held for sale

Non-current assets or disposal groups are accounted for as held for sale when the following conditions are all met: (1) the asset must be available for immediate sale in its present condition subject to terms that are usual and customary for sales of such assets or disposal groups; (2) its sales must be highly probable, i.e., the Company has made a decision on the sale plan and has obtained a firm purchase commitment, and the sale is expected to be completed within one year.

When the Company acquires a non-current asset or disposal group with a view to resale, it shall classify the non-current asset or disposal group as held for sale at the acquisition date only if the requirement of “expected to be completed within one year” is met at that date and it is highly probable that other criteria for held for sale will be met within a short period (usually within three months).

An asset or a disposal group is still accounted for as held for sale when the Company remains committed to its plan to sell the asset or disposal group in the circumstance that non-related party transactions fail to be completed within one year due to one of the following reasons: (1) a buyer or others unexpectedly set conditions that will extend the sale period, while the Company has taken timely actions to respond to the conditions and expects a favorable resolution of the delaying factors within one year since the setting; (2) a non-current asset or disposal group classified as held for sale fails to be sold within one year due to rare cases, and the Company has taken action necessary to respond to the circumstances during the initial one-year period and the criteria for held for sale are met.

2. Measurement of non-current assets or disposal groups held for sale

(1) Initial measurement and subsequent measurement

For initial measurement and subsequent measurement as at the balance sheet date of a non-current asset or disposal group held for sale, where the carrying amount is higher than the fair value less costs to sell, the carrying amount is written down to the fair value less costs to sell, and the write-down is recognized in profit or loss as assets impairment loss, meanwhile, provision for impairment of assets held for sale shall be made.

For a non-current asset or disposal group classified as held for sale at the acquisition date, the asset or disposal group is measured on initial recognition at the lower of its initial measurement amount had it not been so classified and fair value less costs to sell. Apart from the non-current asset or disposal group acquired through business combination, the difference arising from the initial recognition of a non-current asset or disposal group at the fair value less costs to sell shall be included into profit or loss.

The assets impairment loss recognized for a disposal group held for sale shall reduce the carrying amount of goodwill in the disposal group first, and then reduce its carrying amount based on the proportion of each non-current asset's carrying amount in the disposal group.

No provision for depreciation or amortization shall be made on non-current assets held for sale or non-current assets in disposal groups held for sale, while interest and other expenses attributable to the liabilities of a disposal group held for sale shall continue to be recognized.

(2) Reversal of assets impairment loss

When there is a subsequent increase in fair value less costs to sell of a non-current asset held for sale at the balance sheet date, the write-down shall be recovered, and shall be reversed not in excess of the impairment loss that has been recognized after the non-current asset was classified as held for sale. The reversal shall be included into profit or loss. Assets impairment loss that has been recognized before the classification is not reversed.

When there is a subsequent increase in fair value less costs to sell of a disposal group held for sale at the balance sheet date, the write-down shall be recovered, and shall be reversed not in excess of the non-current assets impairment loss that has been recognized after the disposal group was classified as held for sale. The reversal shall be included into profit or loss. The reduced carrying amount of goodwill and non-current assets impairment loss that has been recognized before the classification is not reversed.

For the subsequent reversal of the impairment loss that has been recognized in a disposal group held for sale, the carrying amount is increased based on the proportion of carrying amount of each non-current asset (excluding goodwill) in the disposal group.

(3) Non-current asset or disposal group that is no longer classified as held for sale and derecognized

A non-current asset or disposal group that does not meet criteria for held for sale and no longer classified as held for sale, or a non-current asset that removed from a disposal group held for sale shall be measured at the lower of: a. its carrying amount before it was classified as held for sale, adjusted for any depreciation, amortization or impairment that would have been recognized had it not been classified as held for sale; and b. its recoverable amount.

When a non-current asset or disposal group classified as held for sale is derecognized, unrecognized gains or losses shall be included into profit or loss.

(XIV) Long-term equity investments

1. Judgment of joint control and significant influence

Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require the unanimous consent of the parties sharing control. Significant influence is the power to participate in the financial and operating policy decisions of the investee but is not control or joint control of these policies.

2. *Determination of investment cost*

- (1) For business combination under common control, if the consideration of the combining party is that it makes payment in cash, transfers non-cash assets, assumes its liabilities or issues equity securities, on the date of combination, it regards the share of the carrying amount of the equity of the combined party included in the consolidated financial statements of the ultimate controlling party as the initial cost of the investment. The difference between the initial cost of the long-term equity investments and the carrying amount of the combination consideration paid or the par value of shares issued offsets capital reserve; if the balance of capital reserve is insufficient to offset, any excess is adjusted to retained earnings.

When long-term equity investments are obtained through business combination under common control achieved in stages, the Company determines whether it is a “bundled transaction”. If it is a “bundled transaction”, stages as a whole are considered as one transaction in accounting treatment. If it is not a “bundled transaction”, on the date of combination, investment cost is initially recognized at the share of the carrying amount of net assets of the combined party included in the consolidated financial statements of the ultimate controlling party. The difference between the initial investment cost of long-term equity investments at the acquisition date and the carrying amount of the previously held long-term equity investments plus the carrying amount of the consideration paid for the newly acquired equity is adjusted to capital reserve; if the balance of capital reserve is insufficient to offset, any excess is adjusted to retained earnings.

- (2) For business combination not under common control, investment cost is initially recognized at the acquisition-date fair value of considerations paid.

When long-term equity investments are obtained through business combination not under common control achieved in stages, the Company determined whether they are stand-alone financial statements or consolidated financial statements in accounting treatment:

- (1) In the case of stand-alone financial statements, investment cost is initially recognized at the carrying amount of the previously held long-term equity investments plus the carrying amount of the consideration paid for the newly acquired equity.
- (2) In the case of consolidated financial statements, the Company determines whether it is a “bundled transaction”. If it is a “bundled transaction”, stages as a whole are considered as one transaction in accounting treatment. If it is not a “bundled transaction”, the carrying amount of the acquirer’s previously held equity interest in the acquiree is remeasured at the acquisition-date fair value, and the difference between the fair value and the carrying amount is recognized in investment income; when the acquirer’s previously held equity interest in the acquiree involves other comprehensive income under equity method, the related other comprehensive income is reclassified as income for the acquisition period, excluding other comprehensive income arising from changes in net liabilities or assets from remeasurement of defined benefit plan of the acquiree.
- (3) Long-term equity investments obtained through ways other than business combination: the initial cost of a long-term equity investment obtained by making payment in cash is the purchase cost which is actually paid; that obtained on the basis of issuing equity securities is the fair value of the equity securities issued; that obtained through debt restructuring is determined according to “CASBE 12—Debt Restructuring”; and that obtained through non-cash assets exchange is determined according to “CASBE 7—Non-cash Assets Exchange”.

3. *Subsequent measurement and recognition method of profit or loss*

For a long-term equity investment with control relationship, it is accounted for with cost method; for a long-term equity investment with joint control or significant influence relationship, it is accounted for with equity method.

4. *Disposal of a subsidiary in stages resulting in the Company's loss of control*

(1) Stand-alone financial statements

The difference between the carrying amount of the disposed equity and the consideration obtained thereof is recognized in profit or loss. If the disposal does not result in the Company's loss of significant influence or joint control, the remained equity is accounted for with equity method; however, if the disposal results in the Company's loss of control, joint control, or significant influence, the remained equity is accounted for according to "CASBE 22—Financial Instruments: Recognition and Measurement".

(2) Consolidated financial statements

1) Disposal of a subsidiary in stages not qualified as "bundled transaction" resulting in the Company's loss of control

Before the Company's loss of control, the difference between the disposal consideration and the proportionate share of net assets in the disposed subsidiary from acquisition date or combination date to the disposal date is adjusted to capital reserve (capital premium), if the balance of capital reserve is insufficient to offset, any excess is adjusted to retained earnings.

When the Company loses control, the remained equity is remeasured at the loss-of-control-date fair value. The aggregated value of disposal consideration and the fair value of the remained equity, less the share of net assets in the disposed subsidiary held before the disposal from the acquisition date or combination date to the disposal date is recognized in investment income in the period when the Company loses control over such subsidiary, and meanwhile goodwill is offset correspondingly. Other comprehensive income related to equity investments in former subsidiary is reclassified as investment income upon the Company's loss of control.

2) Disposal of a subsidiary in stages qualified as "bundled transaction" resulting in the Company's loss of control

In case of "bundled transaction", stages as a whole are considered as one transaction resulting in loss of control in accounting treatment. However, before the Company loses control, the difference between the disposal consideration at each stage and the proportionate share of net assets in the disposed subsidiary is recognized as other comprehensive income at the consolidated financial statements and reclassified as profit or loss in the period when the Company loses control over such subsidiary.

(XV) ***Fixed assets***

1. *Recognition principles of fixed assets*

Fixed assets are tangible assets held for use in the production of goods or rendering of services, for rental to others, or for administrative purposes, and expected to be used during more than one accounting year. Fixed assets are recognized if, and only if, it is probable that future economic benefits associated with the assets will flow to the Company and the cost of the assets can be measured reliably.

2. *Depreciation method of different categories of fixed assets*

Categories	Depreciation method	Useful life (years)	Residual value proportion (%)	Annual depreciation rate (%)
Buildings and structures.	Straight-line method	10-35	5-10	9.50-2.57
Machinery.	Straight-line method	5-15	5-10	19.00-6.00
Transport facilities.	Straight-line method	5-10	5-10	19.00-9.00
Other equipment	Straight-line method	5-10	5-10	19.00-9.00

(XVI) Construction in progress

1. Construction in progress is recognized if, and only if, it is probable that future economic benefits associated with the item will flow to the Company, and the cost of the item can be measured reliably. Construction in progress is measured at the actual cost incurred to reach its designed usable conditions.
2. Construction in progress is transferred into fixed assets at its actual cost when it reaches the designed usable conditions. When the auditing of the construction in progress was not finished while reaching the designed usable conditions, it is transferred to fixed assets using estimated value first, and then adjusted accordingly when the actual cost is settled, but the accumulated depreciation is not to be adjusted retrospectively.

(XVII) Borrowing costs

1. *Recognition principle of borrowing costs capitalization*

Where the borrowing costs incurred to the Company can be directly attributable to the acquisition and construction or production of assets eligible for capitalization, it is capitalized and included in the costs of relevant assets; other borrowing costs are recognized as expenses on the basis of the actual amount incurred, and are included in profit or loss.

2. *Borrowing costs capitalization period*

- (1) The borrowing costs are not capitalized unless the following requirements are all met: 1) the asset disbursements have already incurred; 2) the borrowing costs have already incurred; and 3) the acquisition and construction or production activities which are necessary to prepare the asset for its intended use or sale have already started.
- (2) Suspension of capitalization: where the acquisition and construction or production of a qualified asset is interrupted abnormally and the interruption period lasts for more than 3 months, the capitalization of the borrowing costs is suspended; the borrowing costs incurred during such period are recognized as expenses, and are included in profit or loss, till the acquisition and construction or production of the asset restarts.
- (3) Ceasing of capitalization: when the qualified asset under acquisition and construction or production is ready for the intended use or sale, the capitalization of the borrowing costs is ceased.

3. Capitalization rate and capitalized amount of borrowing costs

For borrowings exclusively for the acquisition and construction or production of assets eligible for capitalization, the to-be-capitalized amount of interests is determined in light of the actual interest expenses incurred (including amortization of premium or discount based on effective interest method) of the special borrowings in the current period less the interest income on the unused borrowings as a deposit in the bank or as a temporary investment; where a general borrowing is used for the acquisition and construction or production of assets eligible for capitalization, the Company calculates and determines the to-be-capitalized amount of interests on the general borrowing by multiplying the weighted average asset disbursement of the part of the accumulative asset disbursements less the general borrowing by the capitalization rate of the general borrowing used.

(XVIII) Intangible assets

1. Intangible assets include land use right, mining right, software, pollution discharging right, patent right and software copyright. The initial measurement of intangible assets is based on its cost.
2. For intangible assets with finite useful lives, their amortization amounts are amortized within their useful lives systematically and reasonably, if it is unable to determine the expected realization pattern reliably, intangible assets are amortized by the straight-line method.

Mining right is amortized using the units-of-production method, while other intangible assets are amortized using the straight-line method with details as follows:

Items	Amortization period (years)
Land use right	25-99
Software	2-10
Pollution discharging right	5-20
Patent right and software copyright	8-10

3. Expenditures on the research phase of an internal project are recognized as profit or loss when they are incurred. An intangible asset arising from the development phase of an internal project is recognized if the Company can demonstrate all of the followings: (1) the technical feasibility of completing the intangible asset so that it will be available for use or sale; (2) its intention to complete the intangible asset and use or sell it; (3) how the intangible asset will generate probable future economic benefits, among other things, the Company can demonstrate the existence of a market for the output of the intangible asset or the intangible asset itself or, if it is to be used internally, the usefulness of the intangible asset; (4) the availability of adequate technical, financial and other resources to complete the development and to use or sell the intangible asset; and (5) its ability to measure reliably the expenditure attributable to the intangible asset during its development.

Criteria for distinguishing the research phase from the development phase of an internal project to create an intangible asset: the planned investigation phase for acquiring new technology and knowledge should be defined as the research phase, which has the characteristics of planning and exploratory nature; before commercial production or use, when the research results or other knowledge are applied to a certain plan or design with the intention to produce new or substantially improved materials, devices, products, etc., such stage should be determined as the development phase, which has the characteristics of pertinence and greater possibility of forming results.

(XIX) Exploration expenditures

Exploration expenditures include the cost of acquiring rights to explore and all costs and expenses incurred in the course of geological exploration. The exploration process includes reconnaissance survey, preliminary prospecting, preliminary exploration, detailed exploration, etc., of which, the exploration expenditures incurred in preliminary exploration and detailed exploration are capitalized and included in other non-current assets. When the exploration is completed and there is a reasonable basis to determine that geological results are generated from the exploration and the mining right certificate is obtained, the balance of other non-current assets is transferred to intangible assets; when the geological results cannot be generated, the balance will be fully included in profit or loss.

(XX) Impairment of part of long-term assets

For long-term assets such as long-term equity investments, fixed assets, construction in progress, right-of-use assets, intangible assets with finite useful lives, etc., if at the balance sheet date there is indication of impairment, the recoverable amount is to be estimated. For goodwill recognized in business combination and intangible assets with indefinite useful lives, no matter whether there is indication of impairment, impairment test is performed annually. Impairment test on goodwill is performed on related asset group or asset group portfolio.

When the recoverable amount of such long-term assets is lower than their carrying amount, the difference is recognized as provision for assets impairment through profit or loss.

(XXI) Long-term prepayments

Long-term prepayments are expenses that have been recognized but with amortization period over one year (excluding one year). They are recorded with actual cost, and evenly amortized within the beneficiary period or stipulated period. If items of long-term prepayments fail to be beneficial to the following accounting periods, residual values of such items are included in profit or loss.

(XXII) Employee benefits

1. Employee benefits include short-term employee benefits, post-employment benefits, termination benefits and other long-term employee benefits.
2. *Short-term employee benefits*

The Company recognizes, in the accounting period in which an employee provides service, short-term employee benefits actually incurred as liabilities, with a corresponding charge to profit or loss or the cost of a relevant asset.

3. *Post-employment benefits*

The Company classifies post-employment benefit plans as either defined contribution plans or defined benefit plans.

- (1) The Company recognizes in the accounting period in which an employee provides service the contribution payable to a defined contribution plan as a liability, with a corresponding charge to profit or loss or the cost of a relevant asset.

- (2) Accounting treatment by the Company for defined benefit plan usually involves the following steps:
 - (1) In accordance with the projected unit credit method, using unbiased and mutually compatible actuarial assumptions to estimate related demographic variables and financial variables, measure the obligations under the defined benefit plan, and determine the periods to which the obligations are attributed. Meanwhile, the Company discounts obligations under the defined benefit plan to determine the present value of the defined benefit plan obligations and the current service cost;
 - (2) When a defined benefit plan has assets, the Company recognizes the deficit or surplus by deducting the fair value of defined benefit plan assets from the present value of the defined benefit plan obligation as a net defined benefit plan liability or net defined benefit plan asset. When a defined benefit plan has a surplus, the Company measures the net defined benefit plan asset at the lower of the surplus in the defined benefit plan and the asset ceiling;
 - (3) At the end of the period, the Company recognizes the following components of employee benefits cost arising from defined benefit plan: a. service cost; b. net interest on the net defined benefit plan liability (asset); and c. changes as a result of remeasurement of the net defined benefit liability (asset). Item a and item b are recognized in profit or loss or the cost of a relevant asset. Item c is recognized in other comprehensive income and is not to be reclassified subsequently to profit or loss. However, the Company may transfer those amounts recognized in other comprehensive income within equity.

4. Termination benefits

Termination benefits provided to employees are recognized as an employee benefit liability for termination benefits, with a corresponding charge to profit or loss at the earlier of the following dates: (1) when the Company cannot unilaterally withdraw the offer of termination benefits because of an employment termination plan or a curtailment proposal; or (2) when the Company recognizes cost or expenses related to a restructuring that involves the payment of termination benefits.

5. Other long-term employee benefits

When other long-term employee benefits provided to the employees satisfied the conditions for classifying as a defined contribution plan, those benefits are accounted for in accordance with the requirements relating to defined contribution plan, while other benefits are accounted for in accordance with the requirements relating to defined benefit plan. The Company recognizes the cost of employee benefits arising from other long-term employee benefits as the followings: (1) service cost; (2) net interest on the net liability or net assets of other long-term employee benefits; and (3) changes as a result of remeasurement of the net liability or net assets of other long-term employee benefits. As a practical expedient, the net total of the aforesaid amounts is recognized in profit or loss or included in the cost of a relevant asset.

(XXIII) Provisions

1. Provisions are recognized when fulfilling the present obligations arising from contingencies such as providing guarantee for other parties, litigation, products quality guarantee, onerous contract, etc., may cause the outflow of the economic benefit and such obligations can be reliably measured.

2. The initial measurement of provisions is based on the best estimated expenditures required in fulfilling the present obligations, and its carrying amount is reviewed at the balance sheet date.

(XXIV) Share-based payment

1. Types of share-based payment

Share-based payment consists of equity-settled share-based payment and cash-settled share-based payment.

2. Accounting treatment for settlements, modifications and cancellations of share-based payment plans

(1) Equity-settled share-based payment

For equity-settled share-based payment transaction with employees, if the equity instruments granted vest immediately, the fair value of those equity instruments is measured at grant date and recognized as transaction cost or expense, with a corresponding adjustment in capital reserve; if the equity instruments granted do not vest until the counterparty completes a specified period of service, at the balance sheet date within the vesting period, the fair value of those equity instruments measured at grant date based on the best estimate of the number of equity instruments expected to vest is recognized as transaction cost or expense, with a corresponding adjustment in capital reserve.

For equity-settled share-based payment transaction with parties other than employees, if the fair value of the services received can be measured reliably, the fair value is measured at the date the Company receives the service; if the fair value of the services received cannot be measured reliably, but that of equity instruments can be measured reliably, the fair value of the equity instruments granted measured at the date the Company receives the service is referred to, and recognized as transaction cost or expense, with a corresponding increase in equity.

(2) Cash-settled share-based payment

For cash-settled share-based payment transactions with employees, if share appreciation rights vest immediately, the fair value of the liability incurred as the acquisition of services is measured at grant date and recognized as transaction cost or expense, with a corresponding increase in liabilities; if share appreciation rights do not vest until the employees have completed a specified period of service, the liability is measured, at each balance sheet date until settled, at the fair value of the share appreciation rights measured at grant date based on the best estimate of the number of share appreciation right expected to vest.

(3) Modifications and cancellations of share-based payment plan

If the modification increases the fair value of the equity instruments granted, the Company includes the incremental fair value granted in the measurement of the amount recognized for services received as consideration for the equity instruments granted; similarly, if the modification increases the number of equity instruments granted, the Company includes the fair value of the additional equity instruments granted, in the measurement of the amount recognized for services received as consideration for the equity instruments granted; if the Company modifies the vesting conditions in a manner that is beneficial to the employee, the Company takes the modified vesting conditions into account.

If the modification reduces the fair value of the equity instruments granted, the Company does not take into account that decrease in fair value and continue to measure the amount recognized for services received as consideration for the equity instruments based on the grant date fair value of the equity instruments granted; if the modification reduces the number of equity instruments granted to an employee, that reduction is accounted for as a cancellation of that portion of the grant; if the Company modifies the vesting conditions in a manner that is not beneficial to the employee, the Company does not take the modified vesting conditions into account.

If the Company cancels or settles a grant of equity instruments during the vesting period (other than that cancelled when the vesting conditions are not satisfied), the Company accounts for the cancellation or settlement as an acceleration of vesting, and therefore recognizes immediately the amount that otherwise would have been recognized for services received over the remainder of the vesting period.

(XXV) Revenue

1. Year 2020 to Year 2021

(1) Revenue recognition principles

At contract inception, the Company shall assess the contracts and shall identify each performance obligation in the contracts, and determine whether the performance obligation should be satisfied over time or at a point in time.

The Company satisfies a performance obligation over time if one of the following criteria is met, otherwise, the performance obligation is satisfied at a point in time: 1) the customer simultaneously receives and consumes the economic benefits provided by the Company's performance as the Company performs; 2) the customer can control goods as they are created by the Company's performance; 3) goods created during the Company's performance have irreplaceable uses and the Company has an enforceable right to the payments for performance completed to date during the whole contract period.

For each performance obligation satisfied over time, the Company shall recognize revenue over time by measuring the progress towards complete satisfaction of that performance obligation. In the circumstance that the progress cannot be measured reasonably, but the costs incurred in satisfying the performance obligation are expected to be recovered, the Company shall recognize revenue only to the extent of the costs incurred until it can reasonably measure the progress. For each performance obligation satisfied at a point in time, the Company shall recognize revenue at the time point that the customer obtains control of relevant goods or services. To determine whether the customer has obtained control of goods, the Company shall consider the following indications: 1) the Company has a present right to payments for the goods, i.e., the customer is presently obliged to pay for the goods; 2) the Company has transferred the legal title of the goods to the customer, i.e., the customer has legal title to the goods; 3) the Company has transferred physical possession of the goods to the customer, i.e., the customer has physically possessed the goods; 4) the Company has transferred significant risks and rewards of ownership of the goods to the customer, i.e., the customer has obtained significant risks and rewards of ownership of the goods; 5) the customer has accepted the goods; 6) other evidence indicating the customer has obtained control over the goods.

(2) Revenue measurement principle

- (1) Revenue is measured at the amount of the transaction price that is allocated to each performance obligation. The transaction price is the amount of consideration to which the Company expects to be entitled in exchange for transferring goods or services to a customer, excluding amounts collected on behalf of third parties and those expected to be refunded to the customer.
- (2) If the consideration promised in a contract includes a variable amount, the Company shall confirm the best estimate of variable consideration at expected value or the most likely amount. However, the transaction price that includes the amount of variable consideration only to the extent that it is high probable that a significant reversal in the amount of cumulative revenue recognized will not occur when the uncertainty associated with the variable consideration is subsequently resolved.
- (3) In the circumstance that the contract contains a significant financing component, the Company shall determine the transaction price based on the price that a customer would have paid for if the customer had paid cash for obtaining control over those goods or services. The difference between the transaction price and the amount of promised consideration is amortized under effective interest method over contractual period. The effects of a significant financing component shall not be considered if the Company expects, at the contract inception, that the period between when the customer obtains control over goods or services and when the customer pays consideration will be one year or less.
- (4) For contracts containing two or more performance obligations, the Company shall determine the stand-alone selling price at contract inception of the distinct good underlying each performance obligation and allocate the transaction price to each performance obligation on a relative stand-alone selling price basis.

(3) Revenue recognition method

The Company is mainly engaged in sales of cobalt products, copper products, nickel products, ternary precursors, cathode materials, etc., which are performance obligations satisfied at a point in time.

Revenue from domestic sales is recognized when the Company has delivered goods to the designated address as agreed by contract and such delivered goods have been verified for acceptance by customers, and the Company has collected the payments or has obtained the right to the payments, and related economic benefits are highly probable to flow to the Company.

Revenue from overseas sales is recognized when the Company has declared goods to the customs based on contractual agreements and has obtained a bill of lading, and the Company has collected the payments or has obtained the right to the payments, and related economic benefits are highly probable to flow to the Company.

2. *Year 2019*

(1) Revenue recognition principles

1) Sale of goods

Revenue from sale of goods is recognized if, and only if, the following conditions are all satisfied: a. significant risks and rewards of ownership of the goods is transferred to the buyer; b. the Company retains neither continuing managerial involvement of ownership nor effective control over the goods sold; c. the amount of revenue can be measured reliably; d. it is probable that the economic benefits of the transaction will flow to the Company; and e. the costs of the transaction incurred and to be incurred can be measured reliably.

2) Rendering of services

When the outcome of the transaction can be estimated reliably (the amount of revenue can be measured reliably, it is probable that the economic benefits will flow to the Company, the percentage of completion of the transaction can be determined reliably, and the costs of the transaction incurred and to be incurred can be measured reliably), revenue from rendering of services is recognized using the percentage of completion method, and the stage of completion is determined at the proportion of costs incurred to the estimated total costs. When the outcome of the transaction cannot be estimated reliably at the balance sheet date, revenue is recognized based on the amount of the costs incurred and the costs incurred are charged off at the same amount when the costs incurred are expected to be recoverable; and no revenue is recognized and the costs incurred are charged off as an expense of the period when the costs incurred are not expected to be recovered.

3) Revenue arising from use by others of assets

Revenue arising from use by others of assets is recognized if, and only if, it is probable that economic benefits associated with the transaction will flow to the Company and the amount of the revenue can be measured reliably. Interest income is recognized based on the length of time for which the Company's cash is used by others and the effective interest rate; and royalties are recognized according to the period and method of charging as specified in relevant contract or agreement.

(2) Revenue recognition method

The Company is mainly engaged in sales of cobalt products, copper products, nickel products, ternary precursors, etc.

Revenue from domestic sales is recognized if, and only if, the following conditions are all met: the Company has delivered goods to the purchaser based on contractual agreements; sales revenue is determined; goods payment has been collected or the Company has obtained receipts invoices and it is probable that economic benefits associated with the transaction will flow to the Company; and the costs of the transaction incurred and to be incurred can be measured reliably.

Revenue from overseas sales is recognized if, and only if, the Company has declared goods to the customs based on contractual agreements; the Company has obtained a bill of lading; sales revenue is determined; goods payment has been collected or the Company has obtained receipts invoices and it is probable that economic benefits associated with the transaction will flow to the Company; and the costs of the transaction incurred and to be incurred can be measured reliably.

(XXVI) *Government grants*

1. Government grants shall be recognized if, and only if, the following conditions are all met: (1) the Company will comply with the conditions attaching to the grants; (2) the grants will be received. Monetary government grants are measured at the amount received or receivable. Non-monetary government grants are measured at fair value, and can be measured at nominal amount in the circumstance that fair value cannot be assessed.

2. *Government grants related to assets*

Government grants related to assets are government grants with which the Company purchases, constructs or otherwise acquires long-term assets under requirements of government. In the circumstances that there is no specific government requirement, the Company shall determine based on the primary condition to acquire the grants, and government grants related to assets are government grants whose primary condition is to construct or otherwise acquire long-term assets. They offset carrying amount of relevant assets, or they are recognized as deferred income. If recognized as deferred income, they are included in profit or loss on a systematic basis over the useful lives of the relevant assets. Those measured at notional amount are directly included into profit or loss. For assets sold, transferred, disposed or damaged within the useful lives, balance of unamortized deferred income is transferred into profit or loss of the period in which the disposal occurred.

3. *Government grants related to income*

Government grants related to income are government grants other than those related to assets. For government grants that contain both parts related to assets and parts related to income, in which those two parts are blurred, they are thus collectively classified as government grants related to income. For government grants related to income used for compensating the related future cost, expenses or losses, they are recognized as deferred income and included in profit or loss or used to offset relevant cost during the period in which the relevant cost, expenses or losses are recognized; for government grants related to income used for compensating the related cost, expenses or losses incurred to the Company, they are directly included in profit or loss or used to offset relevant cost.

4. Government grants related to the ordinary course of business shall be included into other income or used to offset relevant cost based on business nature, while those not related to the ordinary course of business shall be included into non-operating revenue or expenditures.

5. *Policy interest subvention*

(1) In the circumstance that government appropriates interest subvention to lending bank, who provides loans for the Company with a policy subsidised interest rate, borrowings are carried at the amount received, with relevant borrowings cost computed based on the principal and the policy subsidised interest rate.

(2) In the circumstance that government directly appropriates interest subvention to the Company, the subsidised interest shall offset relevant borrowing cost.

(XXVII) Contract assets, contract liabilities

The Company presents contract assets or contract liabilities in the balance sheet based on the relationship between its performance obligations and customers' payments. Contract assets and contract liabilities under the same contract shall offset each other and be presented on a net basis.

The Company presents an unconditional right to consideration (i.e., only the passage of time is required before the consideration is due) as a receivable, and presents a right to consideration in exchange for goods that it has transferred to a customer (which is conditional on something other than the passage of time) as a contract asset.

The Company presents an obligation to transfer goods to a customer for which the Company has received consideration (or the amount is due) from the customer as a contract liability.

(XXVIII) Deferred tax assets/Deferred tax liabilities

1. Deferred tax assets or deferred tax liabilities are calculated and recognized based on the difference between the carrying amount and tax base of assets and liabilities (and the difference of the carrying amount and tax base of items not recognized as assets and liabilities but with their tax base being able to be determined according to tax laws) and in accordance with the tax rate applicable to the period during which the assets are expected to be recovered or the liabilities are expected to be settled.
2. A deferred tax asset is recognized to the extent of the amount of the taxable income, which is most likely to obtain and which can be deducted from the deductible temporary difference. At the balance sheet date, if there is any exact evidence that it is probable that future taxable income will be available against which deductible temporary differences can be utilized, the deferred tax assets unrecognized in prior periods are recognized.
3. At the balance sheet date, the carrying amount of deferred tax assets is reviewed. The carrying amount of a deferred tax asset is reduced to the extent that it is no longer probable that sufficient taxable income will be available to allow the benefit of the deferred tax asset to be utilized. Such reduction is subsequently reversed to the extent that it becomes probable that sufficient taxable income will be available.
4. The income tax and deferred tax for the period are treated as income tax expenses or income through profit or loss, excluding those arising from the following circumstances: (1) business combination; and (2) the transactions or items directly recognized in equity.

(XXIX) Leases

1. Year 2021

- (1) The Company as lessee

At the commencement date, the Company recognizes a lease that has a lease term of 12 months or less as a short-term lease, which shall not contain a purchase option; the Company recognizes a lease as a lease of a low-value asset if the underlying asset is of low value when it is new. If the Company subleases an asset, or expects to sublease an asset, the head lease does not qualify as a lease of a low-value asset.

For all short-term leases and leases of low-value assets, lease payments are recognized as cost or profit or loss with straight-line method over the lease term.

Apart from the above-mentioned short-term leases and leases of low-value assets with simplified approach, the Company recognizes right-of-use assets and lease liabilities at the commencement date.

1) Right-of-use assets

The right-of-use asset is measured at cost and the cost shall comprise: a. the amount of the initial measurement of the lease liabilities; b. any lease payments made at or before the commencement date, less any lease incentives received; c. any initial direct costs incurred by the lessee; and d. an estimate of costs to be incurred by the lessee in dismantling and removing the underlying asset, restoring the site on which it is located or restoring the underlying asset to the condition required by the terms and conditions of the lease.

The Company depreciates the right-of-use asset using the straight-line method. If it is reasonable to be certain that the ownership of the underlying asset can be acquired by the end of the lease term, the Company depreciates the right-of-use asset from the commencement date to the end of the useful life of the underlying asset. Otherwise, the Company depreciates the right-of-use asset from the commencement date to the earlier of the end of the useful life of the right-of-use asset or the end of the lease term.

2) Lease liabilities

At the commencement date, the Company measures the lease liabilities at the present value of the lease payments that are not paid at that date, discounted using the interest rate implicit in the lease. If that rate cannot be readily determined, the Company's incremental borrowing rate shall be used. Unrecognized financing expenses, calculated at the difference between the lease payment and its present value, are recognized as interest expenses over the lease term using the discount rate which has been used to determine the present value of lease payment and included in profit or loss. Variable lease payments not included in the measurement of lease liabilities are included in profit or loss in the periods in which they are incurred.

After the commencement date, if there is a change in the following items: (a) actual fixed payments; (b) amounts expected to be payable under residual value guarantees; (c) an index or a rate used to determine lease payments; (d) assessment result or exercise of purchase option, extension option or termination option., the Company remeasures the lease liabilities based on the present value of lease payments after changes, and adjusts the carrying amount of the right-of-use asset accordingly. If the carrying amount of the right-of-use asset is reduced to zero but there shall be a further reduction in the lease liabilities, the remaining amount shall be recognized into profit or loss.

(2) The Company as lessor

At the commencement date, the Company classifies a lease as a finance lease if it transfers substantially all the risks and rewards incidental to ownership of an underlying asset. Otherwise, it is classified as an operating lease.

1) Operating lease

Lease receipts are recognized as lease income with straight-line method over the lease term. Initial direct costs incurred shall be capitalized, amortized on the same basis as the recognition of lease income, and included into profit or loss by installments. Variable lease payments related to operating lease which are not included in the lease payment are charged as profit or loss in the periods in which they are incurred.

2) Finance lease

At the commencement date, the Company recognizes the finance lease payment receivable based on the net investment in the lease (sum of the present value of unguaranteed residual value and lease receipts that are not received at the commencement date, discounted by the interest rate implicit in the lease), and derecognizes assets held under the finance lease. The Company calculates and recognizes interest income using the interest rate implicit in the lease over the lease term.

Variable lease payments not included in the measurement of the net investment in the lease are charged as profit or loss in the periods in which they are incurred.

(3) Sale and leaseback

1) The Company as the lessee

In accordance with the “CASBE 14—Revenues”, the Company would assess and determine whether the transfer of an asset in the sale and leaseback transaction is accounted for as a sale of that asset.

If the transfer of an asset is accounted for as a sale of the asset, the Company measures the right-of-use asset arising from the leaseback at the proportion of the original carrying amount of the asset that relates to the right of use retained by the Company. Accordingly, the Company recognizes only the amount of any gain or loss that relates to the rights transferred to the lessor.

Otherwise, the Company continues the recognition of the transferred assets, and recognizes a financial liability equal to the amount of transfer income in accordance with the “CASBE 22—Financial Instruments: Recognition and Measurement” at the same time.

2) The Company as the lessor

In accordance with the “CASBE 14—Revenues”, the Company would assess and determine whether the transfer of an asset in the sale and leaseback transaction is accounted for as a sale of that asset.

If the transfer of an asset is accounted for as a sale of the asset, the Company accounts for the purchase of assets in accordance with other applicable standards, and accounts for the lease of assets in accordance with the “CASBE 21—Leases”.

Otherwise, the Company does not recognize the transferred asset, but recognizes a financial asset equal to the amount of transfer income in accordance with the “CASBE 22—Financial Instruments: Recognition and Measurement”.

2. Year 2019 to Year 2020

(1) Operating leases

When the Company is the lessee, lease payments are recognized as cost or profit or loss with straight-line method over the lease term. Initial expenses are recognized directly into profit or loss. Contingent rents are charged as profit or loss in the periods in which they are incurred.

When the Company is the lessor, lease income is recognized as profit or loss with straight-line method over the lease term. Initial expenses, other than those with material amount and eligible for capitalization which are recognized as profit or loss by installments, are recognized directly as profit or loss. Contingent rents are charged as profit or loss in the periods in which they are incurred.

(2) Finance leases

When the Company is the lessee, at the commencement of the lease term, lessees recognize finance leases as assets and liabilities in their balance sheets at amounts equal to the lower of fair value of the leased property and the present value of the minimum lease payments, each determined at the inception of the lease, and recognize the minimum lease payments as the entering value of long-term payable, and treat the difference of the two as unrecognized finance expense. Any initial direct costs of the lessee are added to the amount recognized as an asset. The effective interest method is used to recognize finance expense of the period during the lease term.

When the Company is the lessor, at the commencement of the lease, lessor recognizes the aggregate of minimum lease receipts and initial direct costs, each determined at the inception of the lease, as the entering value of finance lease receivables, and recognize the unguaranteed residual value at the same time. The difference between the aggregate of the minimum lease receipts, the initial direct costs and the unguaranteed residual value, and the sum of their present values is recognized as unrealized finance income. The effective interest method is used to recognize finance income of the period during the lease term.

(XXX) Work safety fund

The Company accrues work safety fund in accordance with the Circular on Management Measures on the Accrual and Use of Work Safety Fund numbered Cai Qi [2012] 16 by Ministry of Finance and State Administration of Work Safety. Standard work safety fund is included in the cost or profit or loss, meanwhile accounted for under “special reserve”. When work safety fund is used as an expense, it is to offset special reserve directly. When work safety fund is qualified to be included in the cost of fixed assets, it is accounted for under “construction in progress” and transferred to fixed assets when related safety projects reach the designed useful conditions; meanwhile, the cost included in fixed assets is to offset “special reserve”, and accumulated depreciation shall be recognized at the same amount. Such fixed assets shall not be depreciated in future periods.

(XXXI) Segment reporting

Operating segments are determined based on the structure of the Company's internal organization, management requirements and internal reporting system. An operating segment is a component of the Company:

- (1) that engages in business activities from which it may earn revenues and incur expenses;
- (2) whose financial performance is regularly reviewed by the Management to make decisions about resource to be allocated to the segment and to assess its performance; and
- (3) for which accounting information regarding financial position, financial performance and cash flows is available through analysis.

(XXXIII) Other significant accounting policies and estimates

Basis of the adoption of hedge accounting and its accounting treatment

1. Hedge includes fair value hedge, cash flow hedge and hedge of a net investment in a foreign operation.
2. A hedging relationship qualifies for hedge accounting if all of the following conditions are met: (1) the hedging relationship consists only of eligible hedging instruments and eligible hedged instruments; (2) at the inception of the hedge there is formal designation of hedging instruments and hedged item, and documentation of the hedging relationship and the Company's risk management objective and strategy for undertaking the hedge; (3) the hedging relationship meets the hedging effectiveness requirements.

The Company recognizes that the hedging relationship meets effectiveness requirements if the all of the followings are simultaneously satisfied: (1) there is an economic relationship between the hedged item and the hedging instruments; (2) the effect of credit risk does not dominate the value changes that result from that economic relationship between the hedged item and the hedging instruments; and (3) the hedge ratio of the hedging relationship is the same as the ratio of the quantity of the hedged item that the Company actually hedges and the number of hedging instruments that the Company actually uses to hedge that quantity of hedged item, but does not reflect an imbalance between the weightings of the hedged item and the hedging instrument.

The Company shall assess whether a hedging relationship meets the hedge effectiveness requirements at inception and on an ongoing basis. If a hedging relationship ceases to meet the hedge effectiveness requirement relating to the hedge ratio but the risk management objective for that designated hedging relationship remains the same, the hedging relationship shall be rebalanced.

3. *Hedge accounting*

(1) Fair value hedge

- (1) Gain or loss on the hedging instrument shall be recognized in profit or loss (or other comprehensive income, if the hedging instrument hedges a non-trading equity instrument (or a component thereof) at fair value through other comprehensive income).
- (2) The gain or loss on hedged item arising from risk exposure should be recognized in profit or loss, and meanwhile, the carrying amount of the hedged item which is not measured at fair value should be adjusted. If the hedged item is a financial asset (or a component thereof) that is measured at fair value through other comprehensive income in accordance with article XVIII in “CASBE 22—Financial Instruments: Recognition and Measurement”, the gain or loss arising from the risk exposure on the hedged item shall be recognized in profit or loss, with carrying amount unadjusted for it has already been measured at fair value; if the hedged item is a non-trading equity instrument (or a component thereof) for which the Company has elected to present changes at fair value through other comprehensive income, the gain or loss arising from the risk exposure on the hedged item shall be recognized in profit or loss, with carrying amount unadjusted for it has already been measured at fair value.

When a hedged item is an unrecognized firm commitment (or a component thereof), the cumulative change in fair value of the hedged item subsequent to its designation is recognized as an asset or a liability with a corresponding gain or loss recognized in profit or loss. When a firm commitment is performed to acquire an asset or assume a liability, the initial carrying amount of the asset or the liability is adjusted to include the cumulative change in fair value of the hedged item that was previously recognized.

For a hedged item that is a financial instrument (or a component thereof) measured at amortized cost, any adjustment on the carrying amount of the hedged item shall be amortized to profit or loss based on a recalculated effective interest rate at the date that amortization begins. In the case of a financial asset (or a component thereof) that is a hedged item and that is measured at fair value through other comprehensive income in accordance with article XVIII in “CASBE 22—Financial Instruments: Recognition and Measurement”, amortization applies in the same manner but to the amount that represents the cumulative gain or loss previously recognized, which shall be subsequently recognized in profit or loss, instead of by adjusting the carrying amount.

(2) Cash flow hedges

- (1) The portion of the gain or loss on the hedging instrument that is determined to be an effective hedge shall be recognized in other comprehensive income as cash flow hedge reserve, while the ineffective portion shall be recognized in profit or loss. The cash flow hedge reserve shall be recognized at the lower of the following (in absolute amounts): a. the cumulative gain or loss on the hedging instrument from inception of the hedge; and b. the cumulative change in present value of the expected future cash flows of the hedged item from inception of the hedge.
- (2) If a hedged forecast transaction subsequently results in the recognition of a non-financial asset or non-financial liability, or a hedged forecast transaction for a non-financial asset or non-financial liability becomes a firm commitment for which fair value hedge accounting is applied, the Company shall transfer out the amount of cash flow hedge reserve previously recognized in other comprehensive income, and include it in the initial cost of the asset or the liability.

(3) For other cash flow hedges, the amount of cash flow hedge reserve previously recognized in other comprehensive income shall be transferred out into profit or loss in the same period the hedged forecast sale affects profit or loss.

(3) Hedges of a net investment in a foreign operation

The portion of the gain or loss on the hedging instrument that is determined to be an effective hedge is recognized in other comprehensive income, and reclassified from other comprehensive income to profit or loss on the disposal of the foreign operation; and the ineffective portion is recognized in profit or loss.

(XXXIII) Significant changes in accounting policies and estimates

1. Year 2021

Changes in accounting policies arising from changes in CASBEs

(1) The Company has adopted the revised “CASBE 21—Leases” (the “revised lease standard”) since January 1, 2021 (the “first adoption date”).

1) For lease contracts with the Company as lessee, the cumulative effect arising from adoption of the revised lease standard at the first adoption date shall be retrospectively adjusted into retained earnings and other related financial statement items at the beginning of the reporting period, and no adjustment shall be made on comparable information. The specific treatments are as follows:

For operating leases prior to the first adoption date, the Company measures lease liabilities at the present value of remaining lease payments, which are discounted using the Company’s incremental borrowing rate at the first adoption date, and measures right-of-use assets at the amount equivalent to lease liabilities through necessary adjustments based on prepaid leasing fees at the first adoption date.

At the first adoption date, pursuant to section III (XX) of notes to the financial statements, the Company performed impairment test on right-of-use assets and carried out corresponding accounting treatments.

a. Main effects on the financial statements as at January 1, 2021 due to adoption of the revised lease standard are as follows:

Items	Balance sheet		
	Dec. 31, 2020	Effect due to revised lease standard	Jan. 1, 2021
Advances paid	780,865,279.18	-2,265,865.85	778,599,413.33
Right-of-use assets		49,612,455.59	49,612,455.59
Non-current liabilities due within one year	1,448,009,624.78	11,189,108.80	1,459,198,733.58
Lease liabilities		36,157,480.94	36,157,480.94

- b. Simplified approach adopted for operating leases prior to the first adoption date:
 - (i) For lease contracts completed within 12 months after the first adoption date, the Company adopts a simplified approach and does not recognize right-of-use assets and lease liabilities;
 - (ii) The Company applies a single discount rate to a portfolio of leases with similar characteristics such as building leases when measuring lease liabilities;
 - (iii) Initial direct costs are not included in the measurement of right-of-use assets;
 - (iv) The Company determines the lease term according to the actual exercise of the renewal option or the termination option and other latest conditions before the first adoption date.
 - (v) As a substitute for the impairment test of right-of-use assets, the Company assesses whether the contract containing a lease is an onerous contract before the first adoption date according to “CASBE 13—Contingencies”, and adjusts right-of-use assets based on provisions for losses included in the balance sheet before the first adoption date;
 - (vi) For a lease changed prior to the first adoption date, the Company makes accounting treatments according to the final arrangement.

The adoption of the above simplified approach has no significant effect on the Company’s financial statements.

- 2) For operating lease contracts of low-value assets existed prior to the first adoption date, the Company adopts a simplified approach and does not recognize right-of-use assets and lease liabilities. The revised lease standard is adopted since the first adoption date.
- 3) For lease contracts in which the Company as the lessor, the revised lease standard is adopted since the first adoption date.
- 4) Accounting treatment on the sale and leaseback transactions existed prior to the first adoption date.

For a sale and leaseback existed prior to the first adoption date, the Company does not reassess whether the transfer of an asset shall be accounted for as a sale of that asset according to “CASBE 14—Revenues” at the first adoption date.

- (2) The Company has adopted the “Interpretation of China Accounting Standards for Business Enterprises No. 14” issued by the Ministry of Finance in 2021 since January 26, 2021. Such change in accounting policies has no impact on the Company’s financial statements.
- (3) The Company has adopted the regulations about disclosure of centralized fund management in the “Interpretation of China Accounting Standards for Business Enterprises No. 15” issued by the Ministry of Finance since December 31, 2021. Such change in accounting policies has no impact on the Company’s financial statements.

2. Year 2020

Changes in accounting policies arising from changes in CASBEs

(1) The Company has adopted “CASBE 14—Revenues” (the “revised revenue standard”) revised by Ministry of Finance since January 1, 2020. Pursuant to regulations on convergence between original and revised standards, no adjustment shall be made on comparable information, and the cumulative effect arising from adoption of the revised revenue standard on the first adoption date shall be retrospectively adjusted into retained earnings and other related financial statement items at the beginning of the reporting period.

1) Main effects on the financial statements as at January 1, 2020 due to adoption of the revised revenue standard are as follows:

Items	Consolidated balance sheet		
	Dec. 31, 2019	Effect due to revised revenue standard	Jan. 1, 2020
Advances received	49,481,999.73	-49,481,999.73	
Contract liabilities		47,161,189.68	47,161,189.68
Other current liabilities.		2,320,810.05	2,320,810.05

(Continued)

Items	Parent company balance sheet		
	Dec. 31, 2019	Effect due to revised revenue standard	Jan. 1, 2020
Advances received	11,646,730.13	-11,646,730.13	
Contract liabilities		10,958,649.41	10,958,649.41
Other current liabilities.		688,080.72	688,080.72

2) For changes in contracts occurred prior to January 1, 2020, the Company, based on the final arrangement, adopts a simplified approach to identify the fulfilled and outstanding performance obligations of all contracts, to determine the transaction price, and to allocate transaction price between the fulfilled and outstanding performance obligations. Adoption of the simplified approach has no significant impact on the Company’s financial statements.

(2) The Company has adopted the “Interpretation of China Accounting Standards for Business Enterprises No. 13” issued by the Ministry of Finance in 2019 since January 1, 2020, and the prospective application method is applicable to changes in accounting policies.

3. Year 2019

Changes in accounting policies arising from changes in CASBEs

- (1) The Company prepared the financial statements for the year ended December 31, 2019 in accordance with the “Notice of the Ministry of Finance on Revising and Issuing Financial Statement Templates for General Enterprises of 2019” (Cai Kuai [2019] No. 6), the “Notice on Revising and Issuing the Templates of Consolidated Financial Statements (2019 Edition)” (Cai Kuai [2019] No. 16) and the requirements of CASBEs, and the retrospective application method is applicable to changes in accounting policies. Items of the financial statements for the year ended December 31, 2018 significantly affected and their amounts are as follows:

<u>Original financial statement items and amounts</u>		<u>Revised financial statement items and amounts</u>	
Notes receivable and accounts receivable . . .	1,506,491,099.90	Notes receivable	591,030,308.20
		Accounts receivable	915,460,791.70
Notes payable and accounts payable	1,880,548,432.66	Notes payable	762,017,481.23
		Accounts payable	1,118,530,951.43

- (2) The Company has adopted “CASBE 22—Financial Instruments: Recognition and Measurement”, “CASBE 23—Transfer of Financial Assets”, “CASBE 24—Hedging” and “CASBE 37—Presentation of Financial Instruments” (collectively, the “revised financial instrument standards”) revised by the Ministry of Finance since January 1, 2019. Pursuant to regulations on convergence between original and revised standards, no adjustment shall be made on comparable information, and the difference arising from adoption on the first adoption date shall be retrospectively adjusted into retained earnings or other comprehensive income at the beginning of the reporting period.

The revised financial instrument standards changed classification and measurement method of financial assets, and determined three major categories of measurement: at amortized cost; at fair value through other comprehensive income; at fair value through profit or loss. The Company makes the above classification based on its own business model and the contractual cash flow characteristics of the financial assets. The Company measures equity investments at fair value through profit or loss, but may make an irrevocable election at initial recognition to measure them at fair value through other comprehensive income (gains or losses on disposal cannot be reversed into profit or loss, but dividend income can be included into profit or loss).

The revised financial instrument standards require for an “expected credit loss model” instead of “incurred loss model”, which is applicable to financial assets at amortized cost, financial assets at fair value through other comprehensive income, and leases receivable.

- 1) Main effects on the financial statements as at January 1, 2019 due to adoption of the revised financial instrument standards are as follows:

Items	Balance sheet		
	December 31, 2018	Effect due to the revised financial instrument standards	January 1, 2019
Held-for-trading financial assets . . .		166,915,198.87	166,915,198.87
Financial assets at fair value			
through profit or loss	15,315,198.87	-15,315,198.87	
Notes receivable	591,030,308.20	-576,292,483.20	14,737,825.00
Receivables financing		576,292,483.20	576,292,483.20
Other current assets	500,881,461.40	-151,600,000.00	349,281,461.40
Available-for-sale financial assets . .	63,192,181.76	-63,192,181.76	
Other equity instrument			
investments		50,618,581.76	50,618,581.76
Other non-current financial assets . .		12,573,600.00	12,573,600.00
Held-for-trading financial			
liabilities		6,529,248.16	6,529,248.16
Financial liabilities at fair value			
through profit or loss	6,529,248.16	-6,529,248.16	
Surplus reserve [Note]	182,633,133.09	1,555,884.22	184,189,017.31
Undistributed profit [Note]	3,647,054,561.91	-1,555,884.22	3,645,498,677.69

Note: As the revised financial instrument standards require for an “expected credit loss model” instead of “incurred loss model”, no provision for bad debts is made on the current accounts of subsidiaries within the consolidation scope, with opening balance of provision for bade debts on accounts receivable of the parent company decreased by 615,594.91 yuan, opening balance of provision for bade debts on other receivables decreased by 15,035,586.56 yuan, and deferred tax assets decreased by 92,339.24 yuan accordingly. Meanwhile, opening balance of surplus reserve of the parent company was increased by 1,555,884.22 yuan, and opening balance of undistributed profit was increased by 14,002,958.01 yuan accordingly. As provisions for bad debts between the parent company and subsidiaries have been offset when preparing the consolidated financial statements, the impact on the consolidated financial statements includes increase in opening balance of surplus reserve of 1,555,884.22 yuan and decrease in opening balance of undistributed profit of 1,555,884.22 yuan.

- 2) On January 1, 2019, the comparison table of categories and measuring result of the Company’s financial assets and financial liabilities under revised and original financial instrument standards is as follows:

Items	Under original standards		Under revised standards	
	Measurement category	Carrying amount	Measurement category	Carrying amount
Cash and bank balances	Amortized cost (Loans and receivables)	2,324,164,775.98	Amortized cost	2,324,164,775.98
Financial assets at fair value				
through profit	Measured at fair value	15,315,198.87	Measured at fair value	15,315,198.87
or loss	through profit or loss		through profit or loss	
Notes receivable	Amortized cost (Loans and receivables)	591,030,308.20	Measured at fair value	576,292,483.20
			through other comprehensive income	
			Amortized cost	14,737,825.00
Accounts receivable	Amortized cost (Loans and receivables)	915,460,791.70	Amortized cost	915,460,791.70
Other receivables	Amortized cost (Loans and receivables)	90,796,079.33	Amortized cost	90,796,079.33

Items	Under original standards		Under revised standards	
	Measurement category	Carrying amount	Measurement category	Carrying amount
Other current assets	Measured at fair value through other comprehensive income	151,600,000.00	Measured at fair value through profit or loss	151,600,000.00
Available-for-sale financial assets	Measured at fair value through other comprehensive income (Available-for-sale financial assets)	63,192,181.76	Measured at fair value through other comprehensive income Measured at fair value through profit or loss	50,618,581.76 12,573,600.00
Long-term receivables	Amortized cost (Loans and receivables)	109,376,960.67	Amortized cost	109,376,960.67
Short-term borrowings	Amortized cost (Other financial liabilities)	5,121,992,187.76	Amortized cost	5,121,992,187.76
Financial liabilities at fair value through profit or loss	Measured at fair value through profit or loss	6,529,248.16	Measured at fair value through profit or loss	6,529,248.16
Notes payable	Amortized cost (Other financial liabilities)	762,017,481.23	Amortized cost	762,017,481.23
Accounts payable	Amortized cost (Other financial liabilities)	1,118,530,951.43	Amortized cost	1,118,530,951.43
Other payables	Amortized cost (Other financial liabilities)	361,619,612.11	Amortized cost	361,619,612.11
Non-current liabilities due within one year	Amortized cost (Other financial liabilities)	559,320,685.32	Amortized cost	559,320,685.32
Other current liabilities	Amortized cost (Other financial liabilities)	400,000,000.00	Amortized cost	400,000,000.00
Long-term borrowings	Amortized cost (Other financial liabilities)	265,660,629.25	Amortized cost	265,660,629.25
Bonds payable	Amortized cost (Other financial liabilities)	715,662,003.49	Amortized cost	715,662,003.49
Long-term payables	Amortized cost (Other financial liabilities)	508,365,053.59	Amortized cost	508,365,053.59

3) On January 1, 2019, the reconciliation statement on the carrying amount of the financial assets and financial liabilities under revised financial instrument standards is as follows:

Items	Carrying amount under original standards (Dec. 31, 2018)	Reclassification	Remeasurement	Carrying amount under revised standards (Jan. 1, 2019)
A. Financial assets				
a. Measured at amortized cost				
Cash and bank balances . . .	2,324,164,775.98			2,324,164,775.98
Notes receivable	591,030,308.20	-576,292,483.20		14,737,825.00
Accounts receivable	915,460,791.70			915,460,791.70
Other receivables	90,796,079.33			90,796,079.33
Long-term receivables	109,376,960.67			109,376,960.67
Total financial assets at amortized cost	4,030,828,915.88	-576,292,483.20		3,454,536,432.68

Items	Carrying amount under original standards (Dec. 31, 2018)	Reclassification	Remeasurement	Carrying amount under revised standards (Jan. 1, 2019)
b. Measured at fair value through profit or loss				
Held-for-trading financial assets		166,915,198.87		166,915,198.87
Financial assets at fair value through profit or loss	15,315,198.87	-15,315,198.87		
Other non-current financial assets		12,573,600.00		12,573,600.00
Total financial assets at fair value through profit or loss	15,315,198.87	164,173,600.00		179,488,798.87
c. Measured at fair value through other comprehensive income				
Receivables financing		576,292,483.20		576,292,483.20
Other current assets.	151,600,000.00	-151,600,000.00		
Available-for-sale financial assets	63,192,181.76	-63,192,181.76		
Other equity instrument investments		50,618,581.76		50,618,581.76
Total financial assets at fair value through other comprehensive income . .	214,792,181.76	412,118,883.20		626,911,064.96
B. Financial liabilities				
a. Measured at amortized cost				
Short-term borrowings	5,121,992,187.76			5,121,992,187.76
Notes payable	762,017,481.23			762,017,481.23
Accounts payable	1,118,530,951.43			1,118,530,951.43
Other payables.	361,619,612.11			361,619,612.11
Non-current liabilities due within one year.	559,320,685.32			559,320,685.32
Other current liabilities . . .	400,000,000.00			400,000,000.00
Long-term borrowings	265,660,629.25			265,660,629.25
Bonds payable	715,662,003.49			715,662,003.49
Long-term payables.	508,365,053.59			508,365,053.59
Total financial liabilities at amortized cost	9,813,168,604.18			9,813,168,604.18
b. Measured at fair value through profit or loss				
Held-for-trading financial liabilities.		6,529,248.16		6,529,248.16
Financial liabilities at fair value through profit or loss	6,529,248.16	-6,529,248.16		
Total financial liabilities at fair value through profit or loss	6,529,248.16			6,529,248.16

- 4) On January 1, 2019, the reconciliation statement on the provision for impairment of the financial assets under revised financial instrument standards is as follows:

Items	Provision for impairment made under original financial instrument standards/Provisions recognized under the contingencies standard (Dec. 31, 2018)	Reclassification	Remeasurement	Provision for impairment under revised financial instrument standards (Jan. 1, 2019)
Notes receivable	775,675.00			775,675.00
Accounts receivable	64,749,916.65			64,749,916.65
Other receivables	14,308,496.27			14,308,496.27

- (3) The Company has adopted the revised “CASBE 7—Non-cash Assets Exchange” since June 10, 2019, and the revised “CASBE 12—Debt Restructuring” since June 17, 2019, and the prospective application method is applicable to changes in accounting policies.

IV. Taxes

(I) Main taxes and tax rates

Taxes	Tax bases	Tax rates
Value-added tax (VAT)	The output tax calculated based on the revenue from sales of goods or rendering of services in accordance with the tax law, net of the input tax that is allowed to be deducted in the current period	16%, 13%, 6%
Mineral tax	Taxable revenue	3.5%, 10%
Housing property tax	For housing property levied on the basis of price, housing property tax is levied at the rate of 1.2% of the balance after deducting a certain percentage of the cost; for housing property levied on the basis of rent, housing property tax is levied at the rate of 12% of lease income.	1.2%, 12%
Urban maintenance and construction tax	Turnover tax actually paid	7%, 5%
Education surcharge	Turnover tax actually paid	3%
Local education surcharge	Turnover tax actually paid	2%
Enterprise income tax	Taxable income	Please refer to the following different enterprise income tax rates applicable to different taxpayers

Different enterprise income tax rates applicable to different taxpayers:

Taxpayers	Year 2021	Year 2020	Year 2019
The Company, New Energy Quzhou . . .	15%	15%	15%
Tianjin B&M, Chengdu B&M	15%	—	—
Beijing Youhong	20%	25%	—
Guangxi Huayou Engineering, Beijing Huashan, Wenzhou Huake, Tongxiang Huaxun, Zhejiang B&M, Guangxi Huayou New Material, Guangxi Huayou New Energy, Tongxiang Huawang, Tongxiang Hualing	20%	—	—
Shanghai FC	20%	25%	25%
Taxpayers other than the above- mentioned	25%	25%	25%
Overseas entities	Subject to the tax rate in the place of registration		

(II) Tax preferential policies

1. VAT

(1) Domestic entities

Manufacturing enterprises including the Company and its subsidiary Huayou Quzhou enjoy the tax preferential policy of “exemption, credit and refund” for export goods, while tax rebate rate in 2019 is 0%, 5% and 13%, and tax rebate rate from 2020 to 2021 is 0% and 13%; foreign trade enterprises including the subsidiary Huayou Import & Export enjoy the tax preferential policy of “exemption and refund” for export goods, while the tax rebate rate in 2019 ranges from 0% to 16%, and tax rebate rate from 2020 to 2021 ranges from 0% to 13%.

(2) Overseas entities

The tax rate for export goods of the subsidiaries CDM Company, MIKAS Company, OIM Company and TMC Company is 0%. If the deductible VAT is higher than the VAT payable, the surplus can be refunded or carried forward to offset future VAT payable.

Pursuant to the Decree of Minister of Finance of Indonesia Concerning the Import Duty Relief for Machinery Required for Construction of Huayue Company in the Context of Foreign Investment, Huayue Company enjoys the import duty exemption policy on imported machinery (in compliance with Government Regulation No. 81 of 2015).

Pursuant to the Decree of Minister of Finance of Indonesia, Huake Indonesia enjoys the preferential policy of VAT exemption regarding the import or delivery of certain taxable goods classified as strategic goods in the “Import Demand and Procurement Plan”.

2. *Enterprise income tax*

(1) Domestic entities

According to the “High-tech Enterprise Certificate” jointly issued by Science and Technology Department of Zhejiang Province, Zhejiang Provincial Department of Finance and Zhejiang Provincial Tax Service, State Taxation Administration (STA) on November 13, 2017 and December 1, 2020, the Company is accredited as a high-tech enterprise. Pursuant to the “Enterprise Income Tax Law of the People’s Republic of China”, the Company is entitled to enjoy the preferential enterprise income tax policy as a high-tech enterprise and subject to a reduced rate of 15% from 2019 to 2021.

According to the “High-tech Enterprise Certificate” jointly issued by Science and Technology Department of Zhejiang Province, Zhejiang Provincial Department of Finance and Zhejiang Provincial Tax Service, STA on November 30, 2018 and December 16, 2021, New Energy Quzhou is accredited as a high-tech enterprise. Pursuant to the “Enterprise Income Tax Law of the People’s Republic of China”, New Energy Quzhou is entitled to enjoy the preferential enterprise income tax policy as a high-tech enterprise and subject to a reduced rate of 15% from 2019 to 2021.

According to the “High-tech Enterprise Certificate” jointly issued by Tianjin Municipal Science and Technology Bureau, Tianjin Finance Bureau and Tianjin Municipal Tax Service, STA on October 28, 2020, Tianjin B&M is accredited as a high-tech enterprise. Pursuant to the “Enterprise Income Tax Law of the People’s Republic of China”, Tianjin B&M is entitled to enjoy the preferential enterprise income tax policy as a high-tech enterprise and subject to a reduced rate of 15% in 2021.

Pursuant to the “Announcement on Continuing the Enterprise Income Tax Policy for the Western Development” (Announcement of the Ministry of Finance [2020] No. 23), Chengdu B&M is entitled to enjoy the preferential enterprise income tax policy as an enterprise engaged in the encouraged industries in the western region and subject to a reduced rate of 15% in 2021.

Pursuant to the “Announcement of the State Taxation Administration on Matters Concerning the Implementation of Preferential Income Tax Policies for Supporting the Development of Small Enterprises with Meager Profit and Individually-Owned Businesses” (Announcement of the State Taxation Administration [2021] No. 8), for the subsidiaries Shanghai FC, Beijing Youhong, Guangxi Huayou Engineering, Beijing Huashan, Wenzhou Huake, Tongxiang Huaxun, Zhejiang B&M, Guangxi Huayou New Material, Guangxi Huayou New Energy, Tongxiang Huawang, Tongxiang Hualing, which are qualified as small enterprises with meager profits, in 2021, their enterprise income tax for the portion of the taxable income within 1 million yuan is levied at 20% based on 12.5% of that portion of income, while the enterprise income tax for the portion of the taxable income exceeding 1 million yuan but within 3 million yuan is levied at 20% based on 50% of that portion of income.

Pursuant to the “Notice of the People’s Government of Guangxi Zhuang Autonomous Region on Several Policies for Promoting the High-level Opening and High-Quality Development of the Guangxi Beibu Gulf Economic Zone in the New Era” (Gui Zheng Fa [2020] No. 42), the subsidiary Guangxi B&M, as a new enterprise registered and established in the economic zone, is accredited as a high-tech enterprise or an enterprise entitled to enjoy the preferential enterprise income tax policy for the western development. It is exempted from enterprise income tax shared by local governments for 5 years since the first year in which the revenue from main operations is generated.

(2) Overseas entities

Pursuant to the Decree of Minister of Finance of Indonesia Concerning Preferential Policies of Enterprise Income Tax Reduction and Exemption to Huayue Company, Huayue Company is exempted from enterprise income tax as well as tax withheld by third parties on certain income from Huayue Company for 15 years from the tax year of the commencement of its commercial production. It also enjoys a tax reduction of 50% for 2 years following the expiration of the above exemption period.

3. *Import duty*

Pursuant to the Decree of Minister of Finance of Indonesia Concerning the Import Duty Relief for Machinery Required for Construction of Huayue Company in the Context of Foreign Investment, Huayue Company enjoys the import duty exemption policy on imported machinery.

Pursuant to the Decree of Minister of Finance of Indonesia Concerning the Import Duty Relief for Machinery Required for Construction of Huake Indonesia in the Context of Foreign Investment, Huake Indonesia enjoys the import duty exemption policy on imported machinery.

V. Notes to items of consolidated financial statements

(I) Notes to items of the consolidated balance sheet

1. *Cash and bank balances*

(1) Details

<u>Items</u>	<u>December 31, 2021</u>	<u>December 31, 2020</u>	<u>December 31, 2019</u>
Cash on hand	30,717,041.97	6,419,244.46	10,989,287.18
Cash in bank	6,028,851,637.85	1,422,345,842.00	1,908,537,857.72
Other cash and bank balances	3,709,915,975.32	905,492,542.46	966,233,394.40
Total	9,769,484,655.14	2,334,257,628.92	2,885,760,539.30
Including: Deposited overseas	1,749,990,024.72	529,776,013.67	826,645,363.20

(2) Details of other cash and bank balances

<u>Items</u>	<u>December 31, 2021</u>	<u>December 31, 2020</u>	<u>December 31, 2019</u>
Deposits for notes	2,703,403,483.57	400,532,127.19	581,818,967.05
Deposits for letters of credit	251,997,597.57	303,975,001.15	287,376,985.90
Deposits for letters of guarantee	6,122,337.26	13,976,405.12	10,200,000.00
Deposits for borrowings	662,940,956.10	102,567,145.99	18,720,250.00
Deposits for forward foreign exchange settlement	30,232,894.50	9,590,000.00	
Deposited investment funds	44,445,877.93	58,715,881.96	65,053,455.93
Funds frozen due to litigations		12,170,972.77	
Balances in WeChat accounts	4,378,838.00	1,998,538.28	
Other deposits	6,393,990.39	1,966,470.00	3,063,735.52
Total	3,709,915,975.32	905,492,542.46	966,233,394.40
Including: Total restricted funds	3,661,091,259.39	844,778,122.22	901,179,938.47

2. Held-for-trading financial assets

Items	December 31, 2021	December 31, 2020	December 31, 2019
Financial assets classified as at fair value through profit or loss	332,752,951.53	30,317,180.12	103,543,722.85
Including: Short-term bank financial products	300,239,589.04		20,035,361.11
Derivative financial assets	32,513,362.49	30,317,180.12	83,508,361.74
Total	332,752,951.53	30,317,180.12	103,543,722.85

3. Accounts receivable

(1) Details

1) Details on categories

Categories	December 31, 2021				
	Book balance		Provision for bad debts		
	Amount	% to total	Amount	Provision proportion	Carrying amount
				(%)	
Receivables with provision made on an individual basis	25,238,344.58	0.54	25,238,344.58	100.00	
Receivables with provision made on a collective basis	4,627,881,296.04	99.46	244,107,681.70	5.27	4,383,773,614.34
Total	4,653,119,640.62	100.00	269,346,026.28	5.79	4,383,773,614.34

(Continued)

Categories	December 31, 2020				
	Book balance		Provision for bad debts		
	Amount	% to total	Amount	Provision proportion	Carrying amount
				(%)	
Receivables with provision made on an individual basis	20,200,435.00	1.65	20,200,435.00	100.00	
Receivables with provision made on a collective basis	1,206,747,571.56	98.35	66,207,454.65	5.49	1,140,540,116.91
Total	1,226,948,006.56	100.00	86,407,889.65	7.04	1,140,540,116.91

(Continued)

Categories	December 31, 2019				
	Book balance		Provision for bad debts		
	Amount	% to total	Amount	Provision proportion	Carrying amount
				(%)	
Receivables with provision made on an individual basis	16,328,559.34	1.75	16,328,559.34	100.00	
Receivables with provision made on a collective basis	916,342,353.32	98.25	48,417,399.11	5.28	867,924,954.21
Total	932,670,912.66	100.00	64,745,958.45	6.94	867,924,954.21

2) Accounts receivable with provision made on an individual basis

a. December 31, 2021

Debtors	Book balance	Provision for bad debts	Provision proportion	Reasons
			(%)	
Ningxia King Lithium Cell Co., Ltd.	9,209,380.00	9,209,380.00	100.00	Expected to be irrecoverable due to difficulties in the operation of the debtors.
Jiangxi Jialong New Material Co., Ltd.	5,717,261.90	5,717,261.90	100.00	
Shenzhen King Power Technology Co., Ltd.	4,724,396.86	4,724,396.86	100.00	
R&F Company.	3,783,340.38	3,783,340.38	100.00	
Others	1,803,965.44	1,803,965.44	100.00	
Subtotal	25,238,344.58	25,238,344.58	100.00	

b. December 31, 2020

Debtors	Book balance	Provision for bad debts	Provision proportion	Reasons
			(%)	
Ningxia King Lithium Cell Co., Ltd.	9,209,380.00	9,209,380.00	100.00	Expected to be irrecoverable due to difficulties in the operation of the debtors.
Jiangxi Jialong New Material Co., Ltd.	5,717,261.90	5,717,261.90	100.00	
Others	5,273,793.10	5,273,793.10	100.00	
Subtotal	20,200,435.00	20,200,435.00	100.00	

c. December 31, 2019

Debtors	Book balance	Provision for bad debts	Provision proportion	Reasons
			(%)	
Ningxia King Lithium Cell Co., Ltd.	9,209,380.00	9,209,380.00	100.00	Expected to be irrecoverable due to difficulties in the operation of the debtors.
Jiangxi Jialong New Material Co., Ltd.	5,717,261.90	5,717,261.90	100.00	
Others	1,401,917.44	1,401,917.44	100.00	
Subtotal	16,328,559.34	16,328,559.34	100.00	

3) Accounts receivable with provision made on a collective basis using age analysis method

Items	December 31, 2021			December 31, 2020		
	Book balance	Provision for bad debts	Provision proportion	Book balance	Provision for bad debts	Provision proportion
			(%)			(%)
Within 1 year	4,601,347,981.21	230,067,399.06	5.00	1,178,381,700.06	58,919,085.00	5.00
1-2 years	503,054.00	100,610.80	20.00	26,093,185.86	5,218,637.17	20.00
2-3 years	24,181,177.98	12,090,588.99	50.00	405,906.32	202,953.16	50.00
Over 3 years	1,849,082.85	1,849,082.85	100.00	1,866,779.32	1,866,779.32	100.00
Subtotal	4,627,881,296.04	244,107,681.70	5.27	1,206,747,571.56	66,207,454.65	5.49

(Continued)

Items	December 31, 2019		
	Book balance	Provision for bad debts	Provision proportion (%)
Within 1 year	907,753,151.27	45,387,657.56	5.00
1-2 years	6,413,134.88	1,282,626.98	20.00
2-3 years	857,905.20	428,952.60	50.00
Over 3 years	1,318,161.97	1,318,161.97	100.00
Subtotal	916,342,353.32	48,417,399.11	5.28

(2) Age analysis

Ages	Book balance		
	December 31, 2021	December 31, 2020	December 31, 2019
Within 1 year	4,601,347,981.21	1,178,381,700.06	907,753,151.27
1-2 years	5,371,894.38	26,093,185.86	7,225,134.88
2-3 years	25,563,177.98	5,089,781.98	9,891,485.20
Over 3 years	20,836,587.05	17,383,338.66	7,801,141.31
Total	4,653,119,640.62	1,226,948,006.56	932,670,912.66

(3) Changes in provision for bad debts

1) Year 2021

Items	Opening balance	Increase			Decrease			Closing balance
		Accrual	Recovery	Others [Note]	Reversal	Write-off	Others [Note]	
Receivables with provision made on an individual basis	20,200,435.00	313,512.72		4,724,396.86				25,238,344.58
Receivables with provision made on a collective basis	66,207,454.65	98,198,634.52		80,022,958.77			321,366.24	244,107,681.70
Total	86,407,889.65	98,512,147.24		84,747,355.63			321,366.24	269,346,026.28

2) Year 2020

Items	Opening balance	Increase			Decrease			Closing balance
		Accrual	Recovery	Others	Reversal	Write-off	Others	
Receivables with provision made on an individual basis	16,328,559.34	3,871,875.66						20,200,435.00
Receivables with provision made on a collective basis	48,417,399.11	17,790,055.54						66,207,454.65
Total	64,745,958.45	21,661,931.20						86,407,889.65

3) Year 2019

Items	Opening balance	Increase			Decrease			Closing balance
		Accrual	Recovery	Others [Note]	Reversal	Write-off	Others	
Receivables with provision made on an individual basis	13,826,979.34	9,845,580.00			7,344,000.00			16,328,559.34
Receivables with provision made on a collective basis	50,922,937.31	-2,507,129.66		1,591.46				48,417,399.11
Total	64,749,916.65	7,338,450.34		1,591.46	7,344,000.00			64,745,958.45

Note: Others refer to changes in provision for bad debts due to changes in the consolidation scope.

(4) Details of the top 5 debtors with largest balances

Items	December 31, 2021	December 31, 2020	December 31, 2019
Book balance	2,184,386,603.14	545,361,496.71	452,421,351.27
Proportion to the total balance of accounts receivable (%)	46.94	44.45	48.51
Provision for bad debts	109,219,330.15	27,268,074.84	22,621,067.56

4. *Receivables financing*

(1) Details

Items	December 31, 2021		December 31, 2020	
	Carrying amount	Accumulated provision for credit impairment	Carrying amount	Accumulated provision for credit impairment
Bank acceptance	1,319,017,850.74		762,316,046.62	
Total	1,319,017,850.74		762,316,046.62	

(Continued)

Items	December 31, 2019	
	Carrying amount	Accumulated provision for credit impairment
Bank acceptance	460,537,826.62	
Total	460,537,826.62	

(2) No receivables financing written off during the reporting period.

(3) Pledged notes

Items	December 31, 2021	December 31, 2020	December 31, 2019
Bank acceptance	392,771,270.84	511,417,886.84	188,831,996.10
Subtotal	392,771,270.84	511,417,886.84	188,831,996.10

(4) Endorsed or discounted but undue notes at the balance sheet date

Items	Closing balance derecognized		
	December 31, 2021	December 31, 2020	December 31, 2019
Bank acceptance	5,311,600,088.59	1,906,776,345.83	1,243,116,919.37
Subtotal	5,311,600,088.59	1,906,776,345.83	1,243,116,919.37

Due to the fact that the acceptor of bank acceptance is commercial bank, which is of high credit level, there is very little possibility of failure in recoverability when it is due. Based on this fact, the Company derecognized the endorsed or discounted bank acceptance. However, if any bank acceptance is not recoverable when it is due, the Company still holds joint liability on such acceptance, according to the China Commercial Instrument Law.

(5) No receivables financing was transferred to accounts receivable due to non-performance of issuer during the reporting period.

5. *Advances paid*

(1) Age analysis

1) Details

Ages	December 31, 2021				December 31, 2020			
	Book balance	% to total	Provision for impairment	Carrying amount	Book balance	% to total	Provision for impairment	Carrying amount
Within 1 year	1,011,867,650.20	93.53		1,011,867,650.20	757,420,985.87	93.17		757,420,985.87
1-2 years	18,733,104.04	1.73		18,733,104.04	13,769,060.37	1.69		13,769,060.37
2-3 years	10,877,990.36	1.01		10,877,990.36	21,513,323.89	2.65	12,066,622.51	9,446,701.38
Over 3 years	40,322,246.26	3.73	32,066,622.51	8,255,623.75	20,228,531.56	2.49	20,000,000.00	228,531.56
Total	1,081,800,990.86	100.00	32,066,622.51	1,049,734,368.35	812,931,901.69	100.00	32,066,622.51	780,865,279.18

(Continued)

Ages	December 31, 2019			
	Book balance	% to total	Provision for impairment	Carrying amount
Within 1 year	379,755,601.04	35.57		379,755,601.04
1-2 years	664,580,109.17	62.25		664,580,109.17
2-3 years	3,667,661.03	0.35	513,600.00	3,154,061.03
Over 3 years	19,535,457.11	1.83	18,972,800.00	562,657.11
Total	1,067,538,828.35	100.00	19,486,400.00	1,048,052,428.35

2) No significant balance with age over one year as at December 31, 2021.

3) For balances due from Panzhihua Seven-Stars Optoelectronic Tech. Co., Ltd. and Konkola Copper Mines Plc as of December 31, 2021, the debtor could not fulfill the contract due to difficulties in its operation, and the goods were expected to be unavailable and the balance was expected to be irrecoverable, therefore, the Company made provision for bad debts in full amount of 32,066,622.51 yuan.

(2) Details of the top 5 debtors with largest balances

Items	December 31, 2021	December 31, 2020	December 31, 2019
Book balance	551,743,831.62	651,166,301.96	875,978,049.60
Proportion to the total balance of advances paid (%).	51.00	80.10	82.06

6. *Other receivables*

(1) Details

1) Details on categories

Categories	December 31, 2021				
	Book balance		Provision for bad debts		
	Amount	% to total	Amount	Provision proportion (%)	Carrying amount
Receivables with provision made on an individual basis	3,917,282.59	1.40	3,917,282.59	100.00	
Receivables with provision made on a collective basis	275,267,441.02	98.60	40,076,679.81	14.56	235,190,761.21
Total	279,184,723.61	100.00	43,993,962.40	15.76	235,190,761.21

(Continued)

Categories	December 31, 2020				
	Book balance		Provision for bad debts		
	Amount	% to total	Amount	Provision proportion (%)	Carrying amount
Receivables with provision made on an individual basis					
Receivables with provision made on a collective basis	239,863,271.20	100.00	58,006,033.06	24.18	181,857,238.14
Total	239,863,271.20	100.00	58,006,033.06	24.18	181,857,238.14

(Continued)

Categories	December 31, 2019				
	Book balance		Provision for bad debts		
	Amount	% to total	Amount	Provision proportion (%)	Carrying amount
Receivables with provision made on an individual basis					
Receivables with provision made on a collective basis	222,421,799.14	100.00	33,084,874.38	14.87	189,336,924.76
Total	222,421,799.14	100.00	33,084,874.38	14.87	189,336,924.76

2) Other receivables with provision made on an individual basis

December 31, 2021

Debtors	Book balance	Provision for bad debts	Provision proportion	Reasons
Wulong Power (Chongqing) Lithium Battery Materials Co., Ltd.	3,917,282.59	3,917,282.59	100.00	Expected to be irrecoverable due to difficulties in the operation of the debtor.
Subtotal	3,917,282.59	3,917,282.59	100.00	

3) Other receivables with provision made on a collective basis

Portfolios	December 31, 2021			December 31, 2020		
	Book balance	Provision for bad debts	Provision proportion	Book balance	Provision for bad debts	Provision proportion
			(%)			(%)
Portfolio grouped with government funds receivable	79,374,213.15			34,360,309.10		
Portfolio grouped with ages . .	195,893,227.87	40,076,679.81	20.46	205,502,962.10	58,006,033.06	28.23
Including: Within 1 year	108,867,653.68	5,443,382.68	5.00	74,583,534.74	3,729,176.74	5.00
1-2 years	49,264,852.61	9,852,970.52	20.00	50,712,953.36	10,142,590.67	20.00
2-3 years	25,960,789.95	12,980,394.98	50.00	72,144,416.70	36,072,208.35	50.00
Over 3 years	11,799,931.63	11,799,931.63	100.00	8,062,057.30	8,062,057.30	100.00
Subtotal	275,267,441.02	40,076,679.81	14.56	239,863,271.20	58,006,033.06	24.18

(Continued)

Portfolios	December 31, 2019		
	Book balance	Provision for bad debts	Provision proportion
			(%)
Portfolio grouped with government funds receivable	39,202,977.25		
Portfolio grouped with ages	183,218,821.89	33,084,874.38	18.06
Including: Within 1 year	68,750,979.00	3,437,548.95	5.00
1-2 years	105,559,772.04	21,111,954.41	20.00
2-3 years	745,399.66	372,699.83	50.00
Over 3 years	8,162,671.19	8,162,671.19	100.00
Subtotal	222,421,799.14	33,084,874.38	14.87

(2) Age analysis

Ages	Book balance		
	December 31, 2021	December 31, 2020	December 31, 2019
Within 1 year	192,159,149.42	108,943,843.84	107,953,956.25
1-2 years	49,264,852.61	50,712,953.36	105,559,772.04
2-3 years	25,960,789.95	72,144,416.70	745,399.66
Over 3 years	11,799,931.63	8,062,057.30	8,162,671.19
Total	279,184,723.61	239,863,271.20	222,421,799.14

(3) Changes in provision for bad debts

1) Year 2021

Items	Stage 1	Stage 2	Stage 3	Total
	12-month expected credit losses	Lifetime expected credit losses (credit not impaired)	Lifetime expected credit losses (credit impaired)	
Opening balance.	3,729,176.74	10,142,590.67	44,134,265.65	58,006,033.06
Opening balance in the current period.	—	—	—	
—Transferred to stage 2. . .	-2,463,242.63	2,463,242.63		
—Transferred to stage 3. . .		-5,192,157.99	5,192,157.99	
—Reversed to stage 2				
—Reversed to stage 1				
Provision made in the current period.	3,184,069.86	1,954,658.44	-20,461,352.51	-15,322,624.21
Provision recovered in the current period.				
Provision reversed in the current period.				
Provision written off in the current period.				
Other changes [Note]	993,378.71	484,636.77	-167,461.93	1,310,553.55
Closing balance	5,443,382.68	9,852,970.52	28,697,609.20	43,993,962.40

2) Year 2020

Items	Stage 1	Stage 2	Stage 3	Total
	12-month expected credit losses	Lifetime expected credit losses (credit not impaired)	Lifetime expected credit losses (credit impaired)	
Opening balance.	3,437,548.95	21,111,954.41	8,535,371.02	33,084,874.38
Opening balance in the current period.	—	—	—	
—Transferred to stage 2. . .	-2,535,647.67	2,535,647.67		
—Transferred to stage 3. . .		-14,428,883.34	14,428,883.34	
—Reversed to stage 2				
—Reversed to stage 1				
Provision made in the current period.	2,827,275.46	923,871.93	21,170,011.29	24,921,158.68
Provision recovered in the current period.				
Provision reversed in the current period.				
Provision written off in the current period.				
Other changes				
Closing balance	3,729,176.74	10,142,590.67	44,134,265.65	58,006,033.06

3) Year 2019

Items	Stage 1	Stage 2	Stage 3	Total
	12-month expected credit losses	Lifetime expected credit losses (credit not impaired)	Lifetime expected credit losses (credit impaired)	
Opening balance	2,856,988.75	1,423,289.98	10,028,217.54	14,308,496.27
Opening balance in the current period	—	—	—	
—Transferred to stage 2 . . .	-2,856,988.75	2,856,988.75		
—Transferred to stage 3 . . .		-149,079.93	149,079.93	
—Reversed to stage 2				
—Reversed to stage 1				
Provision made in the current period	3,467,996.74	16,980,755.61	-1,641,926.45	18,806,825.90
Provision recovered in the current period				
Provision reversed in the current period				
Provision written off in the current period				
Other changes [Note]	-30,447.79			-30,447.79
Closing balance	3,437,548.95	21,111,954.41	8,535,371.02	33,084,874.38

Note: Other changes refer to changes in provision for bad debts due to changes in the consolidation scope.

(4) Other receivables categorized by nature

Nature of receivables	Book balance		
	December 31, 2021	December 31, 2020	December 31, 2019
Security deposits	167,295,082.41	118,940,620.79	66,067,274.95
Export tax rebate	79,374,213.15	34,360,309.10	39,202,977.25
Petty cash	7,539,168.62	4,683,881.73	11,117,827.38
Temporary advance payment receivable	15,333,606.77	13,526,300.61	32,896,730.09
Others	9,642,652.66	68,352,158.97	73,136,989.47
Total	279,184,723.61	239,863,271.20	222,421,799.14

(5) Details of the top 5 debtors with largest balances

1) December 31, 2021

Debtors	Nature of receivables	Book balance	Ages	Proportion to the total balance of other receivables	Provision for bad debts
				(%)	
Cinda Financial Leasing Co., Ltd.	Security deposits	79,500,000.00	Within 1 year: 55,500,000.00 yuan, 2-3 years: 24,000,000.00 yuan	28.48	14,775,000.00
Export tax rebate receivable	Export tax rebate	79,374,213.15	Within 1 year	28.43	

Debtors	Nature of receivables	Book balance	Ages	Proportion to the total balance of other receivables	Provision for bad debts
				(%)	
LG Energy Solution (Nanjing) Co., Ltd. . . .	Security deposits	12,000,000.00	1-2 years	4.30	2,400,000.00
Haitong UniTrust International Financial Leasing Co., Ltd. . . .	Security deposits	8,497,000.00	Within 1 year: 6,885,000.00 yuan, 1-2 years: 1,612,000.00 yuan	3.04	666,650.00
Minsheng Financial Leasing Co., Ltd. . . .	Security deposits	7,600,000.00	1-2 years	2.72	1,520,000.00
Subtotal.		186,971,213.15		66.97	19,361,650.00

2) December 31, 2020

Debtors	Nature of receivables	Book balance	Ages	Proportion to the total balance of other receivables	Provision for bad debts
				(%)	
Summit Reward Investment Limited [Note]	Others (Prepayments for equity transfer refundable)	64,890,130.50	2-3 years	27.05	32,445,065.25
Cinda Financial Leasing Co., Ltd.	Security deposits	38,400,000.00	1-2 years	16.01	7,680,000.00
Export tax rebate receivable	Export tax rebate	34,360,309.10	Within 1 year	14.33	
Fuzhou Superchain Supply Chain Management Co., Ltd.	Security deposits	27,563,403.38	Within 1 year	11.49	1,378,170.17
LG Energy Solution (Nanjing) Co., Ltd. . . .	Security deposits	12,000,000.00	Within 1 year	5.00	600,000.00
Subtotal.		177,213,842.98		73.88	42,103,235.42

3) December 31, 2019

Debtors	Nature of receivables	Book balance	Ages	Proportion to the total balance of other receivables	Provision for bad debts
				(%)	
Summit Reward Investment Limited [Note]	Others (Prepayments for equity transfer refundable)	69,378,309.00	1-2 years	31.19	13,875,661.80
Export tax rebate receivable	Export tax rebate	39,202,977.25	Within 1 year	17.63	
Cinda Financial Leasing Co., Ltd.	Security deposits	38,400,000.00	Within 1 year	17.26	1,920,000.00

Debtors	Nature of receivables	Book balance	Ages	Proportion to the total balance of other receivables (%)	Provision for bad debts
New Minerals Investment SPRL (the “New Minerals”)	Temporary borrowings	32,896,730.09	Within 1 year: 13,424,121.63 yuan, 1-2 years: 19,472,608.46 yuan	14.79	4,565,727.77
Huaxia Financial Leasing Co., Ltd. . . .	Security deposits	9,000,000.00	1-2 years	4.05	1,800,000.00
Subtotal.		188,878,016.34		84.92	22,161,389.57

Note: Pursuant to the “Proposal on Termination of Foreign Investment by Overseas Wholly-owned Subsidiary” deliberated and approved by the 26th meeting of the fourth session of the Board of Directors dated August 15, 2019, the “Agreement on Termination of Cooperation Agreement” was entered into among the subsidiary Huayou Mining Hong Kong, Summit Reward Investment Limited, Triprosper Investment Limited and Lucky Resources Holdings Company Limited, and Huayou Mining Hong Kong’s proposed acquisition of 51% equity of Lucky Resources Holdings Company Limited from Summit Reward Investment Limited at the consideration of USD66.30 million was terminated. The prepayments for equity transfer of USD9.95 million paid by Huayou Mining Hong Kong would be returned by Summit Reward Investment Limited or its designated third party according to the termination agreement.

7. Inventories

(1) Details

Items	December 31, 2021 [Note]			December 31, 2020		
	Book balance	Provision for write-down	Carrying amount	Book balance	Provision for write-down	Carrying amount
Raw materials.	4,502,475,893.36	2,930,164.38	4,499,545,728.98	2,430,236,029.73	12,287,514.31	2,417,948,515.42
Work in process.	1,999,451,448.20	1,658,601.67	1,997,792,846.53	599,777,058.56		599,777,058.56
Goods on hand	2,541,388,791.33	47,031,014.69	2,494,357,776.64	1,058,703,374.05	8,148,296.11	1,050,555,077.94
Materials on consignment for further processing.	43,260,608.84		43,260,608.84	883,976.69		883,976.69
Consumptive biological assets						
Total	9,086,576,741.73	51,619,780.74	9,034,956,960.99	4,089,600,439.03	20,435,810.42	4,069,164,628.61

(Continued)

Items	December 31, 2019		
	Book balance	Provision for write-down	Carrying amount
Raw materials.	2,260,868,369.89	66,612,819.48	2,194,255,550.41
Work in process	515,869,566.88	20,526,195.01	495,343,371.87
Goods on hand	744,627,531.16	52,396,525.76	692,231,005.40
Materials on consignment for further processing.	10,905,324.17	3,055,555.85	7,849,768.32
Consumptive biological assets	653,188.37	415,550.40	237,637.97
Total	3,532,923,980.47	143,006,646.50	3,389,917,333.97

Note: Balance as at December 31, 2021 included gains or losses on changes in fair value of hedged inventories of 162,139,915.55 yuan. Please refer to section IX (II) of notes to the financial statements for details.

(2) Provision for inventory write-down

1) Details

a. Year 2021

Items	Opening balance	Increase		Decrease		Closing balance
		Accrual	Others	Write-off	Others	
Raw materials	12,287,514.31	-1,857,973.82		7,499,376.11		2,930,164.38
Work in process		11,163,160.74	73,149.09	9,577,708.16		1,658,601.67
Goods on hand	8,148,296.11	6,343,731.10	42,061,812.05	7,032,788.90	2,490,035.67	47,031,014.69
Total	20,435,810.42	15,648,918.02	42,134,961.14	24,109,873.17	2,490,035.67	51,619,780.74

b. Year 2020

Items	Opening balance	Increase		Decrease		Closing balance
		Accrual	Others	Write-off	Others	
Raw materials	66,612,819.48	1,531,747.35		55,857,052.52		12,287,514.31
Work in process	20,526,195.01			20,526,195.01		
Goods on hand	52,396,525.76	29,821,774.81		74,070,004.46		8,148,296.11
Materials on consignment for further processing . .	3,055,555.85			3,055,555.85		
Consumptive biological assets . .	415,550.40			415,550.40		
Total	143,006,646.50	31,353,522.16		153,924,358.24		20,435,810.42

c. Year 2019

Items	Opening balance	Increase		Decrease		Closing balance
		Accrual	Others	Write-off	Others	
Raw materials	427,790,869.43	69,309,702.46		430,487,752.41		66,612,819.48
Work in process	30,850,240.28	45,658,661.85		55,982,707.12		20,526,195.01
Goods on hand	219,006,042.21	195,200,132.28		361,809,648.73		52,396,525.76
Materials on consignment for further processing . .	5,942,911.04	18,266,593.47		21,153,948.66		3,055,555.85
Consumptive biological assets . .		415,550.40				415,550.40
Total	683,590,062.96	328,850,640.46		869,434,056.92		143,006,646.50

Note: Other changes refer to changes in provision for inventory write-down due to changes in the consolidation scope.

2) Determination basis of net realizable value and reasons for the reversal or write-off of provision for inventory write-down

At the balance sheet date, inventories are measured at the lower of cost and net realizable value, with provisions for inventory write-down made on the excess of its cost over the net realizable value on an individual basis. Net realizable value of goods on hand are measured based on estimated selling price less estimated selling expenses and relevant taxes and surcharges; net realizable value of raw materials, work in process and materials on consignment for further processing are measured based on estimated selling price of relevant finished goods less cost to be incurred upon completion, estimated selling expenses, and relevant taxes and surcharges. Current decreases all refer to provision for inventory write-down made in the preceding period but written off in the current period due to sale or use of relevant inventories.

8. *Other current assets*

Items	December 31, 2021			December 31, 2020		
	Book balance	Provision for impairment	Carrying amount	Book balance	Provision for impairment	Carrying amount
Input VAT to be credited or refunded	861,711,599.53		861,711,599.53	524,144,114.07		524,144,114.07
Prepaid enterprise income tax	4,763,559.99		4,763,559.99	2,561,986.93		2,561,986.93
Total	866,475,159.52		866,475,159.52	526,706,101.00		526,706,101.00

(Continued)

Items	December 31, 2019		
	Book balance	Provision for impairment	Carrying amount
Input VAT to be credited or refunded	496,956,970.05		496,956,970.05
Prepaid enterprise income tax	7,609,387.66		7,609,387.66
Total	504,566,357.71		504,566,357.71

9. *Long-term receivables*

(1) Details

Items	December 31, 2021			December 31, 2020		
	Book balance	Provision for bad debts	Carrying amount	Book balance	Provision for bad debts	Carrying amount
La Societe Immobiliere du Congo	1,125,151.66		1,125,151.66	1,151,481.73		1,151,481.73
La Sino-Congolaise Des Mines S. A. (the "SGM")	37,503,780.11		37,503,780.11	38,381,419.27		38,381,419.27
Gecamines	1,875,252.76		1,875,252.76	1,919,136.21		1,919,136.21
La Province du Lualaba	14,427,758.47		14,427,758.47	14,765,387.52		14,765,387.52
Indonesia Weda Bay Industrial Park Co., Ltd. (the "IWIP Company")	177,116,946.00		177,116,946.00	181,261,722.00		181,261,722.00
Veinstone Investment Limited (the "Veinstone").	104,357,457.60		104,357,457.60	106,799,563.20		106,799,563.20
Total	336,406,346.60		336,406,346.60	344,278,709.93		344,278,709.93

(Continued)

Items	December 31, 2019			Discount rate range
	Book balance	Provision for bad debts	Carrying amount	
La Societe Immobiliere du Congo	1,231,124.90		1,231,124.90	N/A
SGM	41,036,101.26		41,036,101.26	N/A
Gecamines	2,051,874.83		2,051,874.83	N/A
La Province du Lualaba	15,786,647.52		15,786,647.52	N/A
IWIP Company	102,271,092.00		102,271,092.00	N/A
Veinstone	101,177,754.03		101,177,754.03	N/A
Total	263,554,594.54		263,554,594.54	

(2) Other remarks

1) Gecamines, La Societe Immobiliere du Congo, SGM

Pursuant to the “Agreement on Establishment of Joint Venture” entered into among the Company, Gecamines, La Societe Immobiliere du Congo, China Railway Group (Hong Kong) Limited, China Railway Resources Development Co., Ltd., Sinohydro Corporation Limited, Sinohydro Harbour Co., Ltd. and China Metallurgical Group Corporation in September 2008 and the “Confirmation of Equity Adjustment” entered into among the Company, China Railway (Hong Kong) Engineering Limited and Sinohydro Resources Limited on October 23, 2013, the Company respectively rendered borrowings of USD294,125.00 (equivalent to 2,051,874.83 yuan, 1,919,136.21 yuan, 1,875,252.76 yuan according to the exchange rate at the end of each reporting period) and USD176,475.00 (equivalent to 1,231,124.90 yuan, 1,151,481.73 yuan, 1,125,151.66 yuan according to the exchange rate at the end of each reporting period) to Gecamines and La Societe Immobiliere du Congo for their contributions to SGM, and rendered borrowings of USD5,882,300.00 (equivalent to 41,036,101.26 yuan, 38,381,419.27 yuan and 37,503,780.11 yuan according to the exchange rate at the end of each reporting period) to SGM. Gecamines and La Societe Immobiliere du Congo would repay the borrowings with dividends distributed by SGM, and SGM would repay the borrowings with its earnings from operations free of interest.

2) La Province du Lualaba

Pursuant to the “Pre-financing Agreement on Restoration Engineering of Luena Road” and the “Concession Contract” entered into between the subsidiary CDM Company and La Province du Lualaba respectively in September 2017 and March 2018, the subsidiary CDM Company rendered borrowings of USD4.00 million to La Province du Lualaba for road restoration. La Province du Lualaba would repay the borrowings with taxes on proceedings from right-of-way of the road section. Balances of the subsidiary CDM Company due from La Province du Lualaba as at the end of each reporting period were all USD2,262,929.32 (equivalent to 15,786,647.52 yuan, 14,765,387.52 yuan and 14,427,758.47 yuan according to the exchange rate at the end of each reporting period).

3) IWIP Company

Pursuant to the “Shareholder Loan Agreement” entered into between the subsidiary Huachuang International and the associate IWIP Company in 2019, Huachuang International, together with other shareholders of IWIP Company, rendered shareholder borrowings to IWIP Company based on their holding proportions. Balances due from IWIP

Company as at the end of each reporting period were USD14,660,000.00, USD27,780,000.00 and USD27,780,000.00 (equivalent to 102,271,092.00 yuan, 181,261,722.00 and 177,116,946.00 yuan according to the exchange rate at the end of each reporting period).

4) Veinstone

Pursuant to the “Supplementary Agreement” entered into among the subsidiary Huayou Mining Hong Kong, Newstride Limited, Zhenshi Group Hong Kong Cornerstone Investment Co., Ltd., Brunp (China) Recycling Technology Co., Ltd. and Yongqing Technology Co., Ltd. in 2019, Huayou Mining Hong Kong, together with other shareholders of Veinstone, rendered shareholder borrowings to Veinstone based on their holding proportions. Balances due from Veinstone as at the end of each reporting period were USD14,503,276.00, USD16,368,000.00, USD16,368,000.00 (equivalent to 101,177,754.03 yuan, 106,799,563.20 yuan, 104,357,457.60 yuan according to the exchange rate at the end of each reporting period).

As there was no obvious evidence indicating impairment of the above long-term receivables, no provision for impairment was made thereon.

10. Long-term equity investments

(1) Categories

Items	December 31, 2021			December 31, 2020		
	Book balance	Provision for impairment	Carrying amount	Book balance	Provision for impairment	Carrying amount
Investments in associates	3,426,087,640.29	4,640,501.42	3,421,447,138.87	2,066,495,192.21	4,640,501.42	2,061,854,690.79
Investments in joint ventures	6,305,745.11		6,305,745.11	16,643,371.77		16,643,371.77
Total	3,432,393,385.40	4,640,501.42	3,427,752,883.98	2,083,138,563.98	4,640,501.42	2,078,498,062.56

(Continued)

Items	December 31, 2019		
	Book balance	Provision for impairment	Carrying amount
Investments in associates	1,312,767,942.88		1,312,767,942.88
Investments in joint ventures	18,717,782.00		18,717,782.00
Total	1,331,485,724.88		1,331,485,724.88

(2) Details

1) Year 2021

Investees	Opening balance	Increase/Decrease			
		Investments increased	Investments decreased	Investment income recognized under equity method	Adjustment in other comprehensive income
Joint ventures					
Town Mining Resource Co., Ltd. (the "TMR Company")	14,029,958.18		16,593,971.47	2,032,746.66	531,266.63
PT. Alam Hijau Environmental Services	2,613,413.59	3,880,680.00		-123,694.21	-64,654.27
Subtotal	16,643,371.77	3,880,680.00	16,593,971.47	1,909,052.45	466,612.36
Associates					
Newstride Technology Limited (the "Newstride Technology").	671,818,440.04	333,564,358.79		310,235,283.58	-25,839,592.65
Quzhou Minfu Woneng New Energy Vehicle Technology Co., Ltd. (the "Minfu Woneng").					
Nanjing Hanmo New Energy Industry Investment Partnership (LP) (the "Hanmo New Energy").	2,844,222.10			-2,844,222.10	
AVZ Minerals Limited (the "AVZ Company").	67,343,994.89			-1,637,263.52	985,432.01
Zhejiang Puhua New Energy Materials Co., Ltd. (the "Puhua Company").	116,961,987.41			8,758,432.24	
Leyou New Energy Materials (Wuxi) Co., Ltd. (the "Leyou Company").	970,411,523.40			165,763,725.38	
Ruiyou Investment Company Limited (the "Ruiyou Company")	10,004,722.91			-4,816.23	-1,917.68
Hanaq Argentina S.A. (the "HANAQ Company").	7,803,471.01		6,003,668.72	-1,329,518.59	3,532,162.11
Veinstone	84,039,406.46			61,355,873.23	-2,590,980.62
IWIP Company	130,626,922.57			61,783,367.92	-3,093,816.23
PT. Hua Pioneer Indonesia (the "Indonesia Huatuo")					
Quzhou Xinyou Equity Investment Partnership (LP) (the "Quzhou Xinyou")		7,800,000.00	7,806,343.53	6,343.53	
Quzhou Anyou Equity Investment Partnership (LP) (the "Quzhou Anyou")		599,000,000.00		-569,053.81	
POSCO-HY Clean Metal Co., Ltd. (the "PHC Company").		238,873,179.19		-2,811,829.56	-13,753,179.19
Shenzhen Phoenicia Technology Co., Ltd. (the "Shenzhen Phoenicia").		4,500,000.00		52,737.31	
PT. Huafei Nickel Cobalt (the "Indonesia Huafei").		3,239,250.00		-1,435,648.96	-34,796.21
Subtotal	2,061,854,690.79	1,186,976,787.98	13,810,012.25	597,323,410.42	-40,796,688.46
Total	2,078,498,062.56	1,190,857,467.98	30,403,983.72	599,232,462.87	-40,330,076.10

(Continued)

Investees	Increase/Decrease					Closing balance	Closing balance of provision for impairment
	Changes in other equity	Cash dividend/ Profit declared for distribution	Provision for impairment	Others			
Joint ventures							
TMR Company							
PT. Alam Hijau Environmental Services						6,305,745.11	
Subtotal						6,305,745.11	
Associates							
Newstride Technology		366,098,603.80				923,679,885.96	
Minfu Woneng							1,161,307.33
Hanmo New Energy							
AVZ Company						66,692,163.38	
Puhua Company						125,720,419.65	
Leyou Company						1,136,175,248.78	
Ruiyou Company						9,997,989.00	
					-4,002,445.81		
HANAQ Company					[Note]		
Veinstone						142,804,299.07	
IWIP Company						189,316,474.26	
Indonesia Huatuo							3,479,194.09
Quzhou Xinyou							
Quzhou Anyou						598,430,946.19	
PHC Company						222,308,170.44	
Shenzhen Phoenicia						4,552,737.31	
Indonesia Huafei						1,768,804.83	
Subtotal		366,098,603.80			-4,002,445.81	3,421,447,138.87	4,640,501.42
Total		366,098,603.80			-4,002,445.81	3,427,752,883.98	4,640,501.42

2) Year 2020

Investees	Increase/Decrease				
	Opening balance	Investments increased	Investments decreased	Investment income recognized under equity method	Adjustment in other comprehensive income
Joint ventures					
TMR Company	15,930,251.30			-1,811,810.34	-88,482.78
PT. Alam Hijau Environmental Services	2,787,530.70			34,795.26	-208,912.37
Subtotal	18,717,782.00			-1,777,015.08	-297,395.15
Associates					
Newstride Technology		699,824,800.00		22,583,091.93	-50,589,451.89
Minfu Woneng	1,161,307.33				
Hanmo New Energy	2,884,932.20			-40,710.10	
AVZ Company	69,457,545.90			-1,919,127.28	-194,423.73
Nzuri Copper Limited (the "NZC Company")	52,698,834.14		52,698,834.14		
Puhua Company	120,455,161.97			-3,493,174.56	
Leyou Company	869,707,289.90	98,816,715.14		1,887,518.36	
Ruiyou Company	10,015,755.26			-4,899.51	-6,132.84

Investees	Opening balance	Increase/Decrease		Investment income recognized under equity method	Adjustment in other comprehensive income
		Investments increased	Investments decreased		
HANAQ Company	8,233,962.91			-203,495.15	-226,996.75
Veinstone	72,608,885.91	9,017,216.00		7,052,281.00	-4,638,976.45
IWIP Company	104,150,493.27			33,941,873.24	-7,465,443.94
Indonesia Huatuo	1,393,774.09	2,085,420.00			
Subtotal	1,312,767,942.88	809,744,151.14	52,698,834.14	59,803,357.93	-63,121,425.60
Total	1,331,485,724.88	809,744,151.14	52,698,834.14	58,026,342.85	-63,418,820.75

(Continued)

Investees	Changes in other equity	Increase/Decrease			Closing balance	Closing balance of provision for impairment
		Cash dividend/ Profit declared for distribution	Provision for impairment	Others		
Joint ventures						
TMR Company					14,029,958.18	
PT. Alam Hijau Environmental Services					2,613,413.59	
Subtotal					16,643,371.77	
Associates						
Newstride Technology					671,818,440.04	
Minfu Woneng			1,161,307.33			
Hanmo New Energy					2,844,222.10	
AVZ Company					67,343,994.89	
NZC Company						
Puhua Company					116,961,987.41	
Leyou Company					970,411,523.40	
Ruiyou Company					10,004,722.91	
HANAQ Company					7,803,471.01	
Veinstone					84,039,406.46	
IWIP Company					130,626,922.57	
Indonesia Huatuo			3,479,194.09			
Subtotal			4,640,501.42		2,061,854,690.79	
Total			4,640,501.42		2,078,498,062.56	

3) Year 2019

Investees	Opening balance	Increase/Decrease		Investment income recognized under equity method	Adjustment in other comprehensive income
		Investments increased	Investments decreased		
Joint ventures					
TMR Company	14,361,644.59			1,805,274.70	-236,667.99
PT. Alam Hijau Environmental Services		2,816,000.00		-39,167.69	10,698.39
Subtotal	14,361,644.59	2,816,000.00		1,766,107.01	-225,969.60

Investees	Opening balance	Increase/Decrease		Investment income recognized under equity method	Adjustment in other comprehensive income
		Investments increased	Investments decreased		
Associates					
Quzhou Huahai New Energy Technology Industry Equity Investment Partnership (LP) (the “Huahai Industry Investment”)	98,321,733.05		134,334,116.92	36,012,383.87	
Minfu Woneng	1,254,420.88			-93,113.55	
Hanmo New Energy	4,965,347.26			-2,080,415.06	
AVZ Company	66,100,726.57	5,802,574.95		-2,357,662.09	-88,093.53
NZC Company	55,936,984.86			-3,179,622.42	-58,528.30
Puhua Company	-465,215.99	124,000,000.00		-3,079,622.04	
Leyou Company	285,306,417.54	582,631,440.04		1,769,432.32	
Ruiyou Company	9,905,826.00	3,556,245.17		-3,583,219.57	136,903.66
HANAQ Company	7,853,022.81			-3,572,649.92	3,953,590.02
Veinstone		72,601,580.75		-73,098.36	80,403.52
IWIP Company		99,977,124.00		2,904,326.54	1,269,042.73
Indonesia Huatuo		1,405,240.00		-19,575.35	8,109.44
Subtotal	529,179,262.98	889,974,204.91	134,334,116.92	22,647,164.37	5,301,427.54
Total	543,540,907.57	892,790,204.91	134,334,116.92	24,413,271.38	5,075,457.94

(Continued)

Investees	Increase/Decrease				Closing balance	Closing balance of provision for impairment
	Changes in other equity	Cash dividend/Profit declared for distribution	Provision for impairment	Others		
Joint ventures						
TMR Company					15,930,251.30	
PT. Alam Hijau Environmental Services					2,787,530.70	
Subtotal					18,717,782.00	
Associates						
Huahai Industry Investment						
Minfu Woneng					1,161,307.33	
Hanmo New Energy					2,884,932.20	
AVZ Company					69,457,545.90	
NZC Company					52,698,834.14	
Puhua Company					120,455,161.97	
Leyou Company					869,707,289.90	
Ruiyou Company					10,015,755.26	
HANAQ Company					8,233,962.91	
Veinstone					72,608,885.91	
IWIP Company					104,150,493.27	
Indonesia Huatuo					1,393,774.09	
Subtotal					1,312,767,942.88	
Total					1,331,485,724.88	

Note: As the subsidiary Huayou Mining Hong Kong no longer had significant influence over the associate HANAQ Company after disposal of its 12% equity, the Company designated it as an equity instrument investment measured at fair value through other comprehensive income.

11. Other equity instrument investments

(1) Details

1) December 31, 2021/Year 2021

Items	Closing balance	Dividend income	Accumulated amount of gains or losses transferred from other comprehensive income to retained earnings	
			Amount	Reasons
Shenzhen Sinuo Industrial Development Co., Ltd. (the "Sinuo Industrial")				
Beijing Saidemei Resources Recycling Research Institute Co., Ltd. (the "Beijing Saidemei")	1,550,000.00			
Inner Mongolia Sinuo New Material Technology Co., Ltd. (the "Inner Mongolia Sinuo")	29,000,000.00			
HANAQ Company	4,002,445.81			
Total	34,552,445.81			

2) December 31, 2020/Year 2020

Items	Closing balance	Dividend income	Accumulated amount of gains or losses transferred from other comprehensive income to retained earnings	
			Amount	Reasons
Sinuo Industrial	4,103,575.00			
Beijing Saidemei	1,550,000.00			
Optimal Mining Limited				
Total	5,653,575.00			

3) December 31, 2019/Year 2019

Items	Closing balance	Dividend income	Accumulated amount of gains or losses transferred from other comprehensive income to retained earnings	
			Amount	Reasons
Sinuo Industrial	11,311,510.76			
Beijing Saidemei	1,550,000.00			
Optimal Mining Limited	9,068,581.76			
Total	21,930,092.52			

(2) Reasons for equity instrument investments designated as at fair value through other comprehensive income

Considering that the above investments were non-trading equity instrument investments, the Company designated them as equity instrument investments at fair value through other comprehensive income.

12. Other non-current financial assets

(1) Details

Items	December 31, 2021	December 31, 2020	December 31, 2019
Financial assets classified as at fair value through profit or loss	6,573,600.00	6,573,600.00	6,573,600.00
Including: Equity instrument investments	6,573,600.00	6,573,600.00	6,573,600.00
Total	6,573,600.00	6,573,600.00	6,573,600.00

(2) Other remarks

1) Year 2021

Investees	Opening balance	Increase	Decrease	Closing balance
SGM	6,573,600.00			6,573,600.00
Subtotal	6,573,600.00			6,573,600.00

2) Year 2020

Investees	Opening balance	Increase	Decrease	Closing balance
SGM	6,573,600.00			6,573,600.00
Subtotal	6,573,600.00			6,573,600.00

3) Year 2019

Investees	Opening balance	Increase	Decrease [Note]	Closing balance
SGM	6,573,600.00			6,573,600.00
Huahai New Energy	6,000,000.00		6,000,000.00	
Subtotal	12,573,600.00		6,000,000.00	6,573,600.00

Note: Please refer to section VI(I)2 of notes to the financial statements for details on current decrease.

13. Fixed assets

(1) Details

1) Year 2021

Items	Buildings and structures	Machinery	Transport facilities	Other equipment	Total
Cost					
Opening balance	3,719,888,940.48	6,508,190,316.36	235,412,713.44	333,198,406.94	10,796,690,377.22
Increase	1,870,873,734.67	3,499,719,668.30	155,942,762.54	112,685,510.46	5,639,221,675.97
1) Acquisition	32,969,956.78	108,212,771.20	148,365,723.07	46,479,913.52	336,028,364.57
2) Transferred in from construction in progress.	813,400,310.81	1,302,735,491.20		54,925,644.91	2,171,061,446.92
3) Increase due to business combination	1,024,503,467.08	2,088,771,405.90	7,577,039.47	11,279,952.03	3,132,131,864.48
Decrease.	206,143,874.65	339,206,875.85	53,381,850.25	21,482,029.99	620,214,630.74
1) Disposal/Scrapping.	57,533,671.93	156,319,596.25	41,345,122.79	9,891,403.67	265,089,794.64

Items	Buildings and structures	Machinery	Transport facilities	Other equipment	Total
2) Transferred into construction in progress.		462,508.42		178,720.39	641,228.81
3) Decrease due to business combination . .	93,887,172.67	95,313,763.09	4,978,164.84	7,975,629.60	202,154,730.20
4) Translation reserve . . .	54,723,030.05	87,111,008.09	7,058,562.62	3,436,276.33	152,328,877.09
Closing balance	5,384,618,800.50	9,668,703,108.81	337,973,625.73	424,401,887.41	15,815,697,422.45
Accumulated depreciation					
Opening balance	692,231,701.14	1,563,742,677.77	100,796,454.35	102,148,599.50	2,458,919,432.76
Increase	307,867,697.68	1,039,250,242.72	34,655,225.60	68,982,619.85	1,450,755,785.85
1) Accrual.	192,834,053.01	706,723,085.69	30,699,893.67	63,169,895.13	993,426,927.50
2) Increase due to business combination . .	115,033,644.67	332,527,157.03	3,955,331.93	5,812,724.72	457,328,858.35
Decrease.	53,893,794.71	157,104,398.34	38,607,717.69	11,893,924.26	261,499,835.00
1) Disposal/Scrapping. . .	17,151,105.38	99,245,333.47	34,130,843.68	7,339,161.70	157,866,444.23
2) Transferred into construction in progress.		19,251.14		55,783.60	75,034.74
3) Decrease due to business combination . .	12,863,114.62	36,545,778.57	2,617,490.47	4,105,061.14	56,131,444.80
4) Translation reserve . . .	23,879,574.71	21,294,035.16	1,859,383.54	393,917.82	47,426,911.23
Closing balance	946,205,604.11	2,445,888,522.15	96,843,962.26	159,237,295.09	3,648,175,383.61
Provision for impairment					
Opening balance		15,457,126.71		1,288,905.93	16,746,032.64
Increase	21,908,400.62	9,097,900.83	174,687.29	122,709.59	31,303,698.33
1) Accrual.	21,908,400.62	9,097,900.83	174,687.29	122,709.59	31,303,698.33
Decrease.		4,977,410.67			4,977,410.67
1) Disposal/Scrapping. . .		4,977,410.67			4,977,410.67
Closing balance	21,908,400.62	19,577,616.87	174,687.29	1,411,615.52	43,072,320.30
Carrying amount					
Closing balance	4,416,504,795.77	7,203,236,969.79	240,954,976.18	263,752,976.80	12,124,449,718.54
Opening balance	3,027,657,239.34	4,928,990,511.88	134,616,259.09	229,760,901.51	8,321,024,911.82

2) Year 2020

Items	Buildings and structures	Machinery	Transport facilities	Other equipment	Total
Cost					
Opening balance	3,152,969,789.51	4,804,180,094.81	220,329,581.53	225,882,777.16	8,403,362,243.01
Increase	778,717,503.70	1,975,386,189.45	34,754,088.67	126,183,923.55	2,915,041,705.37
1) Acquisition.	26,694,042.20	65,472,138.64	26,692,308.70	22,679,760.10	141,538,249.64
2) Transferred in from construction in progress.	752,023,461.50	1,909,914,050.81	8,061,779.97	103,504,163.45	2,773,503,455.73
Decrease.	211,798,352.73	271,375,967.90	19,670,956.76	18,868,293.77	521,713,571.16
1) Disposal/Scrapping. . .	91,564,854.16	40,061,429.61	5,166,327.47	6,108,680.36	142,901,291.60
2) Transferred into construction in progress.		70,937,764.42	407,002.17	11,602,553.44	82,947,320.03
3) Translation reserve . . .	120,233,498.57	160,376,773.87	14,097,627.12	1,157,059.97	295,864,959.53
Closing balance	3,719,888,940.48	6,508,190,316.36	235,412,713.44	333,198,406.94	10,796,690,377.22
Accumulated depreciation					
Opening balance	627,303,386.03	1,184,152,822.28	86,334,818.87	60,090,405.04	1,957,881,432.22
Increase	161,073,992.61	467,744,840.13	24,975,595.94	47,921,196.56	701,715,625.24
1) Accrual.	161,073,992.61	467,744,840.13	24,975,595.94	47,076,132.83	700,870,561.51
2) Translation reserve. . .				845,063.73	845,063.73

Items	Buildings and structures	Machinery	Transport facilities	Other equipment	Total
Decrease.	96,145,677.50	88,154,984.64	10,513,960.46	5,863,002.10	200,677,624.70
1) Disposal/Scrapping. . .	68,087,446.75	31,043,055.03	4,066,858.36	3,183,649.47	106,381,009.61
2) Transferred into construction in progress.		4,908,818.86	42,236.62	1,900,551.59	6,851,607.07
3) Translation reserve. . .	28,058,230.75	52,203,110.75	6,404,865.48	778,801.04	87,445,008.02
Closing balance.	692,231,701.14	1,563,742,677.77	100,796,454.35	102,148,599.50	2,458,919,432.76
Provision for impairment					
Opening balance		6,342,325.05		51,113.08	6,393,438.13
Increase		9,114,801.66		1,237,792.85	10,352,594.51
1) Accrual.		9,114,801.66		1,237,792.85	10,352,594.51
Decrease.					
1) Disposal/Scrapping. . .					
Closing balance.		15,457,126.71		1,288,905.93	16,746,032.64
Carrying amount					
Closing balance	3,027,657,239.34	4,928,990,511.88	134,616,259.09	229,760,901.51	8,321,024,911.82
Opening balance.	2,525,666,403.48	3,613,684,947.48	133,994,762.66	165,741,259.04	6,439,087,372.66

3) Year 2019

Items	Buildings and structures	Machinery	Transport facilities	Other equipment	Total
Cost					
Opening balance	2,474,157,150.32	3,400,674,833.42	139,003,002.15	115,328,473.77	6,129,163,459.66
Increase	707,588,384.50	1,413,375,809.57	85,810,216.58	111,682,038.95	2,318,456,449.60
1) Acquisition.	49,778,785.20	38,212,013.47	71,740,724.01	6,237,701.65	165,969,224.33
2) Transferred in from construction in progress.	631,222,552.31	1,326,405,048.11	11,660,144.11	104,440,875.50	2,073,728,620.03
3) Increase due to business combination. . .				541,508.69	541,508.69
4) Translation reserve. . .	26,587,046.99	48,758,747.99	2,409,348.46	461,953.11	78,217,096.55
Decrease.	28,775,745.31	9,870,548.18	4,483,637.20	1,127,735.56	44,257,666.25
1) Disposal/Scrapping. . .	28,303,763.47	3,337,947.77	679,445.65	1,039,938.04	33,361,094.93
2) Decrease due to business combination. . .		5,817,067.43	631,659.83	64,269.57	6,512,996.83
3) Translation reserve. . .	471,981.84	715,532.98	3,172,531.72	23,527.95	4,383,574.49
Closing balance.	3,152,969,789.51	4,804,180,094.81	220,329,581.53	225,882,777.16	8,403,362,243.01
Accumulated depreciation					
Opening balance	475,340,054.26	893,046,403.34	67,645,988.41	40,455,816.11	1,476,488,262.12
Increase	176,250,504.16	293,953,638.58	19,306,851.51	20,579,945.18	510,090,939.43
1) Accrual.	169,503,325.85	284,764,829.60	18,314,245.88	20,094,447.36	492,676,848.69
2) Increase due to business combination. . .				107,907.84	107,907.84
3) Translation reserve. . .	6,747,178.31	9,188,808.98	992,605.63	377,589.98	17,306,182.90
Decrease.	24,287,172.39	2,847,219.64	618,021.05	945,356.25	28,697,769.33
1) Disposal/Scrapping. . .	24,202,752.22	2,203,699.00	550,961.75	917,346.38	27,874,759.35
2) Decrease due to business combination. . .		183,567.77	25,276.88	5,907.88	214,752.53
3) Translation reserve. . .	84,420.17	459,952.87	41,782.42	22,101.99	608,257.45
Closing balance.	627,303,386.03	1,184,152,822.28	86,334,818.87	60,090,405.04	1,957,881,432.22
Provision for impairment					
Opening balance		6,396,509.17		53,666.85	6,450,176.02
Increase					
1) Accrual.					
Decrease.		54,184.12		2,553.77	56,737.89

Items	Buildings and structures	Machinery	Transport facilities	Other equipment	Total
1) Disposal/Scrapping . . .		54,184.12		2,553.77	56,737.89
Closing balance		6,342,325.05		51,113.08	6,393,438.13
Carrying amount					
Closing balance	2,525,666,403.48	3,613,684,947.48	133,994,762.66	165,741,259.04	6,439,087,372.66
Opening balance	1,998,817,096.06	2,501,231,920.91	71,357,013.74	74,818,990.81	4,646,225,021.52

(2) Fixed assets temporarily idle

1) December 31, 2021

Items	Cost	Accumulated depreciation	Provision for impairment	Carrying amount	Remarks
Buildings and structures . .	51,409,853.87	29,501,453.25	21,908,400.62		
Machinery	80,655,832.30	48,913,064.29	18,574,185.22	13,168,582.79	
Transport facilities	1,584,292.34	1,409,605.05	174,687.29		
Other equipment	4,283,970.70	1,256,051.47	1,411,615.52	1,616,303.71	
Subtotal	137,933,949.21	81,080,174.06	42,068,888.65	14,784,886.50	

2) December 31, 2020

Items	Cost	Accumulated depreciation	Provision for impairment	Carrying amount	Remarks
Buildings and structures . .	6,393,176.49	6,008,100.97		385,075.52	
Machinery	49,602,200.12	29,545,596.18	14,583,719.89	5,472,884.05	
Other equipment	2,432,337.67	888,327.25	1,296,154.12	247,856.30	
Subtotal	58,427,714.28	36,442,024.40	15,879,874.01	6,105,815.87	

3) December 31, 2019

Items	Cost	Accumulated depreciation	Provision for impairment	Carrying amount	Remarks
Buildings and structures . .	6,835,365.73	6,493,597.48		341,768.25	
Machinery	29,343,286.59	21,155,531.45	5,468,918.23	2,718,836.91	
Other equipment	356,360.32	255,555.70	25,066.43	75,738.19	
Subtotal	36,535,012.64	27,904,684.63	5,493,984.66	3,136,343.35	

(3) No fixed assets leased in under finance leases at the end of each reporting period.

(4) Fixed assets leased out under operating leases

Items	Carrying amount as at December 31, 2021	Carrying amount as at December 31, 2020	Carrying amount as at December 31, 2019
Buildings and structures	202,741.87	4,577,247.74	5,357,684.31
Machinery		74,705.53	5,736,870.84
Transport facilities			25,135.67
Other equipment	12,513,369.39	14,108.07	18,060.97
Subtotal	12,716,111.26	4,666,061.34	11,137,751.79

As the fixed assets leased out under operating leases were only part of the Company's buildings and structures for temporary lease, they were not accounted for as investment property.

(5) Fixed assets with certificate of titles being unsettled

<u>Items</u>	<u>Carrying amount</u>	<u>Reasons for unsettlement</u>
Housing property of Chengdu B&M, Huayou Quzhou, etc.	1,023,744,027.41	In processing
Subtotal	1,023,744,027.41	

14. Construction in progress

(1) Details

<u>Items</u>	<u>December 31, 2021</u>	<u>December 31, 2020</u>	<u>December 31, 2019</u>
Construction in progress	9,107,231,788.43	2,838,568,176.12	2,932,641,503.18
Construction materials	713,205,093.03	550,684,806.16	251,373,951.66
Total	9,820,436,881.46	3,389,252,982.28	3,184,015,454.84

(2) Construction in progress

1) Details

<u>Projects</u>	<u>December 31, 2021</u>			<u>December 31, 2020</u>		
	<u>Book balance</u>	<u>Provision for impairment</u>	<u>Carrying amount</u>	<u>Book balance</u>	<u>Provision for impairment</u>	<u>Carrying amount</u>
DRC Mining Concession PE527—Lukuni Mine electrowinning copper project with annual output of 30,000 tons						
Transformation project for extraction workshop with annual output of 30,000 tons of cobalt products . . .						
Brine project with annual output of 2,500 tons . .						
Construction project of Cobalt and Nickel New Material Research Institute . . .	183,077,163.04		183,077,163.04	165,807,562.91		165,807,562.91
Technical transformation of anhydrous iron phosphate workshop for 302A cobalt tetroxide project . . .						
Wet process phase III expansion and reconstruction project of MIKAS Company				62,076,116.39		62,076,116.39
Construction project of Huayou Technology Innovation Center . . .	105,518,876.90		105,518,876.90	214,443,265.02		214,443,265.02

Projects	December 31, 2021			December 31, 2020		
	Book balance	Provision for impairment	Carrying amount	Book balance	Provision for impairment	Carrying amount
Phase II engineering of battery grade lithium carbonate project with annual output of 10,000 tons						
High-purity ternary power battery grade nickel sulfate project with annual output of 30,000 tons (metal content)	404,971,085.98		404,971,085.98	76,638,030.28		76,638,030.28
High-grade nickel power battery grade nickel sulfate project with annual output of 50,000 tons (metal content)	251,206,988.70		251,206,988.70			
Ternary precursor material project for high-grade nickel power battery with annual output of 50,000 tons	755,812,376.99		755,812,376.99	6,909,812.95		6,909,812.95
Ternary cathode material precursor project for high-performance power battery with annual output of 50,000 tons	101,095,586.82		101,095,586.82			
Ternary precursor material project for high-grade nickel power battery with annual output of 40,000 tons				671,948,361.81		671,948,361.81
Nickel cobalt hydroxide project with annual output of 60,000 tons (nickel content)	5,428,143,914.13		5,428,143,914.13	1,081,047,978.83		1,081,047,978.83
Ternary precursor new material project for power battery with annual output of 50,000 tons						
New energy precursor material project for lithium battery with annual output of 30,000 tons	75,436,129.06		75,436,129.06	231,213,250.64		231,213,250.64
Supporting project for optimization of deamination process and treatment of saline wastewater						

Projects	December 31, 2021			December 31, 2020		
	Book balance	Provision for impairment	Carrying amount	Book balance	Provision for impairment	Carrying amount
High-grade nickel matte project with annual output of 45,000 tons (nickel content)	997,080,941.89		997,080,941.89	4,254,138.10		4,254,138.10
High energy density lithium battery materials industrialization project.	428,453,373.36		428,453,373.36			
Construction of Huayou Headquarters Research Institute	120,658,315.19		120,658,315.19	7,571,109.36		7,571,109.36
Other piecemeal engineering	255,777,036.37		255,777,036.37	316,658,549.83		316,658,549.83
Subtotal	9,107,231,788.43		9,107,231,788.43	2,838,568,176.12		2,838,568,176.12

(Continued)

Projects	December 31, 2019		
	Book balance	Provision for impairment	Carrying amount
DRC Mining Concession PE527—Lukuni Mine electrowinning copper project with annual output of 30,000 tons	99,313,284.01		99,313,284.01
Transformation project for extraction workshop with annual output of 30,000 tons of cobalt products	59,774,045.84		59,774,045.84
Brine project with annual output of 2,500 tons	125,427,322.42		125,427,322.42
Construction project of Cobalt and Nickel New Material Research Institute	89,899,605.20		89,899,605.20
Technical transformation of anhydrous iron phosphate workshop for 302A cobalt tetroxide project	276,209,289.79		276,209,289.79
Wet process phase III expansion and reconstruction project of MIKAS Company	21,806,859.70		21,806,859.70
Construction project of Huayou Technology Innovation Center	188,871,623.31		188,871,623.31
Phase II engineering of battery grade lithium carbonate project with annual output of 10,000 tons	103,853,265.16		103,853,265.16
High-purity ternary power battery grade nickel sulfate project with annual output of 30,000 tons (metal content)	470,209.21		470,209.21
High-grade nickel power battery grade nickel sulfate project with annual output of 50,000 tons (metal content)			

December 31, 2019

Projects	Book balance	Provision for impairment	Carrying amount
Ternary precursor material project for high-grade nickel power battery with annual output of 50,000 tons			
Ternary cathode material precursor project for high-performance power battery with annual output of 50,000 tons			
Ternary precursor material project for high-grade nickel power battery with annual output of 40,000 tons	643,744,623.62		643,744,623.62
Nickel cobalt hydroxide project with annual output of 60,000 tons (nickel content)	120,299,909.03		120,299,909.03
Ternary precursor new material project for power battery with annual output of 50,000 tons	587,631,349.63		587,631,349.63
New energy precursor material project for lithium battery with annual output of 30,000 tons	224,824,305.71		224,824,305.71
Supporting project for optimization of deamination process and treatment of saline wastewater . . .	82,836,186.52		82,836,186.52
High-grade nickel matte project with annual output of 45,000 tons (nickel content)			
High energy density li-ion battery materials industrialization project.			
Construction of Huayou Headquarters Research Institute . .			
Other piecemeal engineering	307,679,624.03		307,679,624.03
Subtotal	2,932,641,503.18		2,932,641,503.18

2) Changes in significant projects

1) Year 2021

Projects	Budgets	Opening balance	Increase	Transferred to fixed assets	Other decrease [Note 1]	Closing balance
	<i>(0'000)</i>					
Construction project of Cobalt and Nickel New Material Research Institute . . .	28,739.25	165,807,562.91	17,269,600.13			183,077,163.04
Wet process phase III expansion and reconstruction project of MIKAS Company	USD3,860.00	62,076,116.39	91,902,398.25	153,268,790.61	709,724.03	
Construction project of Huayou Technology Innovation Center . . .	40,152.00	214,443,265.02	153,034,989.75	261,959,377.87		105,518,876.90

Projects	Budgets	Opening balance	Increase	Transferred to fixed assets	Other decrease [Note 1]	Closing balance
	(0'000)					
High-purity ternary power battery grade nickel sulfate project with annual output of 30,000 tons (metal content)	80,086.00	76,638,030.28	543,881,016.12	215,547,960.42		404,971,085.98
High-grade nickel power battery grade nickel sulfate project with annual output of 50,000 tons (metal content)	79,455.71		251,206,988.70			251,206,988.70
Ternary precursor material project for high-grade nickel power battery with annual output of 50,000 tons	135,306.61	6,909,812.95	873,693,186.98	124,790,622.94		755,812,376.99
Ternary cathode material precursor project for high-performance power battery with annual output of 50,000 tons	124,479.00		101,095,586.82			101,095,586.82
Ternary precursor material project for high-grade nickel power battery with annual output of 40,000 tons	90,460.00	671,948,361.81	42,493,064.49	608,588,346.62	105,853,079.68	
Nickel cobalt hydroxide project with annual output of 60,000 tons (nickel content)	USD124,739.10	1,081,047,978.83	4,429,479,148.00		82,383,212.70	5,428,143,914.13
New energy precursor material project for lithium battery with annual output of 30,000 tons	98,226.00	231,213,250.64	75,474,361.58	231,251,483.16		75,436,129.06
High-grade nickel matte project with annual output of 45,000 tons (nickel content)	USD48,943.00	4,254,138.10	1,005,167,329.45		12,340,525.66	997,080,941.89
High energy density lithium battery materials industrialization project.	254,213.00		586,958,911.40 [Note 2]	158,505,538.04		428,453,373.36
Construction of Huayou Headquarters Research Institute	35,000.00	7,571,109.36	113,087,205.83			120,658,315.19
Subtotal		2,521,909,626.29	8,284,743,787.50	1,753,912,119.66	201,286,542.07	8,851,454,752.06

(Continued)

Projects	Accumulated input to budget	Completion percentage	Accumulated amount of borrowing cost capitalization	Amount of borrowing cost capitalization in the current period	Annual capitalization rate	Fund source
	(%)	(%)			(%)	
Construction project of Cobalt and Nickel New Material Research Institute.	101.87	95.00				Raised funds and other sources
Wet process phase III expansion and reconstruction project of MIKAS Company	112.51	100.00				Other sources
Construction project of Huayou Technology Innovation Center.	114.33	95.00	12,956,807.22	1,829,153.82	3.84	Financial institution loans and other sources
High-purity ternary power battery grade nickel sulfate project with annual output of 30,000 tons (metal content).	77.48	80.00				Raised funds and other sources
High-grade nickel power battery grade nickel sulfate project with annual output of 50,000 tons (metal content).	31.62	30.00	4,276,173.26	4,276,173.26	3.84	Financial institution loans and other sources
Ternary precursor material project for high-grade nickel power battery with annual output of 50,000 tons	65.08	70.00				Raised funds and other sources
Ternary cathode material precursor project for high-performance power battery with annual output of 50,000 tons.	8.12	10.00				Raised funds and other sources
Ternary precursor material project for high-grade nickel power battery with annual output of 40,000 tons	109.73	100.00				Other sources
Nickel cobalt hydroxide project with annual output of 60,000 tons (nickel content).	73.53	80.00	107,042,990.15	93,725,806.29	6.28	Financial institution loans and other sources

Projects	Accumulated input to budget	Completion percentage	Accumulated amount of borrowing cost capitalization	Amount of borrowing cost capitalization in the current period	Annual capitalization rate	Fund source
	(%)	(%)			(%)	
New energy precursor material project for lithium battery with annual output of 30,000 tons	40.98	45.00	3,402,866.12	2,769,875.30	4.65	Financial institution loans and other sources
High-grade nickel matte project with annual output of 45,000 tons (nickel content).	31.97	30.00	2,435,148.72	2,435,148.72	4.90	Raised funds and other sources
High energy density li-ion battery materials industrialization project	45.65	50.00	50,396,883.95	3,045,572.86	6.25	Financial institution loans and other sources
Construction of Huayou Headquarters Research Institute.	34.47	30.00				Raised funds and other sources
Subtotal			180,510,869.42	108,081,730.25		

Note 1: Other decrease included: 1) effect of foreign exchange rate changes arising from translation of foreign currency financial statements of overseas subsidiaries of 95,433,462.39 yuan; 2) offsetting of construction in progress of 105,853,079.68 yuan by output from trial operation in the current period.

Note 2: Current increase of 172,243,095.80 yuan was due to changes in the consolidation scope.

2) Year 2020

Projects	Budgets	Opening balance	Increase	Transferred to fixed assets	Other decrease [Note 3]	Closing balance
	(0'000)					
DRC Mining Concession PE527—Lukuni Mine electrowinning copper project with annual output of 30,000 tons	USD13,066.96	99,313,284.01	40,320,472.83	136,421,400.17	3,212,356.67	
Transformation project for extraction workshop with annual output of 30,000 tons of cobalt products	9,843.00	59,774,045.84	449,764.22	60,223,810.06		
Brine project with annual output of 2,500 tons	USD2,250.00	125,427,322.42	1,792,623.47	123,162,912.65	4,057,033.24	
Construction project of Cobalt and Nickel New Material Research Institute	28,739.25	89,899,605.20	75,907,957.71			165,807,562.91

Projects	Budgets	Opening balance	Increase	Transferred to fixed assets	Other decrease [Note 3]	Closing balance
	<i>(0'000)</i>					
Technical transformation of anhydrous iron phosphate workshop for 302A cobalt tetroxide project . . .	30,989.00	276,209,289.79	49,340,467.71	325,549,757.50		
Construction project of Huayou Technology Innovation Center . . .	40,152.00	188,871,623.31	117,176,216.32	91,604,574.61		214,443,265.02
Ternary precursor material project for high-grade nickel power battery with annual output of 40,000 tons	90,460.00	643,744,623.62	306,408,194.80	278,204,456.61		671,948,361.81
Phase II engineering of battery grade lithium carbonate project with annual output of 10,000 tons	16,789.00	103,853,265.16	73,578,887.93	177,432,153.09		
Ternary precursor new material project for power battery with annual output of 50,000 tons	91,479.27	587,631,349.63	82,278,343.14	669,909,692.77		
New energy precursor material project for lithium battery with annual output of 30,000 tons	98,226.00	224,824,305.71	116,165,694.96	109,776,750.03		231,213,250.64
Supporting project for optimization of deamination process and treatment of saline wastewater . . .	22,513.44	82,836,186.52	30,592,448.23	113,428,634.75		
Nickel cobalt hydroxide project with annual output of 60,000 tons (nickel content) . . .	USD124,739.10	120,299,909.03	1,004,209,642.30		43,461,572.50	1,081,047,978.83
High-purity ternary power battery grade nickel sulfate project with annual output of 30,000 tons (metal content)	80,086.00	470,209.21	76,167,821.07			76,638,030.28
Wet process phase III expansion and reconstruction project of MIKAS Company	USD3,860.00	21,806,859.70	175,891,424.20	132,770,037.13	2,852,130.38	62,076,116.39
Subtotal		2,624,961,879.15	2,150,279,958.89	2,218,484,179.37	53,583,092.79	2,503,174,565.88

(Continued)

Projects	Accumulated input to budget	Completion percentage	Accumulated amount of borrowing cost capitalization	Amount of borrowing cost capitalization in the current period	Annual capitalization rate	Fund source
	(%)	(%)			(%)	
DRC Mining Concession PE527 —Lukuni Mine electrowinning copper project with annual output of 30,000 tons	97.29	100.00	2,883,939.35			Financial institution loans and other sources
Transformation project for extraction workshop with annual output of 30,000 tons of cobalt products . . .	61.18	100.00				Other sources
Brine project with annual output of 2,500 tons	82.71	100.00				Other sources
Construction project of Cobalt and Nickel New Material Research Institute.	95.87	90.00				Raised funds and other sources
Technical transformation of anhydrous iron phosphate workshop for 302A cobalt tetroxide project . .	105.06	100.00	16,560,690.78	2,232,236.10	4.75	Financial institution loans, bond issuance and other sources
Construction project of Huayou Technology Innovation Center. .	76.22	80.00	11,127,653.40	3,141,441.82	4.50	Financial institution loans and other sources
Ternary precursor material project for high-grade nickel power battery with annual output of 40,000 tons	105.04	95.00				Other sources
Phase II engineering of battery grade lithium carbonate project with annual output of 10,000 tons.	105.68	100.00	32,631.49			Financial institution loans and other sources
Ternary precursor new material project for power battery with annual output of 50,000 tons	110.95	100.00	5,772,391.34	4,010,756.92	5.20	Financial institution loans and other sources

Projects	Accumulated input to budget	Completion percentage	Accumulated amount of borrowing cost capitalization	Amount of borrowing cost capitalization in the current period	Annual capitalization rate	Fund source
	(%)	(%)			(%)	
New energy precursor material project for lithium battery with annual output of 30,000 tons	33.30	40.00	632,990.82	632,990.82	4.65	Financial institution loans and other sources
Supporting project for optimization of deamination process and treatment of saline wastewater . .	50.38	50.00	3,009,948.89	2,658,267.27	5.23	Financial institution loans and other sources
Nickel cobalt hydroxide project with annual output of 60,000 tons (nickel content) . . .	13.28	15.00	13,317,183.86	11,728,322.96	6.00	Other sources
High-purity ternary power battery grade nickel sulfate project with annual output of 30,000 tons (metal content).	9.57	15.00				Raised funds and other sources
Wet process phase III expansion and reconstruction project of MIKAS Company	78.49	80.00				Other sources
Subtotal			53,337,429.93	24,404,015.89		

Note 3: Other decrease refers to effect of foreign exchange rate changes arising from translation of foreign currency financial statements of overseas subsidiaries.

3) Year 2019

Projects	Budgets	Opening balance	Increase	Transferred to fixed assets	Other decrease	Closing balance
	(0'000)					
DRC Mining Concession PE527— Lukuni Mine electrowinning copper project with annual output of 30,000 tons	USD13,066.96	35,431,959.75	802,331,556.99	738,450,232.73		99,313,284.01
Transformation project for extraction workshop with annual output of 30,000 tons of cobalt products . .	9,843.00	51,711,617.70	8,062,428.14			59,774,045.84
Brine project with annual output of 2,500 tons	USD2,250.00	68,418,844.76	59,473,571.31	2,465,093.65		125,427,322.42
Green recycling project of waste battery.	37,970.00	370,124,248.19	67,751,382.47	437,875,630.66		

Projects	Budgets	Opening balance	Increase	Transferred to fixed assets	Other decrease	Closing balance
	(0'000)					
Construction project of Cobalt and Nickel New Material Research Institute . . .	28,739.25	118,662,490.97	28,282,507.14	57,045,392.91		89,899,605.20
Technical transformation of anhydrous iron phosphate workshop for 302A cobalt tetroxide project	30,989.00	212,091,469.38	64,117,820.41			276,209,289.79
Construction project of Huayou Technology Innovation Center. . . .	40,152.00	78,477,659.90	110,393,963.41			188,871,623.31
Newly-built oxygen pressure leaching project	13,980.00	93,787,931.97	36,895,271.66	130,683,203.63		
Ternary precursor material project for high-grade nickel power battery with annual output of 40,000 tons	90,460.00	44,953,831.39	598,790,792.23			643,744,623.62
Phase II engineering of battery grade lithium carbonate project with annual output of 10,000 tons	16,789.00		103,853,265.16			103,853,265.16
Ternary precursor new material project for power battery with annual output of 50,000 tons	91,479.27		932,682,929.29 [Note 4]	345,051,579.66		587,631,349.63
New energy precursor material project for lithium battery with annual output of 30,000 tons	98,226.00	14,150,690.84	210,909,350.00	235,735.13		224,824,305.71
Supporting project for optimization of deamination process and treatment of saline wastewater . . .	22,513.44		82,836,186.52			82,836,186.52
Nickel cobalt hydroxide project with annual output of 60,000 tons (nickel content). . . .	USD124,739.10		120,299,909.03			120,299,909.03
Subtotal		1,087,810,744.85	3,226,680,933.76	1,711,806,868.37		2,602,684,810.24

(Continued)

Projects	Accumulated input to budget	Completion percentage	Accumulated amount of borrowing cost capitalization	Amount of borrowing cost capitalization in the current period	Annual capitalization rate	Fund source
	(%)	(%)			(%)	
DRC Mining Concession PE527 —Lukuni Mine electrowinning copper project with annual output of 30,000 tons	92.56	95.00	2,883,939.35	2,883,939.35	8.50	Financial institution loans and other sources
Transformation project for extraction workshop with annual output of 30,000 tons of cobalt products . . .	60.73	65.00				Other sources
Brine project with annual output of 2,500 tons	81.49	85.00				Other sources
Green recycling project of waste battery	115.32	100.00	25,518,915.14	21,326,850.53	6.62	Financial institution loans, bond issuance and other sources
Construction project of Cobalt and Nickel New Material Research Institute.	69.45	75.00				Raised funds and other sources
Technical transformation of anhydrous iron phosphate workshop for 302A cobalt tetroxide project . .	89.13	90.00	14,328,454.68	8,566,768.66	5.88	Financial institution loans, bond issuance and other sources
Construction project of Huayou Technology Innovation Center. .	47.03	55.00	7,986,211.58	6,507,438.01	4.67	Financial institution loans and other sources
Newly-built oxygen pressure leaching project	93.48	100.00	4,661,637.39	4,188,915.35	4.67	Financial institution loans and other sources
Ternary precursor material project for high-grade nickel power battery with annual output of 40,000 tons	71.16	85.00				Other sources
Phase II engineering of battery grade lithium carbonate project with annual output of 10,000 tons.	61.86	65.00	32,631.49	32,631.49	5.60	Financial institution loans and other sources

Projects	Accumulated input to budget (%)	Completion percentage (%)	Accumulated amount of borrowing cost capitalization	Amount of borrowing cost capitalization in the current period	Annual capitalization rate (%)	Fund source
Ternary precursor new material project for power battery with annual output of 50,000 tons	101.96	95.00	1,761,634.42	1,761,634.42	4.94	Financial institution loans and other sources
New energy precursor material project for lithium battery with annual output of 30,000 tons	21.47	30.00				Other sources
Supporting project for optimization of deamination process and treatment of saline wastewater . .	36.79	40.00	351,681.62	351,681.62	5.23	Financial institution loans and other sources
Nickel cobalt hydroxide project with annual output of 60,000 tons (nickel content) . . .	1.26	5.00	1,588,860.90	1,588,860.90	6.00	Other sources
Subtotal			59,113,966.57	47,208,720.33		

Note 4: Current increase of 801,709,027.42 yuan was due to changes in the consolidation scope.

(3) Construction materials

Items	December 31, 2021	December 31, 2020	December 31, 2019
Equipment and construction materials	713,205,093.03	550,684,806.16	251,373,951.66
Subtotal	713,205,093.03	550,684,806.16	251,373,951.66

15. Right-of-use assets

Year 2021

Items	Buildings and structures	Transport facilities	Total
Cost			
Opening balance	31,346,648.57	18,265,807.02	49,612,455.59
Increase	35,999,055.29		35,999,055.29
1) Leased in	35,999,055.29		35,999,055.29
Decrease			
Closing balance	67,345,703.86	18,265,807.02	85,611,510.88
Accumulated depreciation			
Opening balance			
Increase	17,332,202.74	4,566,451.75	21,898,654.49
(1) Accrual	17,332,202.74	4,566,451.75	21,898,654.49
Decrease			
Closing balance	17,332,202.74	4,566,451.75	21,898,654.49

Items	Buildings and structures	Transport facilities	Total
Provision for impairment			
Opening balance			
Increase			
Decrease			
Closing balance			
Carrying amount			
Closing balance	50,013,501.12	13,699,355.27	63,712,856.39
Opening balance [Note].	31,346,648.57	18,265,807.02	49,612,455.59

Note: Please refer to section III (XXXIII) 1 of notes to the financial statements for details on the difference between balance as at January 1, 2021 and balance as at December 31, 2020.

16. Intangible assets

(1) Details

1) Year 2021

Items	Land use right	Software	Mining right	Patent right and software copyright	Pollution discharging right	Total
Cost						
Opening balance	556,917,261.55	30,542,811.03	481,321,486.54	245,800.00	10,754,536.00	1,079,781,895.12
Increase	254,242,492.70	27,604,417.36		267,129,399.35	9,881,664.82	558,857,974.23
1) Acquisition.	133,294,634.47	26,757,532.53			9,881,664.82	169,933,831.82
2) Increase due to business combination	120,947,858.23	846,884.83		267,129,399.35 [Note]		388,924,142.41
Decrease	71,613,929.37	236,168.08	11,006,017.84			82,856,115.29
1) Decrease due to business combination	12,708,798.49	205,240.44				12,914,038.93
2) Translation reserve	58,905,130.88	30,927.64	11,006,017.84			69,942,076.36
Closing balance.	739,545,824.88	57,911,060.31	470,315,468.70	267,375,199.35	20,636,200.82	1,555,783,754.06
Accumulated amortization						
Opening balance	54,586,451.22	9,180,523.04	209,520,830.38	245,800.00	4,686,828.71	278,220,433.35
Increase	24,724,814.81	6,597,189.71	49,220,349.48	16,203,984.63	5,115,495.12	101,861,833.75
1) Accrual	17,002,991.00	6,291,605.55	49,220,349.48	11,153,976.53	5,115,495.12	88,784,417.68
2) Increase due to business combination	7,721,823.81	305,584.16		5,050,008.10		13,077,416.07
Decrease	10,554,081.56	201,563.23	5,360,206.60			16,115,851.39
1) Decrease due to business combination	6,933,726.90	182,436.47				7,116,163.37
2) Translation reserve	3,620,354.66	19,126.76	5,360,206.60			8,999,688.02
Closing balance.	68,757,184.47	15,576,149.52	253,380,973.26	16,449,784.63	9,802,323.83	363,966,415.71
Carrying amount						
Closing balance.	670,788,640.41	42,334,910.79	216,934,495.44	250,925,414.72	10,833,876.99	1,191,817,338.35
Opening balance	502,330,810.33	21,362,287.99	271,800,656.16		6,067,707.29	801,561,461.77

Note: It includes the assessed patent right and software copyright of 258,908,900.00 yuan that obtained through business combination of Tianjin B&M not under common control.

2) Year 2020

Items	Land use right	Software	Mining right	Patent right and software copyright	Pollution discharging right	Total
Cost						
Opening balance . . .	454,214,078.73	24,540,584.21	514,612,477.49	245,800.00	10,754,536.00	1,004,367,476.43
Increase.	112,310,703.44	6,273,899.85				118,584,603.29
1) Acquisition. . . .	112,310,703.44	6,273,899.85				118,584,603.29
Decrease	9,607,520.62	271,673.03	33,290,990.95			43,170,184.60
1) Disposal	2,933,162.25	206,564.22				3,139,726.47
2) Translation reserve	6,674,358.37	65,108.81	33,290,990.95			40,030,458.13
Closing balance. . .	556,917,261.55	30,542,811.03	481,321,486.54	245,800.00	10,754,536.00	1,079,781,895.12
Accumulated amortization						
Opening balance . . .	41,793,179.73	7,047,998.36	172,700,415.42	245,800.00	2,807,633.27	224,595,026.78
Increase.	13,740,155.58	2,398,954.47	49,652,368.07		1,941,332.10	67,732,810.22
1) Accrual	13,740,155.58	2,398,954.47	49,652,368.07		1,941,332.10	67,732,810.22
Decrease	946,884.09	266,429.79	12,831,953.11		62,136.66	14,107,403.65
1) Disposal	108,615.62	202,523.17				311,138.79
2) Translation reserve	838,268.47	63,906.62	12,831,953.11		62,136.66	13,796,264.86
Closing balance. . .	54,586,451.22	9,180,523.04	209,520,830.38	245,800.00	4,686,828.71	278,220,433.35
Carrying amount						
Closing balance. . .	502,330,810.33	21,362,287.99	271,800,656.16		6,067,707.29	801,561,461.77
Opening balance . . .	412,420,899.00	17,492,585.85	341,912,062.07		7,946,902.73	779,772,449.65

3) Year 2019

Items	Land use right	Software	Mining right	Patent right and software copyright	Pollution discharging right	Total
Cost						
Opening balance . . .	282,985,647.43	20,291,199.86	506,276,820.54	245,800.00	3,094,245.00	812,893,712.83
Increase.	171,819,346.93	4,249,384.35	8,335,656.95		7,660,291.00	192,064,679.23
1) Acquisition. . . .	150,726,177.50	1,697,117.39			5,443,291.00	157,866,585.89
2) Increase due to business combination	20,472,299.95	2,537,663.51			2,217,000.00	25,226,963.46
3) Translation reserve	620,869.48	14,603.45	8,335,656.95			8,971,129.88
Decrease	590,915.63					590,915.63
1) Disposal						
2) Translation reserve	590,915.63					590,915.63
Closing balance. . .	454,214,078.73	24,540,584.21	514,612,477.49	245,800.00	10,754,536.00	1,004,367,476.43
Accumulated amortization						
Opening balance . . .	32,650,327.80	4,784,308.00	79,040,147.47	245,800.00	1,109,977.49	117,830,560.76
Increase.	9,234,444.35	2,263,690.36	93,660,267.95		1,697,655.78	106,856,058.44
1) Amortization. . .	8,883,903.01	2,081,658.03	91,610,890.21		1,475,955.78	104,052,407.03
2) Increase due to business combination	204,723.00	169,060.40			221,700.00	595,483.40
3) Translation reserve	145,818.34	12,971.93	2,049,377.74			2,208,168.01
Decrease	91,592.42					91,592.42

Items	Land use right	Software	Mining right	Patent right and software copyright	Pollution discharging right	Total
1) Disposal						
2) Translation reserve	91,592.42					91,592.42
Closing balance . . .	41,793,179.73	7,047,998.36	172,700,415.42	245,800.00	2,807,633.27	224,595,026.78
Carrying amount						
Closing balance . . .	412,420,899.00	17,492,585.85	341,912,062.07		7,946,902.73	779,772,449.65
Opening balance . . .	250,335,319.63	15,506,891.86	427,236,673.07		1,984,267.51	695,063,152.07

(2) Land use right with certificate of titles being unsettled

Items	Carrying amount	Reasons for unsettlement
Land use right of Huayue Company and Huake		
Indonesia	129,844,573.90	In processing
Subtotal	129,844,573.90	

17. Goodwill

(1) Details

Investees or events resulting in goodwill	December 31, 2021			December 31, 2020		
	Book balance	Provision for impairment	Carrying amount	Book balance	Provision for impairment	Carrying amount
Huahai New Energy . . .	95,136,198.86		95,136,198.86	95,136,198.86		95,136,198.86
Tianjin B&M	366,245,456.38	901,194.16	365,344,262.22			
Total	461,381,655.24	901,194.16	460,480,461.08	95,136,198.86		95,136,198.86

(Continued)

Investees or events resulting in goodwill	December 31, 2019		
	Book balance	Provision for impairment	Carrying amount
Huahai New Energy	95,136,198.86		95,136,198.86
Tianjin B&M			
Total	95,136,198.86		95,136,198.86

(2) Cost

1) Year 2021

Investees or events resulting in goodwill	Opening balance	Due to business combination in current period	Decrease		Closing balance
			Disposal	Others	
Huahai New Energy	95,136,198.86				95,136,198.86
Tianjin B&M		366,245,456.38			366,245,456.38
Total	95,136,198.86	366,245,456.38			461,381,655.24

(2) Year 2020

Investees or events resulting in goodwill	Opening balance	Due to business combination in current period	Decrease		Closing balance
			Disposal	Others	
Huahai New Energy	95,136,198.86				95,136,198.86
Total	95,136,198.86				95,136,198.86

3) Year 2019

Investees or events resulting in goodwill	Opening balance	Due to business combination in current period	Decrease		Closing balance
			Disposal	Others	
Huahai New Energy.		95,136,198.86			95,136,198.86
Total		95,136,198.86			95,136,198.86

(3) Provision for impairment

Year 2021

Investees or events resulting in goodwill	Opening balance	Increase		Decrease		Closing balance
		Accrual	Others	Disposal	Others	
Tianjin B&M		901,194.16				901,194.16
Total		901,194.16				901,194.16

Goodwill of Tianjin B&M included: 1) the core goodwill of 336,004,594.11 yuan (please refer to section VI(I)2 of notes to the financial statements for details); and 2) the goodwill of 30,240,862.27 yuan arising from the recognition of deferred tax liabilities. For the latter, provision for impairment loss of goodwill was made based on corresponding holding proportion along with the reversal of deferred tax liabilities.

(4) Impairment test process as of December 31, 2021

1) Huahai New Energy

a. Related information of asset group or asset group portfolios which include goodwill

<u>Composition of asset group or asset group portfolios</u>	<u>Relevant asset group of Huahai New Energy</u>
Carrying amount of asset group or asset group portfolios	2,296,546,827.88
Carrying amount of goodwill allocated to the asset group or asset group portfolios	95,136,198.86
Carrying amount of asset groups or asset group portfolios that include goodwill	2,391,683,026.74
Whether asset group or asset group portfolios are consistent with those at acquisition date or at goodwill impairment testing date in previous years	Yes

b. Impairment test process, method and conclusion

The recoverable amount of goodwill is computed based on the present value of estimated future cash flows, which is based on the 5-year estimated annual cash flows approved by the Company. The discount rate used in estimating the annual cash flows is 12.81% (before tax), and the cash flows subsequent to the estimated period are expected to be stable.

Other key data used in the impairment test include: the estimated selling price, sales amount, cost of product, and other relevant expenses. Such key data are determined by the Company based on its experience and its prediction towards market development. The discount rate used by the Company is the pre-tax interest rate that reveals the time value of currency under the current market situation and special risks of certain asset group.

The aforementioned estimation of the recoverable amount of goodwill suggests that the goodwill is not impaired.

(2) Tianjin B&M

a. Related information of asset group or asset group portfolios which include goodwill

<u>Composition of asset group or asset group portfolios</u>	<u>Relevant asset group of Tianjin B&M</u>
Carrying amount of asset group or asset group portfolios	3,123,226,077.42
Carrying amount of goodwill allocated to the asset group or asset group portfolios	870,084,521.17
Carrying amount of asset group or asset group portfolios that include goodwill	3,993,310,598.59
Whether asset group or asset group portfolios are consistent with those at acquisition date or at goodwill impairment testing date in previous years	Yes

b. Impairment test process, method and conclusion

The recoverable amount of goodwill is computed based on the present value of estimated future cash flows, which is based on the 5-year estimated annual cash flows approved by the Company. The discount rate used in estimating the annual cash flows is 13.89% (before tax), and the cash flows subsequent to the estimated period are expected to be stable.

Other key data used in the impairment test include: the estimated selling price, sales amount, cost of product, and other relevant expenses. Such key data are determined by the Company based on its experience and its prediction towards market development. The discount rate used by the Company is the pre-tax interest rate that reveals the time value of currency under the current market situation and special risks of certain asset group.

The aforementioned estimation of the recoverable amount of goodwill suggests that the core goodwill is not impaired.

18. *Long-term prepayments*

(1) Year 2021

<u>Items</u>	<u>Opening balance</u>	<u>Increase</u>	<u>Amortization</u>	<u>Other decrease</u>	<u>Closing balance</u>
Renovation cost of fixed assets	36,855,671.01	1,782,990.10	15,883,526.97	595,796.74	22,159,337.40
Aircraft usage fees	79,888,832.68		8,409,350.76		71,479,481.92
Insurance premium	9,309,466.40		4,210,426.80		5,099,039.60
Total	126,053,970.09	1,782,990.10	28,503,304.53	595,796.74	98,737,858.92

(2) Year 2020

<u>Items</u>	<u>Opening balance</u>	<u>Increase</u>	<u>Amortization</u>	<u>Other decrease</u>	<u>Closing balance</u>
Renovation cost of fixed assets	57,546,742.67	3,343,106.54	21,012,116.61	3,022,061.59	36,855,671.01
Aircraft usage fees		91,101,300.42	11,212,467.74		79,888,832.68
Insurance premium	3,571,142.07	8,250,183.84	2,511,859.51		9,309,466.40
Total	61,117,884.74	102,694,590.80	34,736,443.86	3,022,061.59	126,053,970.09

(3) Year 2019

Items	Opening balance	Increase	Amortization	Other decrease	Closing balance
Renovation cost of fixed assets	10,910,511.13	56,542,891.74	554,084.98	10,460,745.18	57,546,742.67
Mining entry fees	5,706,846.61		46,980.54	5,753,827.15	
Insurance premium	4,869,739.23			1,298,597.16	3,571,142.07
Total	21,487,096.97	56,542,891.74	601,065.52	17,513,169.49	61,117,884.74

Other increase and other decrease all refer to the effect of foreign exchange rate changes arising from translation of foreign currency financial statements of overseas subsidiaries.

19. *Deferred tax assets and deferred tax liabilities*

(1) Deferred tax assets before offset

Items	December 31, 2021		December 31, 2020	
	Deductible temporary difference	Deferred tax assets	Deductible temporary difference	Deferred tax assets
Uncovered losses	288,626,080.46	72,156,520.12	477,007,150.23	119,251,787.56
Deferred income	444,089,181.12	105,845,508.58	410,473,311.89	99,117,265.87
Provision for impairment of assets . . .	291,806,406.80	51,279,014.30	102,488,777.28	22,231,856.75
Unrealized profit from inventories . . .	555,341,660.38	117,677,690.20	74,132,539.38	14,597,729.01
Gains or losses on changes in fair value			12,523,650.79	2,305,415.89
Expenses related to share-based payment	158,766,835.07	23,815,025.26		
Total	1,738,630,163.83	370,773,758.46	1,076,625,429.57	257,504,055.08

(Continued)

Items	December 31, 2019	
	Deductible temporary difference	Deferred tax assets
Uncovered losses	459,126,601.09	110,018,678.89
Deferred income	238,813,222.82	56,115,900.15
Provision for impairment of assets	196,822,372.81	45,713,500.97
Unrealized profit from inventories	175,429,008.70	42,655,034.58
Gains or losses on changes in fair value	29,864,682.00	7,466,170.50
Expenses related to share-based payment		
Total	1,100,055,887.42	261,969,285.09

(2) Deferred tax liabilities before offset

Items	December 31, 2021		December 31, 2020	
	Taxable temporary difference	Deferred tax liabilities	Taxable temporary difference	Deferred tax liabilities
Temporary difference of long-term assets	497,855,156.20	69,896,630.79	4,370,535.48	1,092,633.87
Depreciation of fixed assets	327,054,279.90	74,244,116.70	270,523,736.56	66,541,014.23
Gains or losses on changes in fair value	25,920,305.01	4,188,247.13		
Total	850,829,741.11	148,328,994.62	274,894,272.04	67,633,648.10

(Continued)

Items	December 31, 2019	
	Taxable temporary difference	Deferred tax liabilities
Temporary difference of long-term assets	36,417,990.70	9,104,497.67
Depreciation of fixed assets	119,611,576.39	29,902,894.10
Gains or losses on changes in fair value		
Total	156,029,567.09	39,007,391.77

(3) Details of unrecognized deferred tax assets

Items	December 31, 2021	December 31, 2020	December 31, 2019
Temporary difference of long-term assets	481,946,867.68	177,870,425.25	114,888,492.00
Unrealized profit from inventories		52,236,525.42	19,969,457.43
Provision for impairment of assets	80,399,272.11	115,814,112.42	69,894,944.65
Deductible losses	161,657,916.42	96,356,649.61	70,554,370.42
Total	724,004,056.21	442,277,712.70	275,307,264.50

(4) Maturity years of deductible losses of unrecognized deferred tax assets

Maturity years	December 31, 2021	December 31, 2020	December 31, 2019	Remarks
Year 2022	189,791.83	189,791.83	670,401.56	
Year 2023	13,079,347.33	13,740,435.71	19,810,635.48	
Year 2024	24,716,348.96	45,955,944.73	50,073,333.38	
Year 2025	3,629,580.16	36,470,477.34		
Year 2026	120,042,848.14			
Total	161,657,916.42	96,356,649.61	70,554,370.42	

20. Other non-current assets

Details

Items	December 31, 2021			December 31, 2020		
	Book balance	Provision for impairment	Carrying amount	Book balance	Provision for impairment	Carrying amount
Prepayments for acquisition of land and engineering equipment	2,934,461,836.89		2,934,461,836.89	1,519,697,296.97		1,519,697,296.97
Prepayments for equity investment	127,514,040.64		127,514,040.64	171,732,358.79		171,732,358.79
Prepayments for intangible assets				2,326,620.33		2,326,620.33
Total	3,061,975,877.53		3,061,975,877.53	1,693,756,276.09		1,693,756,276.09

(Continued)

Items	December 31, 2019		
	Book balance	Provision for impairment	Carrying amount
Prepayments for acquisition of land and engineering equipment	670,389,596.09		670,389,596.09
Prepayments for equity investment	699,824,800.00		699,824,800.00
Prepayments for intangible assets	2,487,186.15		2,487,186.15
Total	1,372,701,582.24		1,372,701,582.24

Note: Prepayments for equity investment in 2019 mainly refer to the equity investment funds of USD100 million paid by the subsidiary Huawei Nickel Resources for subscription of 20 million shares of Newstride Technology, which was temporarily presented under other non-current assets as the equity transfer was not yet completed; prepayments for equity investment in 2020 mainly refer to the subsidiary Huawei Nickel Resources's prepayments of USD25.82 million for acquisition of equity of Newstride Technology, which were temporarily presented under other non-current assets as the equity transfer was not yet completed; prepayments for equity investment in 2021 mainly refer to the subsidiary Huayou Mining Hong Kong's prepayments of USD20.00 million for acquisition of equity of Prospect Lithium Zimbabwe (Pvt) Limited, which was temporarily presented under other non-current assets as the equity transfer was not yet completed.

21. Short-term borrowings

(1) Details

Items	December 31, 2021	December 31, 2020	December 31, 2019
Guaranteed borrowings	4,126,701,735.13	3,108,838,666.60	2,870,460,514.76
Credit borrowings	1,166,549,556.40	699,900,345.24	848,240,433.46
Mortgaged borrowings		17,991,000.00	30,763,200.00
Pledged borrowings	2,410,825,955.03	1,464,565,106.20	1,102,197,171.85
Guaranteed and pledged borrowings	50,000,000.00		100,000,000.00
Guaranteed and mortgaged borrowings	316,751,400.00	560,000,000.00	952,000,000.00
Interest on short-term borrowings	12,951,198.14	11,141,509.50	11,316,425.94
Total	8,083,779,844.70	5,862,436,627.54	5,914,977,746.01

- (2) No overdue and outstanding short-term borrowings at the end of each reporting period.

22. *Held-for-trading financial liabilities*

Items	December 31, 2021	December 31, 2020	December 31, 2019
Held-for-trading financial liabilities . . .	360,612.00	23,939,270.26	
Including: Derivative financial liabilities	360,612.00	23,939,270.26	
Total	360,612.00	23,939,270.26	

23. *Derivative financial liabilities*

Details

Items	December 31, 2021	December 31, 2020	December 31, 2019
Hedged futures contract	104,821,710.25		
Total	104,821,710.25		

24. *Notes payable*

(1) Details

Items	December 31, 2021	December 31, 2020	December 31, 2019
Trade acceptance	834,020,112.13	109,583,180.62	451,679,594.57
Bank acceptance	3,976,777,510.99	965,710,671.67	1,260,004,630.81
Total	4,810,797,623.12	1,075,293,852.29	1,711,684,225.38

(2) Other remarks

Items	December 31, 2021	December 31, 2020	December 31, 2019
Notes payable due but unpaid		171,455.50	

25. *Accounts payable*

(1) Details

Items	December 31, 2021	December 31, 2020	December 31, 2019
Payments for goods	4,114,060,983.46	1,102,497,794.66	773,985,161.80
Payments for engineering and equipment	2,089,527,914.24	590,724,896.11	573,652,004.38
Others	29,583,513.06	96,214,499.11	110,209,663.66
Total	6,233,172,410.76	1,789,437,189.88	1,457,846,829.84

- (2) No significant balance with age over one year at the end of each reporting period.

26. *Advances received*

(1) Details

Items	December 31, 2021	December 31, 2020	December 31, 2019
Payments for goods			47,877,473.73
Payments for equipment received in advance	641,739,400.77		
Others	3,000,000.13	13,203,500.00	1,604,526.00
Total	644,739,400.90	13,203,500.00	49,481,999.73

(2) No significant balance with age over one year at the end of each reporting period.

27. *Contract liabilities*

Items	December 31, 2021	December 31, 2020
Payments for goods	78,968,534.53	259,399,312.53
Total	78,968,534.53	259,399,312.53

Due to the adoption of the revised revenue standard since January 1, 2020, balances of goods payments received in advance as at December 31, 2020 and December 31, 2021 were transferred to contract liabilities.

28. *Employee benefits payable*

(1) Details

1) Year 2021

Items	Opening balance	Increase	Decrease	Closing balance
Short-term employee benefits	245,731,201.44	1,827,146,437.57	1,600,839,332.26	472,038,306.75
Post-employment benefits—defined contribution plan	1,196,040.12	57,866,928.97	53,309,688.81	5,753,280.28
Termination benefits		1,594,747.56	1,594,747.56	
Total	246,927,241.56	1,886,608,114.10	1,655,743,768.63	477,791,587.03

2) Year 2020

Items	Opening balance	Increase	Decrease	Closing balance
Short-term employee benefits	148,218,844.01	1,098,008,738.93	1,000,496,381.50	245,731,201.44
Post-employment benefits—defined contribution plan	2,456,884.76	13,189,713.70	14,450,558.34	1,196,040.12
Termination benefits		767,114.95	767,114.95	
Total	150,675,728.77	1,111,965,567.58	1,015,714,054.79	246,927,241.56

3) Year 2019

Items	Opening balance	Increase	Decrease	Closing balance
Short-term employee benefits	107,560,362.07	775,626,190.12	734,967,708.18	148,218,844.01
Post-employment benefits—defined contribution plan	1,931,927.97	28,213,420.35	27,688,463.56	2,456,884.76
Termination benefits		818,721.00	818,721.00	
Total	109,492,290.04	804,658,331.47	763,474,892.74	150,675,728.77

(2) Details of short-term employee benefits

1) Year 2021

Items	Opening balance	Increase	Decrease	Closing balance
Wage, bonus, allowance and subsidy	242,499,817.19	1,612,505,049.52	1,388,202,122.12	466,802,744.59
Employee welfare fund.		133,135,604.49	133,135,604.49	
Social insurance premium	2,098,875.38	44,857,314.68	43,824,110.33	3,132,079.73
Including: Medicare premium.	1,960,397.46	39,890,422.84	39,159,285.56	2,691,534.74
Occupational injuries premium	97,168.83	3,688,751.53	3,446,828.36	339,092.00
Maternity premium	41,309.09	1,278,140.31	1,217,996.41	101,452.99
Housing provident fund	1,106,875.00	24,822,073.56	23,903,333.56	2,025,615.00
Trade union fund and employee education fund	25,633.87	11,826,395.32	11,774,161.76	77,867.43
Subtotal	245,731,201.44	1,827,146,437.57	1,600,839,332.26	472,038,306.75

2) Year 2020

Items	Opening balance	Increase	Decrease	Closing balance
Wage, bonus, allowance and subsidy	145,702,718.97	936,812,453.51	840,015,355.29	242,499,817.19
Employee welfare fund.		109,981,827.50	109,981,827.50	
Social insurance premium	1,969,871.06	26,975,520.80	26,846,516.48	2,098,875.38
Including: Medicare premium.	1,701,693.69	24,969,359.81	24,710,656.04	1,960,397.46
Occupational injuries premium	232,867.68	1,025,957.71	1,161,656.56	97,168.83
Maternity premium	35,309.69	980,203.28	974,203.88	41,309.09
Housing provident fund	546,200.00	16,879,252.67	16,318,577.67	1,106,875.00
Trade union fund and employee education fund	53.98	7,359,684.45	7,334,104.56	25,633.87
Subtotal	148,218,844.01	1,098,008,738.93	1,000,496,381.50	245,731,201.44

3) Year 2019

Items	Opening balance	Increase	Decrease	Closing balance
Wage, bonus, allowance and subsidy	104,773,728.30	663,480,884.48	622,551,893.81	145,702,718.97
Employee welfare fund		74,484,583.94	74,484,583.94	
Social insurance premium	1,549,809.78	20,216,636.92	19,796,575.64	1,969,871.06
Including: Medicare premium	1,259,693.89	16,831,867.86	16,389,868.06	1,701,693.69
Occupational injuries premium	217,918.40	2,355,453.42	2,340,504.14	232,867.68
Maternity premium.	72,197.49	1,029,315.64	1,066,203.44	35,309.69
Housing provident fund	470,956.00	12,151,685.27	12,076,441.27	546,200.00
Trade union fund and employee education fund.	765,867.99	5,292,399.51	6,058,213.52	53.98
Subtotal	107,560,362.07	775,626,190.12	734,967,708.18	148,218,844.01

(3) Details of defined contribution plan

1) Year 2021

Items	Opening balance	Increase	Decrease	Closing balance
Basic endowment insurance premium	1,154,722.82	55,904,422.71	51,498,039.80	5,561,105.73
Unemployment insurance premium	41,317.30	1,962,506.26	1,811,649.01	192,174.55
Subtotal	1,196,040.12	57,866,928.97	53,309,688.81	5,753,280.28

2) Year 2020

Items	Opening balance	Increase	Decrease	Closing balance
Basic endowment insurance premium	2,372,407.78	12,730,246.66	13,947,931.62	1,154,722.82
Unemployment insurance premium	84,476.98	459,467.04	502,626.72	41,317.30
Subtotal	2,456,884.76	13,189,713.70	14,450,558.34	1,196,040.12

3) Year 2019

Items	Opening balance	Increase	Decrease	Closing balance
Basic endowment insurance premium	1,865,426.05	27,244,090.42	26,737,108.69	2,372,407.78
Unemployment insurance premium	66,501.92	969,329.93	951,354.87	84,476.98
Subtotal	1,931,927.97	28,213,420.35	27,688,463.56	2,456,884.76

29. *Taxes and rates payable*

Items	December 31, 2021	December 31, 2020	December 31, 2019
VAT	330,301,986.69	155,628,207.52	91,443,421.90
Enterprise income tax	578,084,644.05	257,247,468.89	21,919,287.56
Individual income tax withheld for tax authorities	4,469,569.69	2,255,420.34	1,807,666.10
Urban maintenance and construction tax	14,163,787.73	2,745,199.20	295,514.63
Housing property tax	4,400,149.92	11,168,388.90	3,762,022.86
Land use tax	762,699.64	4,577,087.93	3,591,378.35
Education surcharge	6,070,194.76	1,175,917.87	126,649.13
Local education surcharge	4,046,796.51	790,900.11	84,432.75
Mineral tax	101,683,794.16	58,486,672.20	57,050,471.28
Others	9,018,810.45	3,976,414.03	552,145.93
Total	1,053,002,433.60	498,051,676.99	180,632,990.49

30. *Other payables*

(1) Details

Items	December 31, 2021	December 31, 2020	December 31, 2019
Interest payable			1,740,921.44
Other payables	1,434,593,185.87	769,409,094.84	620,793,231.40
Total	1,434,593,185.87	769,409,094.84	622,534,152.84

(2) Interest payable

1) Details

Items	December 31, 2021	December 31, 2020	December 31, 2019
Interest on call loans			1,740,921.44
Subtotal			1,740,921.44

2) No significant interest payable overdue but unpaid at the end of each reporting period.

(3) Other payables

1) Details

<u>Items</u>	<u>December 31, 2021</u>	<u>December 31, 2020</u>	<u>December 31, 2019</u>
Call loans and interest thereon	921,453,985.70	546,616,317.81	598,006,415.73
Repurchase obligation of restricted shares	339,232,639.00		
Funds from repo transactions	139,707,302.12	178,038,988.88	
Security deposits	24,858,852.19	19,034,399.98	11,561,916.00
Others	9,340,406.86	25,719,388.17	11,224,899.67
Total	1,434,593,185.87	769,409,094.84	620,793,231.40

2) No significant balance with ages over one year at the end of each reporting period.

3) Other remarks

A. Call loans and interest thereon

- a. Balances as at December 31, 2019 mainly included: (i) balance of 302,966,048.20 yuan due to Huayue Company's other shareholders including W-Source Holding Limited, Tsing Creation International Holding Limited, Long Sincere Holding Limited; (ii) balance of 221,408,180.63 yuan due to Huayou Holding and its subsidiary Huayou Hong Kong Holding Limited (the "Huayou Holding Hong Kong") and TMA International Pte. Ltd. (the "TMA Company"); (iii) balance of 34,000,000.00 yuan due to Tongxiang Huaxing Trading Co., Ltd. (formerly known as Tongxiang Huaxin Investment Co., Ltd., the "Huaxing Trading"); (iv) balance of 11,897,307.40 yuan due to Manpower Resources (Hong Kong) Limited (the "Manpower Hong Kong"); and (v) balance of 8,385,284.55 yuan due to Xie Weitong.
- b. Balances as at December 31, 2020 mainly included: (i) balance of 437,196,884.93 yuan due to W-Source Holding Limited, Tsing Creation International Holding Limited, Long Sincere Holding Limited; (ii) balance of 68,804,798.61 yuan due to TMA Company; (iii) balance of 11,127,654.18 yuan due to Manpower Hong Kong; (iv) balance of 14,520,996.80 yuan due to Xie Weitong; and (v) balance of 9,671,127.61 yuan due to Newstride Technology.
- c. Balances as at December 31, 2021 mainly included: (i) balance of 564,417,592.95 yuan due to W-Source Holding Limited, Tsing Creation International Holding Limited, Long Sincere Holding Limited; (ii) balance of 122,654,665.88 yuan due to EVE Holdings Limited; (iii) balance of 98,635,060.81 yuan due to Tsingshan Holding Group Co., Ltd.; (iv) balance of 101,126,674.27 yuan due to Wintime Industrial Holding Limited; (v) balance of 20,246,612.99 yuan due to Y&R Holding Limited and Cyan Investment Limited; (vi) balance of 14,107,267.34 yuan due to Newstride Technology.

B. Repurchase obligation of restricted shares

Please refer to section V (I) 40 of notes to the financial statements for details.

31. Non-current liabilities due within one year

(1) Details

Items	December 31, 2021	December 31, 2020	December 31, 2019
Long-term borrowings due within one year	1,911,767,314.98	903,085,107.35	231,438,388.99
Call loans and interest thereon	18,477,837.35	320,324,659.86	582,512,686.04
Sale and leaseback fund due within one year	679,795,502.76	224,599,857.57	289,591,919.50
Bonds payable and interest thereon due within one year			107,368,599.95
Lease liabilities due within one year . .	25,917,330.55		
Total	2,635,957,985.64	1,448,009,624.78	1,210,911,594.48

(2) Details of long-term borrowings due within one year

Items	December 31, 2021	December 31, 2020	December 31, 2019
Guaranteed borrowings	1,160,122,228.30	694,289,142.24	138,135,000.05
Guaranteed and mortgaged borrowings	524,552,687.31	205,373,753.35	92,511,724.82
Guaranteed and pledged borrowings . .	100,000,000.00		
Mortgaged borrowings		1,741,700.16	
Credit borrowings	125,159,270.83		
Interest on borrowings	1,933,128.54	1,680,511.60	791,664.12
Total	1,911,767,314.98	903,085,107.35	231,438,388.99

(3) Other remarks

- 1) Please refer to section V (I) 36 of notes to the financial statements for details on call loans and interest thereon.
- 2) Please refer to section V (I) 36 of notes to the financial statements for details on sale and leaseback fund due within one year.
- 3) Please refer to section V (I) 34 of notes to the financial statements for details on bonds payable and interest thereon due within one year.

32. Other current liabilities

Items	December 31, 2021	December 31, 2020	December 31, 2019
Output VAT to be recognized	4,147,523.95	4,503,600.24	
Total	4,147,523.95	4,503,600.24	

33. Long-term borrowings

Items	December 31, 2021	December 31, 2020	December 31, 2019
Guaranteed borrowings	981,754,275.12	771,622,693.39	190,439,800.05
Mortgaged borrowings		33,092,303.01	
Guaranteed and mortgaged borrowings	1,263,295,850.63	615,374,610.27	860,699,103.90
Guaranteed and pledged borrowings . .	4,485,420,000.00		
Interest on long-term borrowings	7,790,519.67	1,915,366.51	2,118,542.98
Total	6,738,260,645.42	1,422,004,973.18	1,053,257,446.93

34. Bonds payable

- (1) Current period movements (not including other financial instruments such as preferred shares/perpetual bonds classified as financial liabilities)

Bonds	Par value	Issuing date	Maturity	Amount outstanding
G18 Huayou 1	620,000,000.00	3/27/2018	3 years	615,040,000.00
18 Huayou 01	100,000,000.00	1/19/2018	2 years	99,000,000.00
Subtotal	720,000,000.00			714,040,000.00

(Continued)

Bonds	Opening balance	Current period issuance	Par value interest	Premium/Discount amortization	Current period repayment	Closing balance [Note]
G18 Huayou 1	616,207,055.81		11,072,350.68	3,792,944.19	620,000,000.00	
18 Huayou 01	99,454,947.68		7,800,000.00	520,069.67		99,975,017.35
Subtotal	715,662,003.49		18,872,350.68	4,313,013.86	620,000,000.00	99,975,017.35

Note: The amount of 99,975,017.35 yuan, which was to be repaid in 2020, was transferred to non-current liabilities due within one year.

- (2) Other remarks

- 1) In March 2018, the Company issued green corporate bond (phase I) of 2018 (the “G18 Huayou 1”) through private placement, with total amount of 620 million yuan, which had been listed and traded on the Integrated Electronic Platform for Fixed-income Securities of Shanghai Stock Exchange since April 3, 2018. In March 2019, the Company completed the repayment of green corporate bonds (phase I).
- 2) In January 2018, the Company issued corporate bonds (phase I) of 2018 (the “18 Huayou 01”) through private placement, with total amount of 100 million yuan, which had been listed and traded on the Integrated Electronic Platform for Fixed-income Securities of Shanghai Stock Exchange since February 12, 2018. The term was from January 19, 2018 to January 19, 2020.

35. Lease liabilities

Items	December 31, 2021
Unpaid lease payments	34,289,431.32
Less: Unrecognized financing expenses	1,501,176.18
Total	32,788,255.14

36. Long-term payables

- (1) Details

Items	December 31, 2021	December 31, 2020	December 31, 2019
Funds from sale and leaseback	741,232,347.77	261,465,550.76	197,110,898.52
Long-term call loans and interest thereon	319,993,726.26	327,482,012.20	342,480,258.36
Total	1,061,226,074.03	588,947,562.96	539,591,156.88

(2) Other remarks

- (1) Funds from sale and leaseback refer to funds from financial institutions such as Cinda Financial Leasing Co., Ltd. through the sale and leaseback of fixed assets (of which, 289,591,919.50 yuan should be repaid in 2020, 224,599,857.57 yuan should be repaid in 2021, and 679,795,502.76 yuan should be repaid in 2022, which were transferred to non-current liabilities due within one year).
- (2) Long-term call loans of 2019 included: a. funds of 844,120,200.06 yuan from Trafigura Pte. Ltd. (of which, 582,512,686.04 yuan should be repaid in 2020, which was transferred to non-current liabilities due within one year); and b. long-term borrowings of 80,872,744.34 yuan from Manpower Hong Kong.

Long-term call loans of 2020 included: a. funds of 327,482,012.20 yuan from Kaifei Investment (Hong Kong) Limited; b. long-term borrowings of 75,640,974.96 yuan from Manpower Hong Kong (of which, 75,640,974.96 yuan should be repaid in 2021, which was transferred to non-current liabilities due within one year); c. funds of 244,683,684.90 yuan from Trafigura Pte. Ltd. (of which, 244,683,684.90 yuan should be repaid in 2021, which was transferred to non-current liabilities due within one year).

Long-term call loans of 2021 refer to funds of 319,993,726.26 yuan from Kaifei Investment (Hong Kong) Limited.

37. Provisions

Items	December 31, 2021	December 31, 2020	December 31, 2019	Reasons for balance
Environment restoration costs . .	26,769,294.11	13,842,559.43	6,676,814.98	It is the environmental restoration costs accrued by the subsidiaries MIKAS Company, CDM Company and SESA Company according to the Mining Code of the Democratic Republic of the Congo and local regulations of Argentina.
Total	26,769,294.11	13,842,559.43	6,676,814.98	

38. Deferred income

(1) Details

1) Year 2021

Items	Opening balance	Increase	Decrease	Closing balance	Reasons for balance
Government grants . .	410,473,311.89	127,413,977.19	19,014,176.16	518,873,112.92	Granted by the government free of charge
Total	410,473,311.89	127,413,977.19	19,014,176.16	518,873,112.92	

2) Year 2020

<u>Items</u>	<u>Opening balance</u>	<u>Increase</u>	<u>Decrease</u>	<u>Closing balance</u>	<u>Reasons for balance</u>
Government grants . .	238,813,222.82	184,028,540.00	12,368,450.93	410,473,311.89	Granted by the government free of charge
Total	238,813,222.82	184,028,540.00	12,368,450.93	410,473,311.89	

3) Year 2019

<u>Items</u>	<u>Opening balance</u>	<u>Increase</u>	<u>Decrease</u>	<u>Closing balance</u>	<u>Reasons for balance</u>
Government grants . .	151,159,115.75	96,708,540.00	9,054,432.93	238,813,222.82	Granted by the government free of charge
Total	151,159,115.75	96,708,540.00	9,054,432.93	238,813,222.82	

(2) Details of government grants

1) Year 2021

<u>Items</u>	<u>Opening balance</u>	<u>Increase</u> <i>[Note 1]</i>	<u>Grants included into profit or loss</u> <i>[Note 2]</i>	<u>Closing balance</u>	<u>Related to assets/income</u>
Subsidies for infrastructure construction	246,740,380.77		4,290,675.01	242,449,705.76	Related to assets
Fiscal subsidies for technological transformation . . .	19,539,746.80		1,185,676.93	18,354,069.87	Related to assets
Fiscal subsidies for technological innovation	33,468,157.53	17,346,976.98	2,250,132.27	48,565,002.24	Related to assets
Subsidies for life cycle green manufacturing projects	26,216,493.86		1,202,091.56	25,014,402.30	Related to assets
Optimization and improvement of wastewater treatment and comprehensive utilization of renewable resources project . .	11,911,509.84		623,016.96	11,288,492.88	Related to assets
Special subsidies for energy conservation and industrial circular economy	16,602,008.14		489,225.48	16,112,782.66	Related to assets
Funds and supporting subsidies for provincial key enterprise research institutes	10,000,000.00		1,000,000.08	8,999,999.92	Related to assets
Fiscal subsidies for industrial transformation and upgrading	8,997,305.50	13,992,202.57	905,733.96	22,083,774.11	Related to assets

Items	Opening balance	Increase [Note 1]	Grants included into profit or loss [Note 2]	Closing balance	Related to assets/income
Supporting funds for enterprises.	7,217,380.26	20,797,814.04	1,310,582.50	26,704,611.80	Related to assets
Central special funds for prevention and control of air pollution.	1,680,000.00		180,000.00	1,500,000.00	Related to assets
Subsidies for the integration of informatization and industrialization . .	877,746.65		66,206.04	811,540.61	Related to assets
Subsidies for collaborative innovation projects of high-quality development industries	12,000,000.00	3,000,000.00	666,666.67	14,333,333.33	Related to assets
Subsidies for industrial productive investment projects	9,816,659.63		1,000,002.06	8,816,657.57	Related to assets
Subsidies for industrial Internet innovation and development projects	3,560,000.00	4,585,000.00	271,500.00	7,873,500.00	Related to assets
Subsidies for innovation-driven funds projects.		18,798,809.95	985,363.10	17,813,446.85	Related to assets
Subsidies for investment in fixed assets		3,130,120.12	159,992.65	2,970,127.47	Related to assets
Special subsidies for technological transformation		30,772,314.06	1,531,308.43	29,241,005.63	Related to assets
Industrial chain collaborative innovation project.		13,500,000.00		13,500,000.00	Related to assets
Other piecemeal subsidies	1,800,247.69		444,940.84	1,355,306.85	Related to assets
Other piecemeal subsidies	45,675.22	1,490,739.47	451,061.62	1,085,353.07	Related to income
Subtotal	410,473,311.89	127,413,977.19	19,014,176.16	518,873,112.92	

2) Year 2020

Items	Opening balance	Increase	Grants included into profit or loss [Note 2]	Closing balance	Related to assets/income
Subsidies for infrastructure construction	126,815,236.69	123,316,040.00	3,390,895.92	246,740,380.77	Related to assets
Fiscal subsidies for technological transformation	19,940,207.64	562,600.00	963,060.84	19,539,746.80	Related to assets
Fiscal subsidies for technological innovation.	18,996,068.57	15,561,600.00	1,089,511.04	33,468,157.53	Related to assets
Subsidies for life cycle green manufacturing projects	13,500,000.00	13,500,000.00	783,506.14	26,216,493.86	Related to assets
Optimization and improvement of wastewater treatment and comprehensive utilization of renewable resources project	12,207,500.01		295,990.17	11,911,509.84	Related to assets
Special subsidies for energy conservation and industrial circular economy.	12,351,862.84	4,687,200.00	437,054.70	16,602,008.14	Related to assets
Funds and supporting subsidies for provincial key enterprise research institutes	10,000,000.00			10,000,000.00	Related to assets
Fiscal subsidies for industrial transformation and upgrading	9,550,267.78		552,962.28	8,997,305.50	Related to assets
Supporting funds for enterprises	7,662,599.46		445,219.20	7,217,380.26	Related to assets
Central special funds for prevention and control of air pollution.	1,800,000.00		120,000.00	1,680,000.00	Related to assets
Subsidies for the integration of informatization and industrialization	943,952.52		66,205.87	877,746.65	Related to assets
Subsidies for collaborative innovation projects of high-quality development industries		12,000,000.00		12,000,000.00	Related to assets

Items	Opening balance	Increase	Grants included into profit or loss [Note 2]	Closing balance	Related to assets/income
Subsidies for industrial productive investment projects		10,000,000.00	183,340.37	9,816,659.63	Related to assets
Subsidies for industrial Internet innovation and development projects		3,560,000.00		3,560,000.00	Related to assets
Major special funds for technologies for control and treatment of water pollution.	2,294,042.62	605,700.00	2,899,742.62		Related to income
Other piecemeal subsidies	2,030,809.47	235,400.00	465,961.78	1,800,247.69	Related to assets
Other piecemeal subsidies	720,675.22		675,000.00	45,675.22	Related to income
Subtotal	238,813,222.82	184,028,540.00	12,368,450.93	410,473,311.89	

3) Year 2019

Items	Opening balance	Increase	Grants included into profit or loss [Note 2]	Closing balance	Related to assets/income
Subsidies for infrastructure construction	61,751,092.56	68,455,040.00	3,390,895.87	126,815,236.69	Related to assets
Fiscal subsidies for technological transformation	15,844,811.56	4,953,100.00	857,703.92	19,940,207.64	Related to assets
Subsidies for life cycle green manufacturing projects	13,500,000.00			13,500,000.00	Related to assets
Fiscal subsidies for industrial transformation and upgrading	10,103,230.01		552,962.23	9,550,267.78	Related to assets
Funds and supporting subsidies for provincial key enterprise research institutes	10,000,000.00			10,000,000.00	Related to assets
Fiscal subsidies for technological innovation.	8,760,979.72	10,797,500.00	562,411.15	18,996,068.57	Related to assets
Special subsidies for energy conservation and industrial circular economy.	8,639,605.40	3,992,800.00	280,542.56	12,351,862.84	Related to assets
Supporting funds for enterprises	8,107,818.61		445,219.15	7,662,599.46	Related to assets

Items	Opening balance	Increase	Grants included into profit or loss [Note 2]	Closing balance	Related to assets/income
Optimization and improvement of wastewater treatment and comprehensive utilization of renewable resources project	7,021,433.34	5,382,400.00	196,333.33	12,207,500.01	Related to assets
Central special funds for prevention and control of air pollution.	1,800,000.00			1,800,000.00	Related to assets
Subsidies for the integration of informatization and industrialization . .	1,010,158.52		66,206.00	943,952.52	Related to assets
Major special funds for technologies for control and treatment of water pollution.	1,746,600.00	1,327,700.00	780,257.38	2,294,042.62	Related to income
Other piecemeal subsidies	2,577,710.81		546,901.34	2,030,809.47	Related to assets
Other piecemeal subsidies	295,675.22	1,800,000.00	1,375,000.00	720,675.22	Related to income
Subtotal	151,159,115.75	96,708,540.00	9,054,432.93	238,813,222.82	

Note 1: In the current period, the increase of 78,623,800.21 yuan was resulted from changes in the consolidation scope.
Note 2: Please refer to section V (IV) 3 of notes to the financial statements for details on government grants included into profit or loss.

39. Share capital

(1) Details

1) Year 2021

Items	Opening balance	Movements				Subtotal	Closing balance
		Issue of new shares	Bonus shares	Reserve transferred to shares	Others		
Total shares	1,141,261,526	79,966,957				79,966,957	1,221,228,483

2) Year 2020

Items	Opening balance	Movements				Subtotal	Closing balance
		Issue of new shares	Bonus shares	Reserve transferred to shares	Others		
Total shares	1,078,671,471	62,590,055				62,590,055	1,141,261,526

3) Year 2019

Items	Opening balance	Movements				Subtotal	Closing balance
		Issue of new shares	Bonus shares	Reserve transferred to shares	Others		
Total shares	829,747,285			248,924,186		248,924,186	1,078,671,471

(2) Other remarks

Please refer to section V (I) 40 of notes to the financial statements for details on changes of share capital during the reporting period.

40. Capital reserve

(1) Details

<u>Items</u>	<u>December 31, 2021</u>	<u>December 31, 2020</u>	<u>December 31, 2019</u>
Share premium	9,686,588,328.31	3,468,523,886.81	2,195,482,589.21
Other capital reserve	531,708,256.11	411,174,717.62	411,174,717.62
Total	10,218,296,584.42	3,879,698,604.43	2,606,657,306.83

(2) Other remarks

1) Year 2019

Capital reserve (share premium) as at December 31, 2019 was 240,410,999.24 yuan less than that as at December 31, 2018.

- a. In 2019, capital reserve (share premium) was increased by 8,513,186.76 yuan. Please refer to section VII (II) 2 of notes to the financial statements for details.
- b. In 2019, capital reserve (share premium) was decreased by 248,924,186.00 yuan, which was due to the Company's increase of 248,924,186 shares (each with par value of one yuan) by converting capital reserve of 248,924,186.00 yuan in the proportion of 3 shares per 10 shares to all shareholders based on total shares of 829,747,285 shares pursuant to the resolution of shareholders' meeting of 2018. Such capital increase had been verified by Pan-China Certified Public Accountants LLP, and a Capital Verification Report numbered PCCPACVR [2019] 297 was issued thereon on June 28, 2019. The Company had registered such change at administration for market regulation on September 11, 2019.

2) Year 2020

Capital reserve (share premium) as at December 31, 2020 was 1,273,041,297.60 yuan higher than that as at December 31, 2019.

- A. In 2020, capital reserve (share premium) was increased by 1,526,240,193.89 yuan due to the following events:
 - a. Pursuant to the resolutions of the 28th meeting and the 29th meeting of the fourth session of the Board of Directors and the second extraordinary shareholders' meeting of 2019, and under the approval of the document numbered Zheng Jian Xu Ke [2020] 179, (i) the Company issued 34,110,169 shares to Wuhu Cinda Xinneng No. 1 Investment Partnership (LP) (the "Cinda Xinneng") at the price of 23.60 yuan per share to purchase its 15.68% equity of Huayou Quzhou. As a result, paid-in capital of 34,110,169.00 yuan and capital reserve (share premium) of 770,889,831.00 yuan were recognized. Such share issuance for acquisition of assets had been verified by Pan-China Certified Public Accountants LLP, and a Capital Verification Report numbered PCCPACVR [2020] 14 was issued thereon; (ii) the Company privately issued RMB ordinary shares (A shares) of 28,479,886 shares to specific targets at a price of 28.09 yuan per share, with Huatai United Securities Co., Ltd. and CITIC Securities Co., Ltd. as co-lead underwriters. The total amount of funds raised

was 799,999,997.74 yuan. After deducting the issuance fees of 18,846,563.25 yuan (tax exclusive), the net amount of funds raised was 781,153,434.49 yuan, of which, 28,479,886.00 yuan was included in paid-in capital, and 752,673,548.49 yuan was included in capital reserve (share premium). The above funds raising had been verified by Pan-China Certified Public Accountants LLP, and a Capital Verification Report numbered PCCPACVR [2020] 78 was issued thereon.

- b. Non-controlling shareholders of the subsidiary Jiangsu Huayou made contributions at a premium, resulting in a capital premium of 5,000,000.00 yuan, and the Company recognized the capital premium of 2,000,000.00 yuan based on the holding proportion.
 - c. The Company acquired non-controlling interest of the subsidiary Jiangsu Huayou, and capital premium was increased by 290,736.62 yuan based on the difference between the acquisition consideration and the proportionate share of net assets from combination date to the acquisition date.
 - d. The subsidiary Huayue Company brought in new investors, resulting in a change of the Company's holding proportions, and capital premium was increased by 63,268.42 yuan based on the difference on the proportionate share of net assets before and after the capital increase.
 - e. The Company acquired the non-controlling interest of the subsidiary Huayou America, and capital premium was increased by 322,809.36 yuan based on the difference between the acquisition consideration and the proportionate share of net assets from combination date to the acquisition date.
- B. In 2020, capital reserve (share premium) was decreased by 253,198,896.29 yuan, which was due to the Company's acquisition of 15.68% equity of the subsidiary Huayou Quzhou from Cinda Xinneng, and capital premium was decreased by 253,198,896.29 yuan based on the difference between the acquisition consideration and the proportionate share of net assets from combination date to the acquisition date.

3) Year 2021

- A. Capital reserve (share premium) as at December 31, 2021 was 6,218,064,441.50 yuan higher than that as at December 31, 2020.
- a. In 2021, capital reserve (share premium) was increased by 6,226,791,838.82 yuan due to the following events:
 - (i) Pursuant to the resolutions of the third meeting, the seventh meeting and the eighth meeting of the fifth session of the Board of Directors and the third and the fourth extraordinary shareholders' meeting of 2020, and under the approval of the document numbered Zheng Jian Xu Ke [2020] 3604, the Company privately issued 71,642,857 shares (each with par value of one yuan) to EVE Holdings Limited, etc. at a price of 84.00 yuan per share. The total amount of funds raised was 6,017,999,988.00 yuan. After deducting the issuance fees of 62,996,333.86 (tax exclusive), the net amount of funds raised was 5,955,003,654.14 yuan, of which, 71,642,857.00 yuan was included in paid-in capital, and 5,883,360,797.14 yuan was included in capital reserve (share premium). Such share issuance had been verified by Pan-China Certified Public Accountants LLP, and a Capital Verification Report numbered PCCPACVR [2021] 50 was issued thereon.

- (ii) Pursuant to the restricted share incentive plan deliberated and approved by the 14th meeting and the 17th meeting of the fifth session of the Board of Directors and the first extraordinary shareholders' meeting of 2021, taking June 17, 2021 as the grant date, the Company ultimately granted 6,829,900 restricted shares to 720 incentive objects at a price of 37.89 yuan per share. As a result, paid-in capital of 6,829,900.00 yuan and capital reserve (share premium) of 251,955,011.00 yuan were recognized. Such restricted share issuance had been verified by Pan-China Certified Public Accountants LLP, and a Capital Verification Report numbered PCCPACVR [2021] 349 was issued thereon. Meanwhile, pursuant to the "Interpretation of China Accounting Standards for Business Enterprises No. 7", treasury shares were increased by 258,784,911.00 yuan and other payables were increased by 258,784,911.00 yuan based on the number of restricted shares issued and the corresponding repurchase obligations.
 - (iii) Pursuant to the restricted share incentive plan deliberated and approved by the 21st meeting of the fifth session of the Board of Directors and the first extraordinary shareholders' meeting of 2021, taking September 28, 2021 as the grant date, the Company ultimately granted 1,494,200 restricted shares to 255 incentive objects at a price of 53.84 yuan per share. As a result, paid-in capital of 1,494,200.00 yuan and capital reserve (share premium) of 78,953,528.00 yuan were recognized. Such restricted share issuance had been verified by Pan-China Certified Public Accountants LLP, and a Capital Verification Report numbered PCCPACVR [2021] 593 was issued thereon. Meanwhile, pursuant to the "Interpretation of China Accounting Standards for Business Enterprises No. 7", treasury shares were increased by 80,447,728.00 yuan and other payables were increased by 80,447,728.00 yuan based on the number of restricted shares issued and the corresponding repurchase obligations.
 - (iv) The subsidiary Tianjin B&M brought in an employee stock ownership platform, resulting in a change of the Company's holding proportion, and share premium was increased by 12,206,546.48 yuan based on the difference on the proportionate share of net assets before and after the capital increase as well as the proportion share in capital premium arising from share-based payment of Tianjin B&M.
 - (v) The Company sold partial equity of its subsidiaries Tongxiang Huashan and Wenzhou Huashan, and share premium was increased by 315,956.20 yuan based on the difference between the consideration and the proportionate share of the net assets.
- b. In 2021, capital reserve (share premium) was decreased by 8,727,397.32 yuan due to the following events:
- (i) The Company acquired non-controlling interest of the subsidiary SESA Company, and share premium was decreased by 8,088,340.85 yuan based on the difference between the acquisition consideration and the proportionate share of net assets.
 - (ii) The Company sold partial equity of the subsidiaries Jiangsu Huayou and Beijing Huashan, and share premium was decreased by 639,056.47 yuan based on the difference between the disposal consideration and the proportionate share of net assets.

B. Capital reserve (share premium) as at December 31, 2021 was 120,533,538.49 yuan higher than that as at December 31, 2020 due to the following events:

- a. According to the Company's equity incentive plan, expenses related to share-based payment for restricted shares was recognized at 113,786,486.15 yuan, which was included in the capital reserve (other capital reserve).
- b. Based on the amount of 158,766,835.07 yuan, which was estimated to be deductible before tax in the future, deferred tax assets of 23,815,025.26 yuan were recognized. For the expenses related to share-based payment of 113,786,486.15 yuan which was recognized in the current period, income tax expenses (deferred income tax expenses) were recognized at 17,067,972.92 yuan along with the accrual of the deferred tax assets, and for the remaining 44,980,348.93 yuan, which was in excess of the cumulative expenses related to share-based payment, capital reserve (other capital reserve) was recognized at 6,747,052.34 yuan along with the accrual of deferred tax assets.

41. Treasury shares

(1) Details

Items	December 31, 2021	December 31, 2020	December 31, 2019
Restricted shares	339,232,639.00		
Total	339,232,639.00		

(2) Other remarks

Please refer to section V (I) 40 of notes to the financial statements for details on changes of treasury shares during the reporting period.

42. Other comprehensive income (OCI)

(1) Year 2021

Items	Opening balance	Current period cumulative					Less: OCI previously recognized but transferred to retained earnings in current period (attributable to parent company after tax)	Closing balance
		Net OCI after tax						
		Current period cumulative before income tax	Less: OCI previously recognized but transferred to profit or loss in current period	Less: Income tax expenses	Attributable to parent company after tax	Attributable to non-controlling shareholders after tax		
Items not to be reclassified subsequently to profit or loss . . .	-44,965,006.76	-4,103,575.00			-4,103,575.00		-49,068,581.76	
Including: Changes in fair value of other equity instrument investments . . .	-44,965,006.76	-4,103,575.00			-4,103,575.00		-49,068,581.76	
Items to be reclassified subsequently to profit or loss . .	-101,028,153.07	-287,694,564.46	2,250,550.56		-269,266,608.73	-20,678,506.29	-370,294,761.80	
Including: Items to be transferred to profit or loss under equity method	-55,395,203.75	-38,079,525.54	2,250,550.56		-40,330,076.10		-95,725,279.85	
Translation reserves	-45,632,949.32	-249,615,038.92			-228,936,532.63	-20,678,506.29	-274,569,481.95	
Total	-145,993,159.83	-291,798,139.46	2,250,550.56		-273,370,183.73	-20,678,506.29	-419,363,343.56	

(2) Year 2020

Items	Opening balance	Current period cumulative					Less: OCI previously recognized but transferred to retained earnings in current period (attributable to parent company after tax)	Closing balance
		Net OCI after tax						
		Current period cumulative before income tax	Less: OCI previously recognized but transferred to profit or loss in current period	Less: Income tax expenses	Attributable to parent company after tax	Attributable to non-controlling shareholders after tax		
Items not to be reclassified subsequently to profit or loss . . .	-28,688,489.24	-16,276,517.52			-16,276,517.52		-44,965,006.76	
Including: Changes in fair value of other equity instrument investments . . .	-28,688,489.24	-16,276,517.52			-16,276,517.52		-44,965,006.76	
Items to be reclassified subsequently to profit or loss . . .	203,914,647.81	-358,239,828.64			-304,942,800.88	-53,297,027.76	-101,028,153.07	
Including: Items to be transferred to profit or loss under equity method	8,023,617.00	-63,418,820.75			-63,418,820.75		-55,395,203.75	
Translation reserves	195,891,030.81	-294,821,007.89			-241,523,980.13	-53,297,027.76	-45,632,949.32	
Total	175,226,158.57	-374,516,346.16			-321,219,318.40	-53,297,027.76	-145,993,159.83	

(3) Year 2019

Items	Opening balance	Current period cumulative					Less: OCI previously recognized but transferred to retained earnings in current period (attributable to parent company after tax)	Closing balance
		Net OCI after tax						
		Current period cumulative before income tax	Less: OCI previously recognized but transferred to profit or loss in current period	Less: Income tax expenses	Attributable to parent company after tax	Attributable to non-controlling shareholders after tax		
Items not to be reclassified subsequently to profit or loss . . .		-28,688,489.24			-28,688,489.24		-28,688,489.24	
Including: Changes in fair value of other equity instrument investments . . .		-28,688,489.24			-28,688,489.24		-28,688,489.24	
Items to be reclassified subsequently to profit or loss . . .	77,104,325.30	139,577,519.71	1,417,581.90		126,810,322.51	11,349,615.30	203,914,647.81	
Including: Items to be transferred to profit or loss under equity method	2,948,159.06	5,075,457.94			5,075,457.94		8,023,617.00	
Translation reserves	74,156,166.24	134,502,061.77	1,417,581.90		121,734,864.57	11,349,615.30	195,891,030.81	
Total	77,104,325.30	110,889,030.47	1,417,581.90		98,121,833.27	11,349,615.30	175,226,158.57	

43. Special reserve

(1) Details

Year 2021

<u>Items</u>	<u>Opening balance</u>	<u>Increase</u>	<u>Decrease</u>	<u>Closing balance</u>
Work safety fund	6,938,266.87	42,664,689.92	49,580,329.66	22,627.13
Mine development fund	9,123,243.02	7,994,685.46	491,994.50	16,625,933.98
Total	16,061,509.89	50,659,375.38	50,072,324.16	16,648,561.11

Year 2020

<u>Items</u>	<u>Opening balance</u>	<u>Increase</u>	<u>Decrease</u>	<u>Closing balance</u>
Work safety fund	16,516,515.70	35,026,668.21	44,604,917.04	6,938,266.87
Mine development fund	4,430,793.11	7,852,385.37	3,159,935.46	9,123,243.02
Total	20,947,308.81	42,879,053.58	47,764,852.50	16,061,509.89

Year 2019

<u>Items</u>	<u>Opening balance</u>	<u>Increase</u>	<u>Decrease</u>	<u>Closing balance</u>
Work safety fund	16,416,325.60	39,756,381.01	39,656,190.91	16,516,515.70
Mine development fund	730,199.55	3,700,593.56		4,430,793.11
Total	17,146,525.15	43,456,974.57	39,656,190.91	20,947,308.81

(2) Other remarks

Work safety fund was accrued and used by the Company and its subsidiaries including Huayou Quzhou and New Energy Quzhou according to the document numbered Cai Qi [2012] 16 jointly issued by the Ministry of Finance and the State Administration of Work Safety. Mine development fund was accrued by the subsidiaries CDM Company and MIKAS Company according to the Mining Code of the Democratic Republic of the Congo.

44. Surplus reserve

(1) Details

<u>Items</u>	<u>December 31, 2021</u>	<u>December 31, 2020</u>	<u>December 31, 2019</u>
Statutory surplus reserve.	309,732,264.90	223,433,020.86	187,336,331.51
Total	309,732,264.90	223,433,020.86	187,336,331.51

(2) Other remarks

1) Year 2021

Statutory surplus reserve as at December 31, 2021 was 86,299,244.04 yuan higher than that as at December 31, 2020, which was due to the appropriation of statutory surplus reserve of 86,299,244.04 yuan at 10% of net profit generated by the parent company in 2021.

2) Year 2020

Statutory surplus reserve as at December 31, 2020 was 36,096,689.35 yuan higher than that as at December 31, 2019, which was due to the appropriation of statutory surplus reserve of 36,096,689.35 yuan at 10% of net profit generated by the parent company in 2020.

3) Year 2019

Statutory surplus reserve as at December 31, 2019 was 4,703,198.42 yuan higher than that as at December 31, 2018, which included: a. the adjustment of 1,555,884.22 yuan on the balance of surplus reserve as at January 1, 2019 due to the Company's adoption of the revised financial instrument standards since January 1, 2021 (please refer to section III (XXXIII) of notes to the financial statements for details); and b. the appropriation of statutory surplus reserve of 3,147,314.20 yuan at 10% of net profit generated by the parent company in 2019.

45. *Undistributed profit*

(1) Details

Items	Year 2021	Year 2020	Year 2019
Balance before adjustment at the end of preceding period	4,807,657,608.58	3,678,911,443.81	3,647,054,561.91
Add: Increase due to adjustment (or less: decrease).			-1,555,884.22
Opening balance after adjustment . . .	4,807,657,608.58	3,678,911,443.81	3,645,498,677.69
Add: Net profit attributable to owners of the parent company	3,897,503,525.74	1,164,842,854.12	119,534,808.82
Less: Appropriation of statutory surplus reserve	86,299,244.04	36,096,689.35	3,147,314.20
Dividend payable on ordinary shares	242,580,876.60		82,974,728.50
Closing balance	8,376,281,013.68	4,807,657,608.58	3,678,911,443.81

(2) Other remarks

1) Year 2021

Pursuant to the "Profit Distribution Plan of 2020" deliberated and approved by the shareholders' meeting of 2020, based on the total share capital of 1,212,904,383 shares as at the equity registration date for implementation of profit distribution, the Company distributed cash dividend of 2.00 yuan (tax inclusive) per 10 shares, totaling 242,580,876.60 yuan.

2) Year 2019

- a. The Company had adopted the revised financial instrument standards since January 1, 2019, and accordingly adjusted the balance of surplus reserve as at January 1, 2019 by -1,555,884.22 yuan. Please refer to section III (XXXIII) 3 of notes to the financial statements for details.
- b. Pursuant to the "Profit Distribution Plan of 2018" deliberated and approved by the shareholders' meeting of 2018, based on the total share capital of 829,747,285 shares, the Company distributed cash dividend of 1.00 yuan (tax inclusive) per 10 shares, totaling 82,974,728.50 yuan.

(II) Notes to items of the consolidated income statement

1. Operating revenue/Operating cost

(1) Details

Items	Year 2021		Year 2020		Year 2019	
	Revenue	Cost	Revenue	Cost	Revenue	Cost
Main operations	34,260,483,178.74	27,315,814,905.28	20,391,649,685.92	17,527,983,920.38	18,459,062,264.47	16,487,538,528.75
Other operations	1,056,065,821.22	815,253,535.55	795,194,279.83	486,078,464.39	393,766,198.75	260,723,043.15
Total	35,316,548,999.96	28,131,068,440.83	21,186,843,965.75	18,014,062,384.77	18,852,828,463.22	16,748,261,571.90
Including: Revenue from contracts with customers [Note]	35,300,204,306.80	28,122,012,006.82	21,184,180,221.56	18,013,860,601.69	—	—

Note: The difference with the total operating revenue refers to the lease income in revenue from other operation.

(2) Breakdown of revenue

1) Breakdown of revenue from contracts with customers by goods or services

Items	Year 2021		Year 2020		Year 2019	
	Revenue	Cost	Revenue	Cost	Revenue	Cost
Cobalt products	8,412,029,764.01	5,760,274,376.63	5,081,409,972.25	4,044,621,289.65	5,680,726,491.32	5,042,733,164.61
Copper products	5,378,197,687.90	2,737,758,347.72	3,013,641,659.45	1,755,518,297.59	2,632,845,658.27	1,777,876,302.10
Nickel products	251,221,594.20	217,406,096.48	480,532,082.96	425,039,175.45	365,348,208.21	354,753,617.98
Ternary precursors	5,761,110,211.29	4,886,038,213.95	2,532,355,171.03	2,104,375,532.05	1,151,304,938.30	968,162,399.81
Cathode materials	4,763,925,346.54	4,213,440,382.36				
Trade and others	10,733,719,702.86	10,307,094,589.68	10,076,241,335.87	9,684,306,306.95	9,022,603,167.12	8,604,736,087.40
Subtotal	35,300,204,306.80	28,122,012,006.82	21,184,180,221.56	18,013,860,601.69	18,852,828,463.22	16,748,261,571.90

2) Breakdown of revenue from contracts with customers by operating regions

Items	Year 2021		Year 2020		Year 2019	
	Revenue	Cost	Revenue	Cost	Revenue	Cost
Domestic	16,584,104,400.71	12,360,411,280.92	8,540,127,185.52	6,917,463,197.10	9,226,501,600.76	8,365,492,658.30
Overseas	18,716,099,906.09	15,761,600,725.90	12,644,053,036.04	11,096,397,404.59	9,626,326,862.46	8,382,768,913.60
Subtotal	35,300,204,306.80	28,122,012,006.82	21,184,180,221.56	18,013,860,601.69	18,852,828,463.22	16,748,261,571.90

3) Breakdown of revenue by time of transferring goods or rendering services

Items	Year 2021	Year 2020
Recognized at a point in time	35,300,204,306.80	21,184,180,221.56
Subtotal	35,300,204,306.80	21,184,180,221.56

(3) Contract liabilities carried over to revenue during the reporting period

Items	Year 2021	Year 2020
Operating revenue	258,378,053.53	46,451,445.72
Subtotal	258,378,053.53	46,451,445.72

2. Taxes and surcharges

Items	Year 2021	Year 2020	Year 2019
Urban maintenance and construction tax	19,449,572.64	9,536,977.33	4,802,006.94
Education surcharge	8,344,669.70	4,094,419.01	2,058,002.98
Local education surcharge	5,563,113.15	2,739,608.01	1,372,001.97
Mineral tax	252,331,683.53	149,990,294.60	230,729,795.21
Housing property tax	2,184,510.75	11,198,677.54	3,490,813.76
Land use tax	1,196,828.35	6,191,972.60	3,300,812.18
Stamp duty	11,574,021.02	5,420,021.88	5,551,897.95
Others	3,315,788.96	4,794,955.02	2,460,638.13
Total	303,960,188.10	193,966,925.99	253,765,969.12

3. Selling expenses

Items	Year 2021	Year 2020	Year 2019
Employee benefits	23,703,539.51	17,589,450.99	13,235,948.10
Business traveling expenses	2,644,943.23	1,342,267.83	2,187,077.95
Logistics costs			138,453,417.10
Service expenses	2,793,527.01	993,535.15	2,872,742.36
Sample charges	2,287,648.99	1,230,369.16	741,363.15
Entertainment expenses	2,280,232.56	1,361,345.11	1,345,810.28
Others	4,235,133.04	4,759,651.97	4,935,747.16
Total	37,945,024.34	27,276,620.21	163,772,106.10

4. Administrative expenses

Items	Year 2021	Year 2020	Year 2019
Employee benefits and incentives	551,210,078.98	335,751,956.69	220,908,564.80
Office expenses	68,936,442.36	47,004,704.40	42,664,811.47
Service expenses	127,267,676.23	82,717,833.40	52,893,038.70
Business entertainment expenses	17,650,251.77	11,061,740.25	11,855,337.68
Depreciation and amortization	131,597,162.53	72,016,744.06	66,385,434.43
Insurance premium	25,417,747.21	12,680,740.81	8,589,274.43
Aircraft usage fees	17,838,084.62	22,247,035.74	4,660,877.73
Share-based payments	186,168,950.15		
Others	53,571,596.06	81,560,653.32	59,643,650.45
Total	1,179,657,989.91	665,041,408.67	467,600,989.69

5. R&D expenses

Items	Year 2021	Year 2020	Year 2019
Employee benefits	173,324,584.98	102,299,884.29	69,584,561.50
Materials consumption	560,190,978.97	229,400,699.58	180,364,652.48
Depreciation and amortization	45,312,627.31	26,899,174.29	10,552,114.96
Others	37,442,016.10	12,184,370.79	7,109,382.89
Total	816,270,207.36	370,784,128.95	267,610,711.83

6. Financial expenses

Items	Year 2021	Year 2020	Year 2019
Interest expenses	502,298,446.61	394,032,889.30	375,408,861.86
Interest income	-74,079,354.47	-23,232,304.04	-19,536,813.86
Gains or losses on foreign exchange	-30,173,497.39	-8,780,448.12	6,429,661.02
Handling charges and others	86,294,299.41	40,507,736.51	64,800,903.30
Total	484,339,894.16	402,527,873.65	427,102,612.32

7. Other income

Items	Year 2021	Year 2020	Year 2019
Government grants related to assets [Note]	18,563,114.54	8,793,708.31	6,899,175.55
Government grants related to income [Note].	31,645,987.32	53,695,454.88	79,097,654.97
Refund of handling fees for withholding individual income tax . .	572,918.39	485,163.11	299,167.39
Total	50,782,020.25	62,974,326.30	86,295,997.91

Note: Please refer to section V (IV) 3 of notes to the financial statements for details on government grants included into other income.

8. Investment income

Details

Items	Year 2021	Year 2020	Year 2019
Investment income from long-term equity investments under equity method	599,789,831.39	58,862,496.59	-9,014,236.77
Investment income from disposal of long-term equity investments	100,646,800.54	19,614,188.31	5,090,389.40
Losses on discounting of receivables financing.	-49,415,734.06	-22,268,178.76	-46,477,984.36
Losses on derecognition of accounts receivable	-2,570,177.84	-3,683,035.79	-11,603,265.73
Investment income from disposal of held-for-trading financial assets	-12,951,009.39	20,309,020.43	8,229,572.05
Investment income from other debt investments [Note 1]	9,742,561.82		7,363,237.34
Investment income from disposal of other debt investments [Note 2]	-9,277,757.88		
Total	635,964,514.58	72,834,490.78	-46,412,288.07

Note 1: Amount of 2019 refers to the interest income on the Company's call loans rendered to Commus Company; amount of 2021 refers to the interest income of the subsidiary Huachuang International on call loans rendered to IWIP Company.

Note 2: It refers to the investment income of the subsidiary Huayou Mining Hong Kong from transfer of creditor's rights over SESA Company.

9. Gains on changes in fair value

Items	Year 2021	Year 2020	Year 2019
Held-for-trading financial assets.	26,384,375.52	-4,640,814.31	-43,656,625.15
Including: Gains on changes in fair value of derivative financial instruments	26,144,786.48	-4,605,453.20	-43,691,986.26
Gains on changes in fair value of financial products	239,589.04	-35,361.11	35,361.11
Held-for-trading financial liabilities . . .	4,045,551.54	-23,939,270.26	6,529,248.16
Including: Gains on changes in fair value of derivative financial instruments	4,045,551.54	-23,939,270.26	6,529,248.16
Hedging gains or losses.	-45,018,743.56		
Total	-14,588,816.50	-28,580,084.57	-37,127,376.99

10. Credit impairment loss

Items	Year 2021	Year 2020	Year 2019
Bad debts	-83,189,523.03	-59,163,312.39	-37,637,572.84
Total	-83,189,523.03	-59,163,312.39	-37,637,572.84

11. Assets impairment loss

Items	Year 2021	Year 2020	Year 2019
Inventory write-down loss	-15,648,918.02	-31,353,522.16	-328,850,640.46
Impairment loss of fixed assets	-31,303,698.33	-10,352,594.51	
Impairment loss of long-term equity investments		-4,640,501.42	
Impairment loss of goodwill	-901,194.16		
Total	-47,853,810.51	-46,346,618.09	-328,850,640.46

12. Gains on asset disposal

Items	Year 2021	Year 2020	Year 2019
Gains on disposal of fixed assets	-5,822,487.58	220,407.91	
Gains on disposal of intangible assets	2,700,000.00	76,333.16	
Total	-3,122,487.58	296,741.07	

13. Non-operating revenue

Items	Year 2021	Year 2020	Year 2019
Gains on damage or retirement of non- current assets	116,963.42	55,353.24	
Including: Losses on damage or retirement of fixed assets	116,963.42	55,353.24	
Indemnity income	2,106,593.67	1,952,349.60	8,724,390.05
Others	336,696.23	574,554.15	987,103.28
Total	2,560,253.32	2,582,256.99	9,711,493.33

14. Non-operating expenditures

Items	Year 2021	Year 2020	Year 2019
Losses on damage or retirement of non-current assets	62,969,804.49	26,717,505.85	5,016,805.69
Including: Losses on damage or retirement of fixed assets	62,969,804.49	26,713,464.80	5,016,805.69
Losses on damage or retirement of intangible assets		4,041.05	
Donations to external parties	7,501,230.16	7,142,762.21	2,525,286.09
Others	5,109,508.19	5,199,913.01	3,886,315.23
Total	75,580,542.84	39,060,181.07	11,428,407.01

15. Income tax expenses

(1) Details

Items	Year 2021	Year 2020	Year 2019
Current period income tax expenses	896,003,065.80	316,927,177.22	85,390,233.99
Deferred income tax expenses	-91,364,135.03	36,141,887.39	-34,248,441.36
Total	804,638,930.77	353,069,064.61	51,141,792.63

(2) Reconciliation of accounting profit to income tax expenses

Items	Year 2021	Year 2020	Year 2019
Profit before tax	4,828,278,862.95	1,478,722,242.53	159,265,708.13
Income tax expenses based on tax rate applicable to the parent company . . .	724,241,829.44	221,808,336.38	23,889,856.22
Effect of different tax rates applicable to subsidiaries	275,940,983.30	140,047,160.22	12,576,956.66
Effect of prior income tax reconciliation.		721,260.70	2,733,634.86
Effect of non-taxable income	-58,598,719.53	-22,829,831.60	107,800.81
Effect of non-deductible costs, expenses and losses	-124,116,928.93	-3,448,087.99	-11,075,069.35
Effect of deducible temporary differences or deductible losses not recognized as deferred tax assets in the current period	-12,828,233.51	16,770,226.90	22,908,613.43
Income tax expenses	804,638,930.77	353,069,064.61	51,141,792.63

16. *Other comprehensive income, net of income tax*

Please refer to section V (I) 42 of notes to the financial statements for details.

(III) Notes to items of the consolidated cash flow statement

1. *Other cash receipts related to operating activities*

Items	Year 2021	Year 2020	Year 2019
Cash and bank balances not considered as cash and cash equivalents	408,445,790.96	541,354,415.19	400,986,023.02
Government grants	82,451,902.68	235,434,415.37	173,650,937.59
Interest income	74,079,354.47	23,232,304.04	19,536,813.86
Others	3,016,208.29	10,536,161.04	7,770,302.62
Total	567,993,256.40	810,557,295.64	601,944,077.09

2. *Other cash payments related to operating activities*

Items	Year 2021	Year 2020	Year 2019
Cash and bank balances not considered as cash and cash equivalents	1,596,883,996.13	414,503,109.03	540,130,863.36
Expenses paid in cash	596,247,488.76	318,765,410.68	414,963,244.06
Hedged futures contract losses	40,587,146.72		
Others	45,464,494.46	13,096,989.75	17,971,328.87
Total	2,279,183,126.07	746,365,509.46	973,065,436.29

3. Other cash receipts related to investing activities

Items	Year 2021	Year 2020	Year 2019
Recovery of cash and bank balances not considered as cash and cash equivalents.	325,750,397.20	242,779,913.28	42,927,813.24
Receipt of payments for equipment from Indonesia Huafei [Note].	641,739,400.77		
Receipt of fund for transfer of creditor's right from SESA Company.	167,636,001.13		
Receipt of interest on call loans from IWIP Company	9,742,561.82		
Recovery of call loans from Newstride Technology		74,383,860.00	
Recovery of call loans from Commus Company.			50,121,263.28
Receipt of call loans and interest thereon from Huahai Industry Investment.			113,106,386.91
Net cash receipts from acquisition of Huachuang International.			249,016.27
Total	1,144,868,360.92	317,163,773.28	206,404,479.70

Note: The Company purchased equipment domestically for the associate Indonesia Huafei, and took the payments for equipment received as other cash receipts related to investing activities.

4. Other cash payments related to investing activities

Items	Year 2021	Year 2020	Year 2019
Payments of cash and bank balances not considered as cash and cash equivalents.	238,601,618.28	325,750,397.20	242,779,913.28
Payments for equipment to Indonesia Huafei [Note]	1,352,590,413.37		
Payments for equity to Newstride Technology Limited		171,732,358.79	699,824,800.00
Payments for call loans to Veinstone		12,167,137.63	101,177,754.03
Payments for call loans to IWIP Company.		85,606,688.00	102,271,092.00
Payments for call loans to Newstride Technology		74,383,860.00	
Payments for call loans to Indonesia Huatuo		3,262,450.00	
Net cash payments for disposal of Huawei Nickel Industry			27,148,209.81
Total	1,591,192,031.65	672,902,891.62	1,173,201,769.12

Note: The Company purchased equipment domestically for the associate Indonesia Huafei, and took the payments for equipment as other cash payments related to investing activities.

5. *Other cash receipts related to financing activities*

Items	Year 2021	Year 2020	Year 2019
Recovery of cash and bank balances not considered as cash and cash equivalents.	59,848,145.99	106,373,750.00	38,634,541.51
Funds from repo transactions.		176,778,674.26	283,112,964.42
Cash receipts from discounting of bank acceptance for financing purposes. . .	149,611,023.32	19,524,777.78	373,224,578.99
Funds from sale and leaseback.	970,000,000.00	370,000,000.00	500,000,000.00
Receipt of call loans	1,912,147,177.57	1,878,848,300.43	784,883,407.60
Recovery of deposits for sale and leaseback.		9,000,000.00	5,000,000.00
Recovery of deposits for repo transactions.	21,370,393.00		
Payments for transfer of partial equity of the subsidiary Wenzhou Huashan .	8,500,000.00		
Payments for transfer of partial equity of the subsidiary Jiangsu Huayou . .	5,000,000.00		
Total	3,126,476,739.88	2,560,525,502.47	1,984,855,492.52

6. *Other cash payments related to financing activities*

Items	Year 2021	Year 2020	Year 2019
Payments of cash and bank balances not considered as cash and cash equivalents.	620,221,956.10	94,280,001.00	106,373,750.00
Repayments for repo transactions.			283,839,061.95
Payments of deposits for repo transactions.		27,563,403.38	
Payments for sale and leaseback	486,278,861.90	407,079,093.70	341,977,321.18
Payments of deposits for sale and leaseback.	65,900,000.00	10,000,000.00	38,400,000.00
Bank acceptance for financing purposes with undertaking to pay at maturity	20,000,000.00	384,930,000.00	63,093,168.58
Payments for issuance fees	7,480,766.06	14,233,647.00	7,269,775.00
Repayments for call loans and interest thereon	1,924,530,243.34	1,873,383,581.53	34,898,501.39
Funds for acquisition of non-controlling interest of Huayou America		4,516,723.64	
Payments for lease liabilities	30,502,932.44		
Payments for repo transactions.	38,331,686.76		
Total	3,193,246,446.60	2,815,986,450.25	875,851,578.10

7. *Supplementary information to the cash flow statement*

(1) Supplementary information to the cash flow statement

Supplementary information	Year 2021	Year 2020	Year 2019
1) Reconciliation of net profit to cash flows from operating activities:			
Net profit	4,023,639,932.18	1,125,653,177.92	108,123,915.50
Add: Provision for assets impairment . .	131,043,333.54	105,509,930.48	366,488,213.30
Depreciation of fixed assets, oil and gas assets and productive biological assets	982,520,861.89	675,763,274.66	492,676,848.69
Depreciation of right-of-use assets . .	21,898,654.49		
Amortization of intangible assets . . .	88,642,075.64	67,732,810.22	104,052,407.03
Amortization of long-term prepayments	28,503,304.53	34,736,443.86	17,513,169.49
Losses on disposal of fixed assets, intangible assets and other long-term assets (Less: gains)	3,122,487.58	-296,741.07	
Fixed assets retirement loss (Less: gains)	62,852,841.07	26,662,152.61	5,016,805.69
Losses on changes in fair value (Less: gains)	14,588,816.50	28,580,084.57	37,127,376.99
Financial expenses (Less: gains)	474,591,749.22	386,052,441.18	381,838,522.88
Investment losses (Less: gains)	-687,950,426.48	-98,785,705.33	-11,668,962.02
Decrease of deferred tax assets (Less: increase)	-110,219,302.33	7,515,631.06	-44,457,121.95
Increase of deferred tax liabilities (Less: decrease)	80,695,346.52	28,626,256.33	10,208,680.59
Decrease of inventories (Less: increase)	-3,846,764,208.40	-710,600,816.80	1,769,075,202.26
Decrease of operating receivables (Less: increase)	-5,607,591,433.39	-815,842,446.55	-1,011,197,816.48
Increase of operating payables (Less: decrease)	4,085,214,324.05	968,245,565.66	371,073,551.15
Others	193,503,053.71	30,217,061.08	3,800,783.66
Net cash flows from operating activities	-61,708,589.68	1,859,769,119.88	2,599,671,576.78
2) Significant investing and financing activities not related to cash receipts and payments:			
Conversion of debt into capital			
Convertible bonds due within one year			
Fixed assets leased in under finance leases			
3) Net changes in cash and cash equivalents:			
Cash at the end of the period	6,108,393,395.75	1,489,479,506.70	1,984,580,600.83
Less: Cash at the beginning of the period	1,489,479,506.70	1,984,580,600.83	1,829,720,986.38
Add: Cash equivalents at the end of the period			
Less: Cash equivalents at the beginning of the period			
Net increase of cash and cash equivalents	4,618,913,889.05	-495,101,094.13	154,859,614.45

(2) Net cash payments for acquisition of subsidiaries during the reporting period

Items	Year 2021	Year 2020	Year 2019
Cash and cash equivalents paid in the current period as consideration for business combination in current period	1,351,200,000.00		772,741,373.73
Including: Tianjin B&M	1,351,200,000.00		
Huahai New Energy			772,741,367.00
Huachuang International			6.73
Less: Cash and cash equivalents held by subsidiaries at the acquisition date	670,992,575.72		17,532,126.33
Including: Tianjin B&M	670,992,575.72		
Huahai New Energy			17,283,103.33
Huachuang International			249,023.00
Net cash payment for acquisition of subsidiaries in the current period . . .	680,207,424.28		755,209,247.40

(3) Net cash receipts from disposal of subsidiaries during the reporting period

Items	Year 2021	Year 2020	Year 2019
Cash and cash equivalents received in current period for subsidiary disposal in current period.	227,559,999.94		6.89
Including: TMC Company	153,760,408.68		
SESAC Company.	73,799,591.26		
Huawei Nickel Industry		[Note]	6.89
Less: Cash and cash equivalents held by subsidiaries at the loss-of-control date	7,661,643.02		27,148,216.70
Including: TMC Company	7,204,074.40		
SESAC Company.	457,568.62		
Huawei Nickel Industry			27,148,216.70
Net cash receipts from disposal of subsidiaries in current period	219,898,356.92		-27,148,209.81

Note: It is the net amount after the disposal-related taxes and rates of 1,539,912.74 yuan are deducted from the consideration of 75,339,504.00 yuan for disposing the equity of SESAC Company.

(4) Composition of cash and cash equivalents

Items	Year 2021	Year 2020	Year 2019
1) Cash	6,108,393,395.75	1,489,479,506.70	1,984,580,600.83
Including: Cash on hand	30,717,041.97	6,419,244.46	10,989,287.18
Cash in bank on demand for payment.	6,028,851,637.85	1,422,345,842.00	1,908,537,857.72
Other cash and bank balances on demand for payment.	48,824,715.93	60,714,420.24	65,053,455.93
2) Cash equivalents.			
Including: Bond investments maturing within three months			
3) Cash and cash equivalents at the end of the period	6,108,393,395.75	1,489,479,506.70	1,984,580,600.83
Including: Cash and cash equivalents of parent company or subsidiaries with use restrictions.			

- (5) Amount of endorsed commercial acceptance not involving cash receipts and payments

Items	Year 2021	Year 2020	Year 2019
Amount of endorsed commercial acceptance	1,320,042,637.44	484,327,490.75	838,996,457.49
Including: Payments for acquisition of long-term assets, such as fixed assets	1,320,042,637.44	484,327,490.75	838,996,457.49

- (6) Remarks

Cash and bank balances not considered as cash and cash equivalents

- 1) Balances as at December 31, 2019 of the “cash and cash equivalents” in the consolidated cash flow statement and the “cash and bank balances” in the consolidated balance sheet were 1,984,580,600.83 yuan and 2,885,760,539.30 yuan respectively, with a difference of 901,179,938.47 yuan. It was due to a reduction of 901,179,938.47 yuan from “cash and cash equivalents” in the consolidated cash flow statement, which was not considered as cash and cash equivalents.
- 2) Balances as at December 31, 2020 of the “cash and cash equivalents” in the consolidated cash flow statement and the “cash and bank balances” in the consolidated balance sheet were 1,489,479,506.70 yuan and 2,334,257,628.92 yuan respectively, with a difference of 844,778,122.22 yuan. It was due to a reduction of 844,778,122.22 yuan from “cash and cash equivalents” in the consolidated cash flow statement, which was not considered as cash and cash equivalents.
- 3) Balances as at December 31, 2021 of the “cash and cash equivalents” in the consolidated cash flow statement and the “cash and bank balances” in the consolidated balance sheet were 6,108,393,395.75 yuan and 9,769,484,655.14 yuan respectively, with a difference of 3,661,091,259.39 yuan. It was due to a reduction of 3,661,091,259.39 yuan from “cash and cash equivalents” in the consolidated cash flow statement, which was not considered as cash and cash equivalents.

(IV) Others

1. Assets with title or use right restrictions

- (1) Details as of December 31, 2021

Items	Carrying amount	Reasons for restrictions
Cash and bank balances	3,661,091,259.39	It refers to other cash and bank balances including deposits for bank acceptance of 2,703,403,483.57 yuan, deposits for letters of credit of 251,997,597.57 yuan, deposits for letters of guarantee of 6,122,337.26 yuan, deposits for borrowings of 662,940,956.10 yuan, deposits for forward exchange settlement of 30,232,894.50 yuan and other deposits of 6,393,990.39 yuan.
Held-for-trading financial assets	300,239,589.04	Pledged for bank financing.
Receivables financing	392,771,270.84	Pledged for bank financing.

Items	Carrying amount	Reasons for restrictions
Inventories	364,660,857.10	Pledged for financing from financial institutions and inventories repurchased after sales.
Long-term equity investments. . .	1,768,804.83	Pledged for borrowings of associates' shareholders. Please refer to section X (II) 3 of notes to the financial statements for details.
Fixed assets	4,105,444,007.99	Mortgaged for bank financing and fixed assets leased back after sales.
Construction in progress	428,453,373.36	Mortgaged for bank financing.
Intangible assets	253,140,794.88	Mortgaged for bank financing.
Total.	9,507,569,957.43	

(2) Other remarks

At the end of 2021, the Company pledged 36.86% equity of Tianjin B&M, 80.00% equity of CDM Company, 80.68% equity of Huayou Quzhou and 100.00% equity of Huayuan Copper for the Company's financing from financial institutions.

2. Monetary items in foreign currencies

(1) Details as of December 31, 2021

Items	Balance in foreign currencies	Exchange rate	RMB equivalent
Cash and bank balances.			4,208,307,126.76
Including: USD.	650,804,604.63	6.3757	4,149,334,917.74
EUR.	1,414,908.18	7.2197	10,215,212.59
HKD	796,682.84	0.81760	651,367.89
AUD	62.39	5.65313	352.70
IDR	81,984,739,095.61	0.0004467160	36,623,894.71
ZAR.	16,095,668.58	0.40040	6,444,705.70
CDF.	1,571,164,657.07	0.003188	5,008,872.93
ARS.	227,241.99	0.06209	14,109.46
SGD.	2,902.36	4.7179	13,693.04
Accounts receivable			1,728,953,250.29
Including: USD.	271,137,398.84	6.3757	1,728,690,713.78
ZAR.	655,685.58	0.40040	262,536.51
Other receivables			30,363,231.47
Including: USD.	4,287,033.57	6.3757	27,332,839.93
HKD	150,845.31	0.81760	123,331.13
IDR	6,427,853,072.85	0.0004467160	2,871,424.81
ZAR.	89,000.00	0.40040	35,635.60
Long-term receivables			336,406,346.60
Including: USD.	52,763,829.32	6.3757	336,406,346.60
Short-term borrowings.			2,327,209,334.24
Including: USD.	364,193,652.55	6.3757	2,321,989,470.56
EUR.	723,002.85	7.2197	5,219,863.68
Accounts payable			3,216,437,316.55
Including: USD.	460,670,847.51	6.3757	2,937,099,122.47
EUR.	188,439.50	7.2197	1,360,476.66
IDR	605,094,798,949.00	0.0004467160	270,305,528.21
ZAR.	19,161,311.71	0.40040	7,672,189.21
Other payables			842,569,062.86
Including: USD.	129,927,020.01	6.3757	828,375,701.45
HKD	17,359,786.44	0.8176	14,193,361.39
IDR	54.00	0.0004467160	0.02
Non-current liabilities due within one year			618,557,950.78

Items	Balance in foreign currencies	Exchange rate	RMB equivalent
Including: USD.	97,018,045.20	6.3757	618,557,950.78
Long-term borrowings			3,941,347,617.57
Including: USD.	618,182,727.79	6.3757	3,941,347,617.57
Long-term payables.			319,993,726.26
Including: USD.	50,189,583.30	6.3757	319,993,726.26

(2) Remarks on foreign operations

Foreign operating entities	Main operating place	Functional currencies	Basis for selection of functional currencies
Huayou Hong Kong. . .	Hong Kong, China	HKD	The local currency
Huayou Singapore. . . .	Singapore	USD	The local primary currency
CDM Company.	The Democratic Republic of the Congo	USD	The local primary currency
MIKAS Company	The Democratic Republic of the Congo	USD	The local primary currency
Huayue Company	Republic of Indonesia	USD	The local primary currency
Huake Indonesia	Republic of Indonesia	USD	The local primary currency

3. Government grants

(1) Details

1) Year 2021

a. Government grants related to assets

Items	Opening balance of deferred income	Increase	Amortization	Closing balance of deferred income	Amortization presented under	Remarks
Subsidies for infrastructure construction	246,740,380.77		4,290,675.01	242,449,705.76	Other income	
Fiscal subsidies for technological transformation	19,539,746.80		1,185,676.93	18,354,069.87	Other income	
Fiscal subsidies for technological innovation.	33,468,157.53	17,346,976.98	2,250,132.27	48,565,002.24	Other income	
Subsidies for life cycle green manufacturing projects	26,216,493.86		1,202,091.56	25,014,402.30	Other income	
Optimization and improvement of wastewater treatment and comprehensive utilization of renewable resources project	11,911,509.84		623,016.96	11,288,492.88	Other income	
Special subsidies for energy conservation and industrial circular economy.	16,602,008.14		489,225.48	16,112,782.66	Other income	
Funds and supporting subsidies for provincial key enterprise research institutes.	10,000,000.00		1,000,000.08	8,999,999.92	Other income	
Fiscal subsidies for industrial transformation and upgrading.	8,997,305.50	13,992,202.57	905,733.96	22,083,774.11	Other income	

Items	Opening balance of deferred income	Increase	Amortization	Closing balance of deferred income	Amortization presented under	Remarks
Supporting funds for enterprises	7,217,380.26	20,797,814.04	1,310,582.50	26,704,611.80	Other income	
Central special funds for prevention and control of air pollution	1,680,000.00		180,000.00	1,500,000.00	Other income	
Subsidies for the integration of informatization and industrialization.	877,746.65		66,206.04	811,540.61	Other income	
Subsidies for collaborative innovation projects of high-quality development industries	12,000,000.00	3,000,000.00	666,666.67	14,333,333.33	Other income	
Subsidies for industrial productive investment projects	9,816,659.63		1,000,002.06	8,816,657.57	Other income	
Subsidies for industrial Internet innovation and development projects. . .	3,560,000.00	4,585,000.00	271,500.00	7,873,500.00	Other income	
Subsidies for innovation-driven funds projects. . .		18,798,809.95	985,363.10	17,813,446.85	Other income	
Subsidies for investment in fixed assets		3,130,120.12	159,992.65	2,970,127.47	Other income	
Special subsidies for technological transformation		30,772,314.06	1,531,308.43	29,241,005.63	Other income	
Industrial chain collaborative innovation project		13,500,000.00		13,500,000.00	Other income	
Other piecemeal subsidies.	1,800,247.69		444,940.84	1,355,306.85	Other income	
Subtotal	410,427,636.67	125,923,237.72	18,563,114.54	517,787,759.85		

b. Government grants related to income and used to compensate future relevant costs, expenses or losses

Items	Opening balance of deferred income	Increase	Amounts carried forward	Closing balance of deferred income	Amounts carried forward presented under	Remarks
Other piecemeal subsidies	45,675.22	1,490,739.47	451,061.62	1,085,353.07	Other income	
Subtotal	45,675.22	1,490,739.47	451,061.62	1,085,353.07		

c. Government grants related to income and used to compensate incurred relevant costs, expenses or losses

Items	Amounts	Presented under	Remarks
Fiscal incentives	25,073,557.42	Other income	
Supporting funds for foreign economy and trade	3,245,000.00	Other income	
Refund of social insurance premiums	594,842.97	Other income	
Subsidies for stabilizing employment of enterprises	549,206.30	Other income	
Piecemeal subsidies	1,732,319.01	Other income	
Subtotal	31,194,925.70		

d. Fiscal interest subvention

Interest subvention directly obtained

Items	Opening balance of deferred income	Increase	Amounts carried forward	Closing balance of deferred income	Amounts carried forward presented under	Remarks
Fiscal interest subvention		2,466,800.00	2,466,800.00		Financial expenses	
Subtotal		2,466,800.00	2,466,800.00			

2) Year 2020

a. Government grants related to assets

Items	Opening balance of deferred income	Increase	Amortization	Closing balance of deferred income	Amortization presented under	Remarks
Subsidies for infrastructure construction	126,815,236.69	123,316,040.00	3,390,895.92	246,740,380.77	Other income	
Fiscal subsidies for technological transformation	19,940,207.64	562,600.00	963,060.84	19,539,746.80	Other income	
Fiscal subsidies for technological innovation	18,996,068.57	15,561,600.00	1,089,511.04	33,468,157.53	Other income	
Subsidies for life cycle green manufacturing projects	13,500,000.00	13,500,000.00	783,506.14	26,216,493.86	Other income	
Optimization and improvement of wastewater treatment and comprehensive utilization of renewable resources project	12,207,500.01		295,990.17	11,911,509.84	Other income	
Special subsidies for energy conservation and industrial circular economy	12,351,862.84	4,687,200.00	437,054.70	16,602,008.14	Other income	
Funds and supporting subsidies for provincial key enterprise research institutes	10,000,000.00			10,000,000.00	Other income	
Fiscal subsidies for industrial transformation and upgrading	9,550,267.78		552,962.28	8,997,305.50	Other income	
Supporting funds for enterprises	7,662,599.46		445,219.20	7,217,380.26	Other income	
Central special funds for prevention and control of air pollution	1,800,000.00		120,000.00	1,680,000.00	Other income	
Subsidies for the integration of informatization and industrialization	943,952.52		66,205.87	877,746.65	Other income	
Subsidies for collaborative innovation projects of high-quality development industries		12,000,000.00		12,000,000.00	Other income	

Items	Opening balance of deferred income	Increase	Amortization	Closing balance of deferred income	Amortization presented under	Remarks
Subsidies for industrial productive investment projects.		10,000,000.00	183,340.37	9,816,659.63	Other income	
Subsidies for industrial Internet innovation and development projects. . .		3,560,000.00		3,560,000.00	Other income	
Other piecemeal subsidies.	2,030,809.47	235,400.00	465,961.78	1,800,247.69	Other income	
Subtotal	235,798,504.98	183,422,840.00	8,793,708.31	410,427,636.67		

b. Government grants related to income and used to compensate future relevant costs, expenses or losses

Items	Opening balance of deferred income	Increase	Amounts carried forward	Closing balance of deferred income	Amounts carried forward presented under	Remarks
Major special funds for technologies for control and treatment of water pollution	2,294,042.62	605,700.00	2,899,742.62		Other income	
Other piecemeal subsidies.	720,675.22		675,000.00	45,675.22	Other income	
Subtotal	3,014,717.84	605,700.00	3,574,742.62	45,675.22		

c. Government grants related to income and used to compensate incurred relevant costs, expenses or losses

Items	Amounts	Presented under	Remarks
Fiscal incentives	38,940,737.98	Other income	
Refund of social insurance premiums	4,402,803.98	Other income	
Supporting funds for foreign economy and trade	1,886,000.00	Other income	
Subsidies for substituting training with work.	1,630,500.00	Other income	
Piecemeal subsidies	3,260,670.30	Other income	
Subtotal.	50,120,712.26		

d. Fiscal interest subvention

Interest subvention directly obtained

Items	Opening balance of deferred income	Increase	Amounts carried forward	Closing balance of deferred income	Amounts carried forward presented under	Remarks
Fiscal interest subvention		800,000.00	800,000.00		Financial expenses	
Subtotal		800,000.00	800,000.00			

3) Year 2019

a. Government grants related to assets

Items	Opening balance of deferred income	Increase	Amortization	Closing balance of deferred income	Amortization presented under	Remarks
Subsidies for infrastructure construction	61,751,092.56	68,455,040.00	3,390,895.87	126,815,236.69	Other income	
Fiscal subsidies for technological transformation	15,844,811.56	4,953,100.00	857,703.92	19,940,207.64	Other income	
Subsidies for life cycle green manufacturing projects	13,500,000.00			13,500,000.00	Other income	
Fiscal subsidies for industrial transformation and upgrading.	10,103,230.01		552,962.23	9,550,267.78	Other income	
Funds and supporting subsidies for provincial key enterprise research institutes.	10,000,000.00			10,000,000.00	Other income	
Fiscal subsidies for technological innovation.	8,760,979.72	10,797,500.00	562,411.15	18,996,068.57	Other income	
Special subsidies for energy conservation and industrial circular economy.	8,639,605.40	3,992,800.00	280,542.56	12,351,862.84	Other income	
Supporting funds for enterprises.	8,107,818.61		445,219.15	7,662,599.46	Other income	
Optimization and improvement of wastewater treatment and comprehensive utilization of renewable resources project	7,021,433.34	5,382,400.00	196,333.33	12,207,500.01	Other income	
Central special funds for prevention and control of air pollution	1,800,000.00			1,800,000.00	Other income	
Subsidies for the integration of informatization and industrialization.	1,010,158.52		66,206.00	943,952.52	Other income	
Other piecemeal subsidies.	2,577,710.81		546,901.34	2,030,809.47	Other income	
Subtotal	149,116,840.53	93,580,840.00	6,899,175.55	235,798,504.98		

b. Government grants related to income and used to compensate future relevant costs, expenses or losses

Items	Opening balance of deferred income	Increase	Amounts carried forward	Closing balance of deferred income	Amounts carried forward presented under	Remarks
Major special funds for technologies for control and treatment of water pollution	1,746,600.00	1,327,700.00	780,257.38	2,294,042.62	Other income	
Other piecemeal subsidies.	295,675.22	1,800,000.00	1,375,000.00	720,675.22	Other income	
Subtotal	2,042,275.22	3,127,700.00	2,155,257.38	3,014,717.84		

- c. Government grants related to income and used to compensate incurred relevant costs, expenses or losses

Items	Amounts	Presented under	Remarks
Supporting funds for foreign economy and trade	1,832,800.00	Other income	
Refund of social insurance premiums	14,996,974.82	Other income	
Fiscal incentives	59,517,000.00	Other income	
Piecemeal subsidies	595,622.77	Other income	
Subtotal	76,942,397.59		

(2) Government grants included into profit or loss

Items	Year 2021	Year 2020	Year 2019
Government grants included into profit or loss	52,675,901.86	63,289,163.19	85,996,830.52

4. Hedging

Fair value hedge

Year 2021

Financial information related to fair value hedge is as follows:

Hedged items	Hedging instruments	Closing fair value of hedging instruments	Profit or loss of hedging instruments in the current period	Profit or loss of hedged items due to hedging risks
Nickel-containing inventories	Nickel futures contracts	-104,821,710.25	-145,408,856.97	94,763,288.25
Subtotal		-104,821,710.25	-145,408,856.97	94,763,288.25

The Company holds nickel-containing inventories and adopts nickel futures contracts of Shanghai Futures Exchange or London Metal Exchange to hedge risks from changes in price of nickel metal, which is accounted for with hedge accounting methods. Due to the rise in price of nickel futures, the Company suffers losses on sales of nickel futures contracts. As of the end of 2021, losses on changes in fair value of nickel futures contracts totaled 104,821,710.25 yuan. In 2021, losses on nickel futures contracts totaled 145,408,856.97 yuan, gains on nickel-containing inventories due to hedging risks totaled 94,763,288.25 yuan, and losses on ineffective hedge totaled 50,645,568.72 yuan.

VI. Changes in the consolidation scope

(I) Business combination not under common control

1. Business combination not under common control during the reporting period

(1) Basic information

Acquirees	Equity acquisition date	Equity acquisition cost	Proportion of equity acquired (%)	Equity acquisition method
1) Year 2021 Tianjin B&M	July 2021	1,351,200,000.00	38.62	Acquisition
2) Year 2019 Huahai New Energy	May 2019	772,741,367.00	99.01	Cash acquisition
Huachuang International . .	April 2019	6.73	100.00	Cash acquisition

(Continued)

Acquirees	Acquisition date	Determine basis for acquisition date	Acquiree's income from acquisition date to period end	Acquiree's net profit from acquisition date to period end
1) Year 2021 Tianjin B&M	July 2021	Please refer to other remarks for details.	4,976,281,811.27	174,617,170.20
2) Year 2019 Huahai New Energy	May 2019	The Company has paid consideration for equity transfer, completed hand-over procedures of relevant property rights, and obtained the actual control over it.	331,263,322.55	14,490,337.35
Huachuang International . . .	April 2019			

(2) Other remarks

Pursuant to the 15th meeting of the fifth session of the Board of Directors and the second extraordinary shareholders' meeting of 2021, the Company acquired 38.62% equity of Tianjin B&M from Hangzhou Hongyuan Equity Investment Partnership (LP) (the "Hangzhou Hongyuan") at the consideration of 1,351.20 million yuan, and Huayou Holding entrusted voting right over 26.40% equity of Tianjin B&M to the Company. As of July 31, 2021, the Company has paid the consideration, completed hand-over procedures of relevant property rights, and obtained the actual control over it. Therefore, Tianjin B&M was brought into the consolidation scope since then.

2. Combination costs and goodwill

(1) Details

Items	Year 2021	
	Tianjin B&M	
Combination costs	1,351,200,000.00	
Cash	1,351,200,000.00	
Original investment costs		
Total combination costs	1,351,200,000.00	
Less: Share of fair value of net identifiable assets acquired	1,015,195,405.89	
Less: Others		
Goodwill/Balance of fair value of net identified assets acquired after deducting combination costs	336,004,594.11	

(Continued)

Items	Year 2019	
	Huahai New Energy	Huachuang International
Combination costs	778,741,367.00	6.73
Cash	772,741,367.00	6.73
Original investment costs	6,000,000.00	
Total combination costs	778,741,367.00	6.73
Less: Share of fair value of net identifiable assets acquired	649,271,051.22	6.73
Less: Others [Note]	34,334,116.92	
Goodwill/Balance of fair value of net identified assets acquired after deducting combination costs	95,136,198.86	

Note: The Company's subsidiary New Energy Quzhou formerly held 0.99% equity of Huahai New Energy with the investment cost of 6,000,000.00 yuan. Pursuant to the Equity Acquisition Agreement entered into between New Energy Quzhou and Huahai Industry Investment dated May 30, 2019, New Energy Quzhou acquired 99.01% equity of Huahai New Energy from Huahai Industry Investment at the consolidation of 772,741,367.00 yuan. The difference between the total investment cost of 778,741,367.00 yuan and share of fair value of net identifiable assets at the acquisition date totaled 129,470,315.78 yuan. As Huahai Industry Investment is an associate of the Company's subsidiary Huayou Quzhou, the equity transfer mentioned above resulted in an income of 34,334,116.92 yuan of Huayou Quzhou's investment in Huahai Industry Investment under equity method. Therefore, the goodwill of 95,136,198.86 yuan was recognized after the above difference was offset by such income in the preparation of the consolidated financial statements.

3. Acquisition-date identifiable assets and liabilities of acquirees

(1) Details

Items	Year 2021	
	Tianjin B&M	
	Acquisition-date fair value	Acquisition-date carrying amount
Assets	8,630,095,474.18	8,108,037,013.73
Liabilities	6,001,245,083.11	6,001,245,083.11
Net assets	2,628,850,391.07	2,106,791,930.62
Less: Non-controlling interest	1,613,654,985.18	1,293,202,273.18
Net assets acquired	1,015,195,405.89	813,589,657.44

(Continued)

Items	Year 2019			
	Huahai New Energy		Huachuang International	
	Acquisition-date fair value	Acquisition-date carrying amount	Acquisition-date fair value	Acquisition-date carrying amount
Assets	1,106,209,875.97	1,089,109,593.48	1,089,935.91	1,056,455.00
Liabilities	456,938,824.75	456,938,824.75	1,089,929.18	1,089,929.18
Net assets	649,271,051.22	632,170,768.73	6.73	-33,474.18
Less: Non-controlling interest				
Net assets acquired . .	649,271,051.22	632,170,768.73	6.73	-33,474.18

(2) Fair value determination method on identifiable assets and liabilities

1) Tianjin B&M

Pursuant to “Assets Appraisal Report on Zhejiang Huayou Cobalt Co., Ltd.’s Proposed Cash Acquisition of Partial Equity of Tianjin B&M Science and Technology Co., Ltd.” (Zhe Lian Ping Bao Zi [2021] No. 189) issued by Zhejiang China United Yaoxin Assets Appraisal Co., Ltd., which took December 31, 2020 as the evaluation benchmark date, and in combination with appropriate reviews, the Company recognized the fair value of identifiable assets of Tianjin B&M in amount of 8,630,095,474.18 yuan and the fair value of identifiable liabilities in amount of 6,001,245,083.11 yuan on the acquisition date.

2) Huahai New Energy

Pursuant to “Assets Appraisal Report on Huayou New Energy Technology (Quzhou) Co., Ltd.’ Proposed Acquisition of 99.01% Equity of Quzhou Huahai New Energy Technology Co., Ltd. held by Quzhou Huahai New Energy Technology Industry Equity Investment Partnership (LP)” (Zhong Lian Ping Bao Zi [2019] No. 797) issued by China United Assets Appraisal Group Co., Ltd., which took December 31, 2018 as the as the evaluation benchmark date, and in combination with appropriate reviews, the Company recognized the fair value of identifiable assets of Huahai New Energy in amount of 1,106,209,875.97 yuan and the fair value of identifiable liabilities in amount of 456,938,824.75 yuan on the acquisition date.

(3) Huachuang International

The Company recognized the fair value of identifiable assets and liabilities of Huachuang International on the acquisition date according to the consideration of equity and the status of assets and liabilities of the acquiree.

(II) Disposal of subsidiaries

One-time disposal involving loss of control over a subsidiary

1. Details

Subsidiaries	Equity disposal consideration	Equity disposal proportion (%)	Equity disposal method	Loss of control date	Determination basis for loss of control date	Difference between disposal consideration and net assets attributable to the Company at the consolidated financial statements level
1) Year 2021						
TMC Company	153,760,408.68	70.00	Transfer	March 2021	Please refer to other remarks for details.	17,647,751.61
SESA Company	75,339,504.00	100.00	Transfer	October 2021	Please refer to other remarks for details.	80,748,498.37
2) Year 2019						
Huawei Nickel Industry	6.89	100.00	Transfer	June 2019	Please refer to other remarks for details.	3,672,807.50

(Continued)

Subsidiaries	Proportion of remaining equity at the loss of control date	Carrying amount of remaining equity at the loss of control date	Fair value of remaining equity at the loss of control date	Gains/Losses on remeasurement of remaining equity	Determination method and major assumption on fair value of remaining equity at the loss of control date	Changes in other comprehensive income/equity related to former subsidiary's equity investment transferred to investment income
1) Year 2021						
TMC Company						4,471,296.04
SESA Company						-2,220,745.48
2) Year 2019						
Huawei Nickel Industry						1,417,581.90

2. Other remarks

(1) TMC Company

The Company's subsidiary Huayou International Holdings holds 70.00% equity of TMC Company. Pursuant to the Equity Acquisition Agreement entered into between Huayou International Holdings and Asteran Investment Co., Ltd. in December 2020, Huayou International Holdings transferred 70.00% equity of TMC Company to Asteran Investment Co., Ltd. at the consideration of KRW 26,950,000,000.00 (equivalent to 153,760,408.68 yuan). As of April 6, 2021, Huayou International Holdings has received the payments mentioned above. As Huayou International Holdings has lost actual control over TMC Company, TMC Company was excluded from the consolidation scope since then.

(2) SESA Company

The Company's subsidiary Huayou Mining Hong Kong holds 100.00% equity of SESA Company. Pursuant to the Debt and Equity Transfer Agreement entered into among Huayou Mining Hong Kong, Shengwei Zhiyuan International Limited, Chengxin Lithium Group Co., Ltd. and SESA Company in September 2021, Huayou Mining Hong Kong transferred 100.00% equity and debts of SESA Company to Shengwei Zhiyuan International Limited at the consideration of USD11,680,000.00 (equivalent to 75,339,504.00 yuan) and USD25,988,868.91 (equivalent to 167,636,001.13 yuan) respectively. As of October 22, 2021, Huayou Mining Hong Kong has received the payments mentioned above. As Huayou Mining Hong Kong has lost actual control over SESA Company, SESA Company was excluded from the consolidation scope since then.

(3) Huawei Nickel Industry

The Company's subsidiary Huayou Mining Hong Kong formerly holds 100.00% equity of Huawei Nickel Industry. Pursuant to the Equity Acquisition Agreement entered into between Huayou Mining Hong Kong and Huayou Holding Hong Kong dated April 18, 2019, Huayou Mining Hong Kong transferred 100.00% equity of Huawei Nickel Industry to Huayou Holding Hong Kong at the consideration of USD1.00. As of June 15, 2019, Huayou Mining Hong Kong has received the payments mentioned above. As Huayou Mining Hong Kong has lost actual control over Huawei Nickel Industry, Huawei Nickel Industry was excluded from the consolidation scope since then.

(III) Changes in the consolidation scope due to other reasons

1. *Entities brought into the consolidation scope*

Entities	Equity acquisition method	Equity acquisition date	Capital contribution	Capital contribution proportion (%)
(1) Year 2021				
Guangxi Huayou Engineering	Establishment	February 2021	50,000,000.00	100.00
Huashan Indonesia	Establishment	March 2021	USD173,469.40	68.00
Tongxiang Huashan	Establishment	March 2021	Not yet paid	51.00
Huatuo Cobalt	Establishment	April 2021	Not yet paid	100.00
Guangxi B&M	Establishment	April 2021	100,000,000.00	100.00
Guangxi Huayou New Material	Establishment	April 2021	Not yet paid	100.00
Guangxi Huayou New Energy	Establishment	April 2021	Not yet paid	100.00
Tongxiang Huawang	Establishment	May 2021	18,040,800.00	68.00
Tongxiang Hualing	Establishment	May 2021	18,040,800.00	68.00
Beijing Huashan	Establishment	May 2021	Not yet paid	51.00
Wenzhou Huashan	Establishment	May 2021	25,500,000.00	51.00
Wenzhou Huake	Establishment	May 2021	Not yet paid	70.00
Tongxiang Huaxun	Establishment	May 2021	Not yet paid	70.00
Zhejiang B&M	Establishment	November 2021	5,000,000.00	100.00
Guangxi Huayou Import & Export	Establishment	December 2021	USD20,000,000.00	100.00
(2) Year 2020				
Jiangsu Huayou	Establishment	April 2020	20,000,000.00	45.00 [Note]
Huake Indonesia	Establishment	July 2020	USD13,434,400.00	70.00
Tongxiang Hua'ang	Establishment	August 2020	1,140,000.00	57.00
Beijing Youhong	Establishment	August 2020	1,710,000.00	57.00
Tongxiang Huashi	Establishment	November 2020	Not yet paid	
(3) Year 2019				
Youqing Trading		May 2019	2,850,000.00	57.00
Huayuan Copper	Establishment	August 2019	USD17,000,000.00	100.00

Note: As of the end of 2020, the Company has held 45% equity of Jiangsu Huayou. As the Company appoints several members to participate in the Board of Directors of Jiangsu Huayou and can control it, Jiangsu Huayou was brought into the consolidation scope.

2. *Entities excluded from the consolidation scope*

Entities	Equity disposal method	Equity disposal date	Disposal-date net assets	Net profit from the period beginning to the disposal date
Year 2020				
International Recycling Holding.	Cancellation	August 2020		
International Resource Recycling	Cancellation	August 2020		
Huayou Power.	Cancellation	November 2020	3,701,301.12	-12,242,823.85

VII. Interest in other entities

(I) Interest in significant subsidiaries

1. Significant subsidiaries

(1) Basis information

Subsidiaries	Main operating place	Place of registration	Business nature	Holding proportion (%)		Acquisition method
				Direct	Direct	
Huayou Quzhou.	Quzhou City, Zhejiang Province	Quzhou City, Zhejiang Province	Manufacturing	100.00		Establishment
Huayou Hong Kong	Hong Kong, China	Hong Kong, China	Trade and wholesale	100.00		Establishment
CDM Company.	The Democratic Republic of the Congo	The Democratic Republic of the Congo	Manufacturing	100.00		Establishment
MIKAS Company.	The Democratic Republic of the Congo	The Democratic Republic of the Congo	Mine development and sales of mineral products	100.00		Business combination not under common control
New Energy Quzhou	Quzhou City, Zhejiang Province	Quzhou City, Zhejiang Province	Manufacturing	100.00		Establishment
Huahai New Energy	Quzhou City, Zhejiang Province	Quzhou City, Zhejiang Province	Technology promotion and application service industry	100.00		Business combination not under common control
Resource Recycling.	Quzhou City, Zhejiang Province	Quzhou City, Zhejiang Province	Technology promotion and application service industry	100.00		Establishment
Huajin Company	Quzhou City, Zhejiang Province	Quzhou City, Zhejiang Province	Chemical raw materials and chemical products manufacturing	51.00		Establishment
HUAYOU-POSCO	Tongxiang City, Zhejiang Province	Tongxiang City, Zhejiang Province	Wholesale	60.00		Establishment

Subsidiaries	Main operating place	Place of registration	Business nature	Holding proportion (%)		Acquisition method
				Direct	Direct	
Huayue Company	Republic of Indonesia	Republic of Indonesia	Manufacturing	57.00		Establishment
Tianjin B&M	Tianjin City	Tianjin City	Manufacturing	36.86		Business combination not under common control
Chengdu B&M	Jintang County, Sichuan Province	Jintang County, Sichuan Province	Manufacturing	[Note]		Business combination not under common control

Note: The Company's subsidiary Tianjin B&M holds 100% equity of Chengdu B&M.

(2) Other remarks

Please refer to section VI (I) 1 of notes to the financial statements for details on remarks on inconsistency between holding proportion and voting right proportion in Tianjin B&M.

2. Significant not wholly-owned subsidiaries

Subsidiaries	Holding proportion of non-controlling shareholders	Non-controlling shareholders' profit or loss		
		Year 2021	Year 2020	Year 2019
Huayou Quzhou [Note]	15.68			30,549,663.23
Huajin Company	49.00	-40,866,496.79	-732,502.33	751,037.91
HUAYOU-POSCO	40.00	-8,542,058.63	-1,549,932.80	177,534.06
Huayue Company	43.00	-21,763,072.75	-19,388,954.46	-2,497,180.56
Tianjin B&M	63.14	110,249,956.79		

(Continued)

Subsidiaries	Dividend declared to non-controlling shareholders		
	Year 2021	Year 2020	Year 2019
Huayou Quzhou [Note]			
Huajin Company			
HUAYOU-POSCO			
Huayue Company			
Tianjin B&M			

(Continued)

Subsidiaries	Closing balance of non-controlling interest		
	December 31, 2021	December 31, 2020	December 31, 2019
Huayou Quzhou [Note]			550,457,703.28
Huajin Company	493,980,755.21	534,847,252.00	404,038,458.08
HUAYOU-POSCO	124,293,344.11	132,835,402.74	134,385,335.54
Huayue Company	700,280,194.03	722,043,266.78	143,096,181.31
Tianjin B&M	1,546,300,807.05		

Note: The Company privately issued shares to Cinda Xinneng to acquire 15.68% equity of Huayou Quzhou on February 13, 2020. The Company has held 100% equity of the subsidiary Huayou Quzhou since then. Therefore, Huayou Quzhou was no longer the significant not wholly-owned subsidiary of the Company in 2020.

3. Main financial information of significant not wholly-owned subsidiaries

(1) Assets and liabilities

Subsidiaries	December 31, 2021					
	Current assets	Non-current assets	Total assets	Current liabilities	Non-current liabilities	Total liabilities
Huayou Quzhou						
Huajin Company . . .	1,174,398,796.08	1,036,281,736.03	2,210,680,532.11	1,138,249,969.78	64,306,572.11	1,202,556,541.89
HUAYOU-POSCO . . .	134,676,295.67	548,447,419.35	683,123,715.02	295,417,498.35	76,972,856.40	372,390,354.75
Huayue Company . . .	1,255,265,126.21	6,607,150,094.34	7,862,415,220.55	2,443,041,860.94	3,828,586,905.89	6,271,628,766.83
Tianjin B&M	6,551,133,327.66	3,139,229,284.99	9,690,362,612.65	6,372,398,036.48	868,887,233.57	7,241,285,270.05

(Continued)

Subsidiaries	December 31, 2020					
	Current assets	Non-current assets	Total assets	Current liabilities	Non-current liabilities	Total liabilities
Huayou Quzhou						
Huajin Company . . .	250,345,966.86	1,123,879,775.14	1,374,225,742.00	195,428,555.96	87,272,181.96	282,700,737.92
HUAYOU-POSCO . . .	62,927,050.69	370,765,558.31	433,692,609.00	58,648,120.84	42,955,981.31	101,604,102.15
Huayue Company . . .	152,439,915.96	2,812,798,504.46	2,965,238,420.42	1,286,068,032.54		1,286,068,032.54
Tianjin B&M						

(Continued)

Subsidiaries	December 31, 2019					
	Current assets	Non-current assets	Total assets	Current liabilities	Non-current liabilities	Total liabilities
Huayou Quzhou . . .	4,965,049,071.19	3,018,433,601.86	7,983,482,673.05	3,937,277,597.20	534,586,549.44	4,471,864,146.64
Huajin Company . . .	360,555,194.55	790,259,982.91	1,150,815,177.46	261,190,151.46	65,056,744.20	326,246,895.66
HUAYOU-POSCO . . .	127,459,576.83	270,847,095.05	398,306,671.88	62,343,333.04		62,343,333.04
Huayue Company . . .	636,356,907.10	550,860,541.20	1,187,217,448.30	846,512,254.71		846,512,254.71
Tianjin B&M						

(2) Profit or loss and cash flows

Subsidiaries	Year 2021				Year 2020			
	Operating revenue	Net profit	Total comprehensive income	Cash flows from operating activities	Operating revenue	Net profit	Total comprehensive income	Cash flows from operating activities
Huayou Quzhou								
Huajin Company	989,905,933.53	-83,401,013.86	-83,401,013.86	-284,012,691.88		-1,494,902.72	-1,494,902.72	66,635,330.34
HUAYOU-POSCO	176,934,342.73	-21,355,146.58	-21,355,146.58	-23,683,436.74	12,773,439.43	-3,874,831.99	-3,874,831.99	31,686,362.92
Huayue Company		-50,611,797.09	-50,611,797.09	-410,974,026.53		-45,232,666.63	-171,917,885.90	39,039,952.27
Tianjin B&M	4,976,281,811.27	174,617,170.20	174,617,170.20	615,613,264.86				

(Continued)

Subsidiaries	Year 2019			
	Operating revenue	Net profit	Total comprehensive income	Cash flows from operating activities
Huayou Quzhou	6,193,905,865.22	194,890,111.86	194,890,111.86	-1,254,088,953.90
Huajin Company		1,532,730.43	1,532,730.43	-18,618,266.54
HUAYOU-POSCO	6,366,549.96	443,835.16	443,835.16	-4,110,139.00
Huayue Company		-5,945,667.99	-724,141.09	-39,902,859.48
Tianjin B&M				

(II) Transactions resulting in changes in subsidiaries' equity but without losing control

1. Changes in subsidiaries' equity

Subsidiaries	Date of change	Holding proportion	Holding proportion
		before change	after change
		(%)	(%)
(1) Year 2021			
Jiangsu Huayou	February 2021	45.00	35.00
Beijing Huashan	August 2021	68.00	51.00
Tongxiang Huashan	August 2021	68.00	51.00
Wenzhou Huashan	August 2021	68.00	51.00
SESA Company	October 2021	70.00	100.00
Tianjin B&M	November 2021	38.62	36.86
(2) Year 2020			
Huayou Quzhou	January 2020	84.32	100.00
Huayue Company	April 2020	58.00	57.00
Huayou America	October 2020	60.00	100.00
Jiangsu Huayou	December 2020	40.00	45.00
(3) Year 2019			
Huayou New Energy	May 2019	100.00	40.23

2. Effect of transactions on non-controlling interest and equity attributable to parent company

Items	Year 2021					
	Jiangsu Huayou	Tianjin B&M	SESA Company	Beijing Huashan	Tongxiang Huashan	Wenzhou Huashan
Acquisition costs/Disposal considerations						
Cash	5,000,000.00					8,500,000.00
Fair value of non-cash assets			6,003,668.72			
Total acquisition costs/disposal considerations	5,000,000.00		6,003,668.72			8,500,000.00
Less: Share in subsidiaries' net assets based on acquired/disposed net assets proportion	5,621,489.48	14,475,007.81	-2,084,672.13	17,566.99	-313,655.60	8,497,699.40
Balance	-621,489.48	-14,475,007.81	8,088,340.85	-17,566.99	313,655.60	2,300.60
Including: Capital reserve adjusted	-621,489.48	-14,475,007.81	-8,088,340.85	-17,566.99	313,655.60	2,300.60

(Continued)

Items	Year 2020			
	Huayou Quzhou	Huayou America	Huayue Company	Jiangsu Huayou
Acquisition costs/Disposal considerations				
Cash		4,516,723.64		
Fair value of non-cash assets	805,000,000.00			
Total acquisition costs/disposal considerations	805,000,000.00	4,516,723.64		
Less: Share in subsidiaries' net assets based on acquired/disposed net assets proportion	551,801,103.71	4,839,533.00	-63,268.42	290,736.62
Balance	253,198,896.29	-322,809.36	63,268.42	-290,736.62
Including: Capital reserve adjusted	-253,198,896.29	322,809.36	63,268.42	290,736.62

(Continued)

Items	Year 2019
	Huayou New Energy [Note]
Acquisition costs/Disposal considerations	1,040,000,000.00
Cash	1,040,000,000.00
Fair value of non-cash assets	
Total acquisition costs/disposal considerations	1,040,000,000.00
Less: Share in subsidiaries' net assets based on acquired/disposed net assets proportion	1,031,486,813.24
Balance	8,513,186.76
Including: Capital reserve adjusted	8,513,186.76

Note: Pursuant to the Capital and Share Increase Agreement entered into among the Company's subsidiary Huayou New Energy, CITIC Securities Investment Co., Ltd., the Company and other companies, CITIC Securities Investment Co., Ltd. and other companies increased investment of 1.04 billion yuan in Huayou New Energy and acquired 59.77% equity of Huayou New Energy. As the consideration mentioned above is more than proportionate share in net assets of Huayou New Energy, capital premiums were increased by 8,513,186.76 yuan. the Company holds 40.23% equity of Huayou New Energy after the capital increase. As the Company appoints several members to participate in the Board of Directors of Huayou New Energy and can control it, Huayou New Energy was still brought into the consolidation scope.

(III) Interest in joint ventures or associates

1. Significant joint ventures or associates

(1) Basic information

Joint ventures or associates	Main operating place	Place of registration	Business nature	Holding proportion (%)		Accounting treatment on investments in joint ventures or associates
				Direct	Indirect	
Puhua Company	Tongxiang City, Zhejiang Province	Tongxiang City, Zhejiang Province	Non-metallic mineral products industry	40.00		Equity method
AVZ Company [Note 1]	The Democratic Republic of the Congo	Mt Hawthorn Wa Australia	Mineral exploration	6.29		Equity method
NZC Company [Note 2]	The Democratic Republic of the Congo	Daglish Wa Australia	Mineral exploration and development	14.65		Equity method
Leyou Company	Wuxi City, Jiangsu Province	Wuxi City, Jiangsu Province	Non-metallic mineral products industry	49.00		Equity method
Veinstone	Hong Kong, China	Hong Kong, China	Services	24.00		Equity method
IWIP Company	Halmahera Island, North Maluku, Indonesia	Jakarta, Indonesia	Industrial park	24.00		Equity method
Newstride Technology . .	Hong Kong, China	Hong Kong, China	Industrial investments	30.00		Equity method
Indonesia Huafei	Halmahera Island, North Maluku, Indonesia	Jakarta, Indonesia	Manufacturing	20.00		Equity method
Quzhou Anyou	Quzhou City, Zhejiang Province	Quzhou City, Zhejiang Province	Capital market services	49.92		Equity method
Shenzhen Phoenicia . . .	Shenzhen City, Guangdong Province	Shenzhen City, Guangdong Province	Information and technology services	15.00		Equity method
PHC Company	Gwangyang, South Jeolla Province, South Korea	Gwangyang, South Jeolla Province, South Korea	Manufacturing	35.00		Equity method

Note 1: At the end of each reporting period, the Company respectively holds 9.47%, 7.55% and 6.29% equity of AVZ Company.

Note 2: The Company has disposed of NZC Company in 2020.

(2) Basis for significant influence over an entity on which the Company held less than 20% voting rights or insignificant influence over an entity on which the Company held more than 20% voting rights

- 1) As the Company is a significant shareholder of AVZ Company with holding proportion over 5% and has the right to participate in the decision-making process on financial and operational policies, it has a significant influence over AVZ Company.
- 2) The Company's subsidiary Jiangsu Huayou holds 15.00% equity of Shenzhen Phoenicia. As the Company appoints a director to the entity, it has a significant influence over Shenzhen Phoenicia.

2. Main financial information of significant associates

Items	December 31, 2021/Year 2021				
	Puhua Company	AVZ Company	Leyou Company	Veinstone	IWIP Company
Current assets	180,376,975.87	13,190,291.33	1,349,441,545.94	346,155,154.10	467,286,398.51
Non-current assets	241,100,288.23	422,019,243.86	1,828,688,229.44	913,093,812.51	1,197,197,874.35
Total assets	421,477,264.10	435,209,535.19	3,178,129,775.38	1,259,248,966.61	1,664,484,272.86
Current liabilities	92,248,109.67	33,527,969.51	859,955,297.74	622,165,218.05	183,480,229.38
Non-current liabilities	9,177,777.77		494,580.87	6,193.61	760,706,932.95
Total liabilities	101,425,887.44	33,527,969.51	860,449,878.61	622,171,411.66	944,187,162.33
Non-controlling interest		10,527,756.00		55,827,131.80	
Equity attributable to					
parent company.	320,051,376.66	391,153,809.68	2,317,679,896.77	581,250,423.15	720,297,110.53
Net profit	23,289,501.89	-26,029,626.70	338,293,317.11	280,948,075.39	238,764,283.80
Total comprehensive income.	23,289,501.89	-10,362,981.04	338,293,317.11	252,944,337.21	225,049,185.28

(Continued)

Items	December 31, 2021/Year 2021				
	Newstride Technology	Indonesia Huafei	Quzhou Anyou	Shenzhen Phoenicia	PHC Company
Current assets	1,663,322,305.16	1,308,094,593.20	1,321,148,991.17	14,681,046.32	472,395,289.13
Non-current assets	5,050,358,536.95	321,314,748.21	486,653,466.66	28,649,951.08	213,106,234.98
Total assets	6,713,680,842.11	1,629,409,341.41	1,807,802,457.83	43,330,997.40	685,501,524.11
Current liabilities	873,597,926.83	1,620,565,317.26	608,842,566.19	10,933,087.19	21,530,470.73
Non-current liabilities	1,182,752,698.94			1,246,332.30	31,892,212.11
Total liabilities	2,056,350,625.77	1,620,565,317.26	608,842,566.19	12,179,419.49	53,422,682.84
Non-controlling interest	1,169,305,792.07		99,899.27		
Equity attributable to					
parent company.	3,488,024,424.27	8,844,024.15	1,198,859,992.37	31,151,577.91	632,078,841.27
Net profit	2,243,124,765.42	-7,178,244.80	-1,140,007.63	-541,244.31	-8,033,798.73
Total comprehensive income.	1,932,741,642.99	-7,352,225.85	-1,140,007.63	-541,244.31	-47,328,596.42

(Continued)

December 31, 2020/Year 2020						
Items	Puhua Company	AVZ Company	Leyou Company	Veinstone	IWIP Company	Newstride Technology [Note]
Current assets	211,186,394.64	73,229,321.87	742,451,264.74	221,003,338.43	410,679,031.99	951,873,169.87
Non-current assets	243,341,697.44	431,947,994.81	1,819,686,969.97	1,016,487,485.00	997,537,668.90	5,131,870,036.12
Total assets	454,528,092.08	505,177,316.68	2,562,138,234.71	1,237,490,823.43	1,408,216,700.89	6,083,743,205.99
Current liabilities	147,921,772.87	2,524,056.69	577,683,298.89	868,922,073.42	539,306,038.64	395,684,466.82
Non-current liabilities	9,844,444.44	29,336,270.48	4,023,255.38		451,066,337.00	945,763,456.05
Total liabilities.	157,766,217.31	31,860,327.17	581,706,554.27	868,922,073.42	990,372,375.64	1,341,447,922.87
Non-controlling interest		58,640,817.88		32,172,046.07		1,110,378,753.74
Equity attributable to parent company	296,761,874.77	414,676,171.63	1,980,431,680.44	336,396,703.94	417,844,325.25	3,631,916,529.38
Net profit	-6,642,552.05	-25,418,904.39	3,852,078.28	31,384,335.65	113,139,577.47	112,915,459.63
Total comprehensive income	-6,642,552.05	-27,994,053.13	3,852,078.28	13,975,341.24	88,254,764.35	-140,031,799.82

(Continued)

December 31, 2019/Year 2019						
Items	Puhua Company	AVZ Company	NZC Company	Leyou Company	Veinstone	IWIP Company
Current assets	68,411,419.89	43,136,897.56	11,891,584.86	942,966,209.62	91,211,689.50	106,118,415.46
Non-current assets	245,330,440.29	363,735,106.39	232,145,788.11	1,158,343,636.23	825,590,541.12	726,388,250.43
Total assets	313,741,860.18	406,872,003.95	244,037,372.97	2,101,309,845.85	916,802,230.62	832,506,665.89
Current liabilities	10,337,433.36	11,657,248.13	30,590,376.66	326,397,009.29	43,228,890.09	165,757,358.99
Non-current liabilities		24,435,731.66	12,074,760.65		666,256,930.23	337,159,746.00
Total liabilities.	10,337,433.36	36,092,979.79	42,665,137.31	326,397,009.29	709,485,820.32	502,917,104.99
Non-controlling interest		56,051,881.66	13,087,954.38		33,407,147.60	
Equity attributable to parent company	303,404,426.82	314,727,142.50	188,284,281.28	1,774,912,836.56	173,909,262.70	329,589,560.90
Net profit	-5,432,533.20	-24,896,114.98	-21,703,907.28	3,611,086.37	-204,921.25	9,681,088.46
Total comprehensive income	-5,432,533.20	-25,826,352.90	-22,103,417.89	3,611,086.37	18,262.90	13,911,230.90

Note: As the Company acquired equity of Newstride Technology in April 2020, the income statement of 2020 only presents data from May to December in 2020.

3. Aggregated financial information of insignificant joint ventures and associates

Items	Year 2021	Year 2020	Year 2019
Joint ventures			
Total carrying amount of investments	6,305,745.11	16,643,371.77	18,717,782.00
Proportionate shares in the following items			
Net profit	1,909,052.45	-1,777,015.09	1,766,107.01
Other comprehensive income	466,612.36	-297,395.15	-225,969.60
Total comprehensive income	2,375,664.81	-2,074,410.24	1,540,137.41
Associates			
Total carrying amount of investments	9,997,989.00	20,652,416.02	23,689,731.79
Proportionate shares in the following items			
Net profit	-4,172,213.39	-249,104.77	26,663,410.42
Other comprehensive income	3,530,244.43	-233,129.59	4,098,603.12
Total comprehensive income	-641,968.96	-482,234.36	30,762,013.54

VIII. Risks related to financial instruments

In risk management, the Company aims to seek the appropriate balance between the risks and benefits from its use of financial instruments and to mitigate the adverse effects that the risks of financial instruments have on the Company's financial performance, so as to maximize the profits of shareholders and other equity investors. Based on such risk management objectives, the Company's risk management policies are established to identify and analyze the risks faced by the Company, to set appropriate risk limits and controls, and to monitor risks and adherence to limits on a timely and reliable basis.

The Company has exposure to the following risks from its use of financial instruments, which mainly include: credit risk, liquidity risk, and market risk. The Management has deliberated and approved policies concerning such risks, and details are:

(I) Credit risk

Credit risk is the risk that one party to a financial instrument will cause a financial loss for the other party by failing to discharge an obligation.

1. Credit risk management practice

(1) Evaluation method of credit risk

At each balance sheet date, the Company assesses whether the credit risk on a financial instrument has increased significantly since initial recognition. When assessing whether the credit risk has increased significantly since initial recognition, the Company takes into account reasonable and supportable information, which is available without undue cost or effort, including qualitative and quantitative analysis based on historical data, external credit risk rating, and forward-looking information. The Company determines the changes in default risk of financial instruments during the estimated lifetime through comparison of the default risk at the balance sheet date and the initial recognition date, on an individual basis or a collective basis.

The Company considers the credit risk on a financial instrument has increased significantly when one or more of the following qualitative and quantitative standards are met:

- 1) Quantitative standard mainly relates to the scenario in which, at the balance sheet date, the probability of default in the remaining lifetime has risen by more than a certain percentage compared with the initial recognition;
- 2) Qualitative standard mainly relates to significant adverse changes in the debtor's operation or financial position, present or expected changes in technology, market, economy or legal environment that will have significant adverse impact on the debtor's repayment ability;

(2) Definition of default and credit-impaired assets

A financial instrument is defined as defaulted when one or more following events have occurred, of which the standard is consistent with that for credit-impairment:

- 1) significant financial difficulty of the debtor;
- 2) a breach of binding clause of contract;
- 3) it is very likely that the debtor will enter bankruptcy or other financial reorganization;
- 4) the creditor of the debtor, for economic or contractual reasons relating to the debtor's financial difficulty, having granted to the debtor a concession(s) that the creditor would not otherwise consider.

2. *Measurement of expected credit losses*

The key factors in the measurement of expected credit loss include the probability of default, loss rate of default, and exposure to default risk. The Company develops a model of the probability of default, loss rate of default, and exposure to default risk on the basis of quantitative analysis of historical data (e.g. counterparty rating, guarantee measures and collateral type, payment method, etc.) and forward-looking information.

3. *Please refer to section V (I) 3, 4 and 6 of notes to the financial statements for details on the reconciliation table of opening balance and closing balance of provision for losses of financial instrument.*

4. *Exposure to credit risk and concentration of credit risk*

The Company's credit risk is primarily attributable to cash and bank balances and receivables. In order to control such risks, the Company has taken the following measures:

(1) Cash and bank balances

The Company deposits its bank balances and other cash and bank balances in financial institutions with relatively high credit levels, hence, its credit risk is relatively low.

(2) Receivables

The Company performs credit assessment on customers using credit settlement on a continuous basis. The Company selects credible and well-reputed customers based on credit assessment result, and conducts ongoing monitoring on balance of receivables, to avoid significant risks in bad debts.

As the Company only conducts business with credible and well-reputed third parties, collateral is not required from customers. The Company manages credit risk aggregated by customers. As of December 31, 2021, the Company has certain concentration of credit risk, and 46.94% (December 31, 2020: 44.45%; December 31, 2019: 48.51%) of the total accounts receivable was due from the five largest customers of the Company. The Company held no collateral or other credit enhancement on balance of receivables.

The maximum amount of exposure to credit risk of the Company is the carrying amount of each financial asset at the balance sheet.

(II) Liquidity risk

Liquidity risk is the risk that the Company may encounter deficiency of funds in meeting obligations associated with cash or other financial assets settlement, which is possibly attributable to failure in selling financial assets at fair value on a timely basis, or failure in collecting liabilities from counterparties of contracts, or early redemption of debts, or failure in achieving estimated cash flows.

In order to control such risk, the Company comprehensively utilizes financing tools such as notes settlement, bank borrowings, etc. and adopts long-term and short-term financing methods to optimize financing structures, and finally maintains a balance between financing sustainability and flexibility. The Company has obtained credit limit from several commercial banks to meet working capital requirements and expenditures.

Financial liabilities classified based on remaining time period till maturity

Items	December 31, 2021				
	Carrying amount	Contract amount not yet discounted	Within 1 year	1-3 years	Over 3 years
Bank borrowings	16,733,807,805.10	17,821,904,609.25	10,423,301,820.84	3,194,046,807.07	4,204,555,981.34
Held-for-trading financial liabilities	360,612.00	360,612.00	360,612.00		
Derivative financial liabilities	104,821,710.25	104,821,710.25	104,821,710.25		
Notes payable	4,810,797,623.12	4,810,797,623.12	4,810,797,623.12		
Accounts payable	6,233,172,410.76	6,233,172,410.76	6,233,172,410.76		
Non-current liabilities due within one year	724,190,670.66	793,561,947.97	793,561,947.97		
Other payables	1,434,593,185.87	1,467,133,622.51	1,467,133,622.51		
Lease liabilities	32,788,255.14	34,289,431.32		32,418,807.58	1,870,623.74
Long-term payables	1,061,226,074.03	1,108,713,679.68	22,217,543.26	1,086,496,136.42	
Subtotal	31,135,758,346.93	32,374,755,646.86	23,855,367,290.71	4,312,961,751.07	4,206,426,605.08

(Continued)

Items	December 31, 2020				
	Carrying amount	Contract amount not yet discounted	Within 1 year	1-3 years	Over 3 years
Bank borrowings	8,187,526,708.07	8,405,638,949.21	6,916,489,967.66	1,406,622,844.94	82,526,136.61
Held-for-trading financial liabilities					
Derivative financial liabilities					
Notes payable	1,075,293,852.29	1,075,293,852.29	1,075,293,852.29		
Accounts payable	1,789,437,189.88	1,789,437,189.88	1,789,437,189.88		
Non-current liabilities due within one year	544,924,517.43	572,271,864.86	572,271,864.86		
Other payables	769,409,094.84	773,585,066.95	773,585,066.95		
Lease liabilities					
Long-term payables	588,947,562.96	644,266,329.94	21,690,035.06	622,576,294.88	
Subtotal	12,955,538,925.47	13,260,493,253.13	11,148,767,976.70	2,029,199,139.82	82,526,136.61

(Continued)

Items	December 31, 2019				
	Carrying amount	Contract amount not yet discounted	Within 1 year	1-3 years	Over 3 years
Bank borrowings	7,199,673,581.93	7,437,272,035.49	6,314,681,930.62	1,044,061,646.54	78,528,458.33
Held-for-trading financial liabilities					
Derivative financial liabilities					
Notes payable	1,711,684,225.38	1,711,684,225.38	1,711,684,225.38		
Accounts payable	1,457,846,829.84	1,457,846,829.84	1,457,846,829.84		
Non-current liabilities due within one year	979,473,205.49	1,005,366,088.38	1,005,366,088.38		
Other payables	620,793,231.40	621,280,141.40	621,280,141.40		
Lease liabilities					
Long-term payables	539,591,156.88	593,997,653.46	41,878,942.52	471,245,966.60	80,872,744.34
Subtotal	12,509,062,230.92	12,827,446,973.95	11,152,738,158.14	1,515,307,613.14	159,401,202.67

(III) Market risk

Market risk is the risk that the Company may encounter fluctuation in fair value or future cash flows of financial instruments due to changes in market price. Market risk mainly includes interest risk and foreign currency risk.

1. Interest risk

Interest risk is the risk that an enterprise may encounter fluctuation in fair value or future cash flows of financial instruments due to changes in market interest. The Company's fair value interest risks arise from fixed-rate financial instruments, while the cash flow interest risks arise from floating-rate financial instruments. The Company determines the proportion of fixed-rate financial instruments and floating-rate financial instruments based on the market environment, and maintains a proper financial instruments portfolio through regular review and monitoring. The Company's interest risk in cash flows relates mainly to bank borrowings with floating interest rate.

As of December 31, 2021, balance of borrowings with interest accrued at floating interest rate totaled 9,219,358,463.54 yuan (December 31, 2020: 2,631,416,737.86 yuan; December 31, 2019: 4,327,497,447.29 yuan). If interest rates had been 50 basis points higher/lower and all other variables were held constant, financial effect on the Company would be a/an decrease/increase of 46.10 million yuan (December 31, 2020: a/an decrease/increase of 13.16 million yuan; December 31, 2019: a/an decrease/increase of 21.64 million yuan) in equity, a/an decrease/increase of 46.10 million yuan (2020: a/an decrease/increase of 13.16 million yuan; 2019: a/an decrease/increase of 21.64 million yuan) in net profit.

2. Foreign currency risk

Foreign currency risk is the risk arising from changes in fair value or future cash flows of financial instrument resulted from changes in exchange rate. The Company's foreign currency risk relates mainly to foreign currency monetary assets and liabilities. When short-term imbalance occurred to foreign currency assets and liabilities, the Company may trade foreign currency at market exchange rate when necessary, in order to maintain the net risk exposure within an acceptable level.

Please refer to section V (IV) 2 of notes to the financial statements for details on foreign currency financial assets and liabilities at the end of the period.

IX. Fair value disclosure

(I) Details of fair value of assets and liabilities at fair value

1. December 31, 2021

Items	Fair value			Total
	Level 1 fair value measurement	Level 2 fair value measurement	Level 3 fair value measurement	
Recurring fair value measurement				
1. Held-for-trading financial assets and other non-current financial assets	9,834,660.26		329,491,891.27	339,326,551.53
Equity instrument investments			6,573,600.00	6,573,600.00
Derivative financial assets . . .	9,834,660.26		22,678,702.23	32,513,362.49
Short-term bank financial products			300,239,589.04	300,239,589.04
2. Receivables financing			1,319,017,850.74	1,319,017,850.74
3. Other equity instrument investments			34,552,445.81	34,552,445.81
4. Inventories—Hedged items . .	162,139,915.55			162,139,915.55
Total assets at recurring fair value measurement	171,974,575.81		1,683,062,187.82	1,855,036,763.63
5. Held-for-trading liabilities . . .			360,612.00	360,612.00
Derivative financial liabilities . .			360,612.00	360,612.00
6. Derivative financial liabilities	104,821,710.25			104,821,710.25
Total liabilities at recurring fair value measurement	104,821,710.25		360,612.00	105,182,322.25

2. December 31, 2020

Items	Fair value			Total
	Level 1 fair value measurement	Level 2 fair value measurement	Level 3 fair value measurement	
Recurring fair value measurement				
1. Held-for-trading financial assets and other non-current financial assets	30,317,180.12		6,573,600.00	36,890,780.12
Equity instrument investments			6,573,600.00	6,573,600.00
Derivative financial assets . . .	30,317,180.12			30,317,180.12
2. Receivables financing			762,316,046.62	762,316,046.62
3. Other equity instrument investments			5,653,575.00	5,653,575.00
Total assets at recurring fair value measurement	30,317,180.12		774,543,221.62	804,860,401.74
4. Held-for-trading liabilities . . .	15,684,302.17		8,254,968.09	23,939,270.26
Derivative financial liabilities . .	15,684,302.17		8,254,968.09	23,939,270.26
Total liabilities at recurring fair value measurement	15,684,302.17		8,254,968.09	23,939,270.26

3. December 31, 2019

Items	Fair value as at the balance sheet date			Total
	Level 1 fair value measurement	Level 2 fair value measurement	Level 3 fair value measurement	
Recurring fair value measurement				
1. Held-for-trading financial assets and other non-current financial assets	83,508,361.74		26,608,961.11	110,117,322.85
Equity instrument investments	6,573,600.00		6,573,600.00	
Derivative financial assets . . .	83,508,361.74			83,508,361.74
Short-term bank financial products			20,035,361.11	20,035,361.11
2. Receivables financing			460,537,826.62	460,537,826.62
3. Other equity instrument investments			21,930,092.52	21,930,092.52
Total assets at recurring fair value measurement	83,508,361.74		509,076,880.25	592,585,241.99

(II) Basis for determining level 1 fair value at recurring and non-recurring fair measurement

Items	Fair value as at December 31, 2021	Fair value as at December 31, 2020	Fair value as at December 31, 2019	Valuation technique
Held-for-trading financial assets—Derivative financial assets	9,834,660.26	30,317,180.12	83,508,361.74	The fair value of futures contracts is determined based on the settlement price determined in futures transactions and the fair value of hedged items is determined based on settlement price in spot market.
Inventories—Hedged items	162,139,915.55			
Derivative financial liabilities . . .	104,821,710.25			
Held-for-trading financial liabilities—Derivative financial liabilities		15,684,302.17		

(III) Qualitative and quantitative information of valuation technique(s) and key input(s) for level 3 fair value at recurring and non-recurring fair measurement

Items	Fair value as at December 31, 2021	Fair value as at December 31, 2020	Fair value as at December 31, 2019	Valuation technique
Held-for-trading financial assets—Derivative financial assets	22,678,702.23			The fair value of forward foreign exchange settlement contracts = the amount of foreign currencies sold * (forward exchange rate agreed in contracts – closing forward exchange rate of forward foreign exchange settlement contracts with similar delivery date)/(1+discount rate * number of days from balance sheet date to delivery date/360);
Held-for-trading financial liabilities—Derivative financial liabilities . . .	360,612.00	8,254,968.09		
				The fair value of foreign exchange swap transactions = the amount of currencies bought agreed in contracts * (forward exchange rate agreed in contracts – closing forward exchange rate of swap transactions with similar delivery date) * exchange rate of foreign currencies to RMB at the balance sheet date/(1+ discount rate * number of days from balance sheet date to delivery date/360);
				The fair value of foreign exchange futures contracts with sale transactions = premium income agreed in contracts * number of days from transaction date to balance sheet date/number of days from transaction date to delivery date.
Receivables financing . .	1,319,017,850.74	762,316,046.62	460,537,826.62	The carrying amount is used as the fair value as there is little difference between them.
Equity instrument investments	6,573,600.00	6,573,600.00	6,573,600.00	The carrying amount is used as the fair value as there is little difference between them.
Short-term bank financial products	300,239,589.04		20,035,361.11	The principal plus expected income as of the end of the period.

Items	Fair value as at December 31, 2021	Fair value as at December 31, 2020	Fair value as at December 31, 2019	Valuation technique
Other equity instrument investments	34,552,445.81	5,653,575.00	21,930,092.52	For Sinuo Industrial, the valuation value is used as the fair value; for Beijing Saidemei, Inner Mongolia Sinuo and HANAQ Company, the carrying amount is used as the fair value as there is little difference between them; for Optimal Mining Limited, the carrying amount is used as the fair value as there is little difference between them, and investments in the entity are expected to be irrecoverable due to its significant adverse changes in operations in 2020.

X. Related party relationships and transactions

(I) Related party relationships

1. Parent company

Parent company	Place of registration	Business nature	Registered capital	Holding proportion over the Company (%)	Voting right proportion over the Company (%)
Huayou Holding	Tongxiang City, Zhejiang Province	Business services	70,092,039.94	16.40	16.40

From Year 2019 to Year 2020, the Company has no parent company and its ultimate controllers were Xie Weitong and Chen Xuehua. In 2021, Great Mountain Company decreased its holding proportion over the Company, and Huayou Holding, Great Mountain Company, Xie Weitong and Chen Xuehua signed the “Confirmation Letter Regarding the Termination of the Agreement on Concerted Action” on August 25, 2021. Since then, the Company’s holding shareholder was changed to Huayou Holding, and its actual controller was changed to Chen Xuehua.

2. Please refer to section I and VII of notes to financial statements for details on the Company’s subsidiaries.

3. Joint ventures and associates of the Company

Please refer to section VII of notes to financial statements for details on the Company's significant joint ventures and associates. Details of other joint ventures or associates carrying out related party transactions with the Company in the current period or in preceding period but with balance in the current period are as follows:

Joint ventures or associates	Relationships with the Company
Minfu Woneng	Associate
Huahai Industry Investment	Associate
Huahai New Energy	The former subsidiary of the associate Huahai Industry Investment, and was brought into the consolidation scope of the Company's subsidiary New Energy Quzhou since June 2019.
HANAQ Company	The former associate. As the Company's holding proportion was decreased to 8% in October 2021, it was no longer the related party of the Company since November 2021.
Puhua Company	Associate
Shenzhen Phoenicia.	Associate
Leyou Company	Associate
TMR Company	The joint venture of the Company's former subsidiary TMC Company. As the Company transferred out 70.00% equity of TMC Company on April 6, 2021, it was no longer the related party of the Company since then.
Zhejiang Times Li-ion Material Co., Ltd. (the "Times Li-ion Company")	The subsidiary of the associate Quzhou Anyou.
PHC Company	Associate
Indonesia Huafei.	Associate
Newstride Technology	Associate
IWIP Company	Associate
Veinstone	Associate
PT. Weda Bay Energi (the "WBE Company").	The subsidiary of the associate Veinstone.
Indonesia Huatuo	Associate

4. Other related parties of the Company

Related parties	Relationships with the Company
Huayou Holding	The Company's former second largest shareholder, becoming holding shareholder since September 2021. Please refer to section X (I) 1 of notes to the financial statements for details.
Great Mountain Company	The Company's former first largest shareholder and was no longer the related party of the Company since September 2021. Please refer to section X (I) 1 of notes to the financial statements for details.
Xie Weitong	One of the Company's former ultimate controller and was no longer the related party of the Company since September 2021. Please refer to section X (I) 1 of notes to the financial statements for details.
Qiu Jinhua	Close family member of the ultimate controller Chen Xuehua.
Huaxing Trading	The Company's key management personnel serves as its Director.

Related parties	Relationships with the Company
Tongling Huachuang New Material Co., Ltd. (the “Tongling Huachuang”) . . .	Under the control of Huayou Holding.
Huayou Holding Hong Kong . . .	Under the control of Huayou Holding.
Guangxi Huayou Construction Operation Management Co., Ltd. (the “Guangxi Huayou Construction”)	Under the control of Huayou Holding.
Zhejiang Beilinde Enterprise Management Co., Ltd. (the “Beilinde Company”)	Associate of Huayou Holding.
Inner Mongolia Shengfan Technology New Energy Co., Ltd. (the “Inner Mongolia Shengfan”)	Under the control of Huayou Holding.
TMA Company	Under the control of the ultimate controller Chen Xuehua.
Sichuan Hope Ready New Energy Materials Co., Ltd. (the “Sichuan Hope Ready”) . . .	Associates of Huayou Holding. Inner Mongolia Hope Ready is a subsidiary of Sichuan Hope Ready. The following related party transactions are presented separately by transaction entity.
Inner Mongolia Hope Ready New Energy Materials Co., Ltd. (the “Inner Mongolia Hope Ready”)	
Hangzhou Hongyuan	Associate of Huayou Holding.
Tianjin B&M	The former subsidiaries of Hangzhou Hongyuan and were brought into the consolidation scope of the Company since August 2021. Chengdu B&M is a subsidiary of Tianjin B&M. The following related party transactions are transactions before the consolidation date and presented separately by transaction entity.
Chengdu B&M	
Cinda Xinneng	It formerly holds 15.68% equity of the Company’s subsidiary Huayou Quzhou. The Company privately issued RMB ordinary shares (A shares) of 34,110,169 shares to Cinda Xinneng to acquire the equity mentioned above on February 13, 2020. Therefore, it was no longer the related party of the Company since then.
New Minerals	The Company proposed to acquire 51% equity of Lucky Resources Holdings Company Limited, the parent company of New Minerals. Pursuant to the proposal approved by the 26th meeting of the fourth session of the Board of Directors dated August 15, 2019, the above-mentioned acquisition was terminated. Therefore, it was no longer the related party of the Company since then.

(II) Related party transactions

1. Purchase and sale of goods, rendering and receiving of services

(1) Purchase of goods and receiving of services

Related parties	Content of transaction	Year 2021	Year 2020	Year 2019
TMR Company	Goods			633,543.92
IWIP Company	Service fees	33,786,115.14	119,587.55	235,679.72
Minfu Woneng.	Service fees		1,022,400.00	1,693,274.32
Tongling Huachuang.	Service fees		99,357.22	282,870.10

<u>Related parties</u>	<u>Content of transaction</u>	<u>Year 2021</u>	<u>Year 2020</u>	<u>Year 2019</u>
	Goods			75,158.62
Huahai New Energy	Processing expenses, service fees			9,427,451.09
	Goods			564,109.51
HANAQ Company	Service fees	3,252,026.40	3,947,564.50	4,186,418.50
Huayou Holding.	Service fees			3,998,296.24
Puhua Company.	Goods	1,766,778.22	1,044,261.01	
	Service fees	1,632,299.41		
Shenzhen Phoenicia	Goods	1,447,251.33		
Leyou Company.	Goods	25,664,986.02		
Tianjin B&M.	Goods	1,511,492.04		
Chengdu B&M	Goods	2,175,297.35		
WBE Company	Energy costs	221,460.99		
Total		71,457,706.90	6,333,170.28	21,096,802.02

(2) Sale of goods and rendering of services

<u>Related parties</u>	<u>Content of transaction</u>	<u>Year 2021</u>	<u>Year 2020</u>	<u>Year 2019</u>
TMR Company	Goods, service fees	1,280,810.94	10,879,627.73	28,135,310.32
Puhua Company.	Goods	315,258,019.90	187,066,022.20	14,946,777.01
	Energy cost	17,017,125.08	11,090,958.79	5,936,571.68
	Service fees, user charges	13,156,275.79	164,151.68	583,776.32
Leyou Company.	Goods	97,391,874.00	531,864.00	
	Service fees	371,555.90	301,602.18	432,544.53
Beilinde Company	Service fees	1,764.00		
Times Li-ion Company . . .	Service fees	219,663.98		
Huahai New Energy	Goods			26,621,383.06
	Service fees, processing expenses			17,269,442.55
Huayou Holding.	Goods	26,048.36	19,204.75	
	Service fees	166,055.36	1,512,372.74	2,510,404.80
Tongling Huachuang.	Goods			55,800.00
PHC Company.	Service fees	500,603.57		
Tianjin B&M.	Goods	488,530,518.73	650,447,114.64	593,313,224.19
			[Note]	
	Processing expenses	394,435.21	4,086,187.46	
Chengdu B&M	Goods	567,405,882.31	167,424,383.88	189,059,359.71
	Processing expenses	331,224.87	2,345,614.00	
New Minerals	Service fees			2,415.10
Inner Mongolia Shengfan. .	Goods	56,584,070.81	7,283,185.82	
Guangxi Huayou Construction.	Service fees	154,755.50	24,761.15	
Indonesia Huafei	Goods	59,848,405.47		
	Service fees	1,277,120.00		
Tongling Huachuang.	Goods	1,911.51		
Total		1,619,918,121.29	1,043,177,051.02	878,867,009.27

Note: Sales revenue calculated using net method was not deducted.

2. Related party leases

Lessees	Types of assets leased	Lease income recognized in 2021	Lease income recognized in 2020	Lease income recognized in 2019
Huayou Holding . . .	Buildings and structures	45,871.56	45,871.56	22,935.78
TMR Company	Buildings and structures	131,389.45	340,491.67	547,895.05
Puhua Company . . .	Buildings and structures and tangible assets	66,396.63		
Total		177,261.01	386,363.23	637,227.46

3. Related party guarantees

(1) The Company and its subsidiaries as guarantors

Guaranteed parties	Guarantors	Lenders	Content guaranteed	Amount guaranteed	Commencement date	Maturity date	Whether the guarantee is mature
Indonesia Huafei . .	Huayou International Cobalt	Eve Asia Co., Limited	Call loans	329,078,298.79 (USD51,614,457.83)	8/10/2021- 11/25/2021	8/9/2028- 11/24/2028	No
Total				329,078,298.79			

(2) The Company and its subsidiaries as guaranteed parties

Guarantors	Guaranteed parties	Lending financial institutions	Content guaranteed	Amount guaranteed	Commencement date	Maturity date	Whether the guarantee is mature
Chen Xuehua, Huayou Holding . . .	The Company	Industrial and Commercial Bank of China Tongxiang Sub-branch	Borrowings	944,000,000.00 (A total of 39 transactions)	5/1/2019- 12/31/2021	1/5/2022- 6/28/2024	No
Chen Xuehua . .	The Company	Huaxia Bank Co., Ltd. Jiaxing Tongxiang Sub-branch	Borrowings	225,696,250.00 (Including: USD12,500,000.00) (A total of 2 transactions)	9/17/2021- 11/24/2021	7/20/2022	No
Chen Xuehua, Qiu Jinhua . .	The Company	Bank of Communications Co., Ltd. Jiaxing Tongxiang Sub-branch	Borrowings Bank acceptance	200,000,000.00 (A total of 4 transactions) 39,900,000.00 (A total of 2 transactions)	4/15/2021- 9/17/2021 6/9/2021	3/17/2022- 3/23/2022 3/23/2022	No No
Chen Xuehua, Qiu Jinhua . .	The Company	China Minsheng Banking Corp., Ltd. Qingchun Sub-branch	Borrowings	468,085,739.02 (USD26,363,495.62) (A total of 6 transactions)	9/2/2021- 12/17/2021	3/2/2022- 12/10/2022	No

Guarantors	Guaranteed parties	Lending financial institutions	Content guaranteed	Amount guaranteed	Commencement date	Maturity date	Whether the guarantee is mature
Chen Xuehua, Qiu Jinhua . .	The Company	Shanghai Pudong Development Bank Co., Ltd. Jiaxing Tongxiang Sub-branch	Borrowings	389,000,000.00 (A total of 5 transactions)	1/4/2021-12/16/2021	1/3/2022-12/16/2022	No
Chen Xuehua, Qiu Jinhua . .	The Company	Bank of China Limited Tongxiang Sub-branch	Borrowings	136,000,000.00 (A total of 2 transactions)	10/20/2021-11/18/2021	5/17/2022-10/19/2022	No
			Letters of credit	340,332,967.25 (USD53,379,702.19) (A total of 6 transactions)	8/12/2021-11/24/2021	4/13/2022-8/28/2022	No
			Letters of guarantee	114,762,600.00 (USD18,000,000.00) (A total of 1 transaction)	1/20/2021	3/31/2022	No
Chen Xuehua, Qiu Jinhua . .	The Company	China Minsheng Banking Corp., Ltd. Hangzhou Branch	Letters of credit	103,401,406.83 (USD16,218,047.72) (A total of 1 transaction)	12/20/2021	3/2/2022	No
Chen Xuehua . .	The Company	China Guangfa Bank Co., Ltd. Jiaxing Branch	Borrowings	200,000,000.00 (A total of 1 transaction)	12/14/2021	12/13/2022	No
Chen Xuehua, Qiu Jinhua . .	The Company	China Citic Bank Co., Ltd. Jiaxing Tongxiang Sub-branch	Guaranteed discounting of trade acceptance Letters of credit	165,000,000.00 (A total of 3 transactions) 59,679,490.56 (USD9,360,460.90) (A total of 2 transactions)	7/29/2021-10/27/2021 8/9/2021-8/27/2021	7/28/2022-10/26/2022 3/11/2022-4/28/2022	No No
Chen Xuehua, Huayou Holding . . .	The Company	China Everbright Bank Co., Ltd. Shaoxing Branch	Letters of credit	84,743,874.66 (USD13,291,697.33) (A total of 2 transactions)	6/11/2021-6/23/2021	2/10/2022-2/20/2022	No
Chen Xuehua, Qiu Jinhua . .	Huayou Hong Kong	China Development Bank Zhejiang Branch	Borrowings	255,028,000.00 (USD40,000,000.00) (A total of 1 transaction)	11/19/2019	11/18/2022	No
Chen Xuehua, Qiu Jinhua . .	CDM Company	China Citic Bank Co., Ltd. Jiaxing Tongxiang Sub-branch	Borrowings	123,453,250.00 (USD19,363,089.54) (A total of 1 transaction)	6/19/2020	6/18/2022-6/18/2023	No
Chen Xuehua, Qiu Jinhua, Huayou Holding . . .	Huayou Quzhou	Bank of Communications Co., Ltd. Quzhou Branch	Borrowings	400,000,000.00 (A total of 4 transactions)	8/20/2021-9/9/2021	3/15/2022-3/17/2022	No
Chen Xuehua, Qiu Jinhua . .			Guaranteed discounting of trade acceptance Letters of credit	39,000,000.00 (A total of 2 transactions) 116,443,832.97 (Including: USD5,234,536.28) (A total of 9 transactions)	2/23/2021-6/25/2021 3/3/2021-9/18/2021	2/22/2022-3/30/2022 8/31/2021-11/25/2022	No No

Guarantors	Guaranteed parties	Lending financial institutions	Content guaranteed	Amount guaranteed	Commencement date	Maturity date	Whether the guarantee is mature
Chen Xuehua . .	Huayou Quzhou	The Export-Import Bank of China Zhejiang Branch	Borrowings	331,779,400.00 (Including: USD4,000,000.00) (A total of 6 transactions)	4/22/2021-8/31/2021	7/21/2022-11/18/2022	No
			Letters of credit	179,725,399.54 (USD28,189,124.26) (A total of 3 transactions)	11/16/2021-12/23/2021	3/30/2022-4/30/2022	No
Chen Xuehua, Qiu Jinhua . .	Huayou Quzhou	Shanghai Pudong Development Bank Co., Ltd. Quzhou Sub-branch	Borrowings	217,000,000.00 (A total of 2 transactions)	5/14/2021-12/10/2021	1/23/2022-12/9/2022	No
			Letters of credit	83,000,000.00 (A total of 1 transaction)	12/9/2021	12/2/2022	No
Chen Xuehua . .	Huayou Quzhou	Bank of Beijing Co., Ltd. Quzhou Branch	Borrowings	180,000,000.00 (A total of 2 transactions)	9/8/2021-9/9/2021	5/21/2022-10/8/2022	No
			Letters of credit	286,000,000.00 (A total of 3 transactions)	3/8/2021-6/25/2021	3/31/2022-7/20/2022	No
Chen Xuehua, Qiu Jinhua . .	Huayou Quzhou	Bank of China Limited Quzhou Kecheng Sub-branch	Borrowings	292,211,886.63 (Including: EUR 721,897.95) (A total of 5 transactions)	7/27/2021-12/2/2021	1/18/2022-11/23/2022	No
			Letters of credit	88,609,192.65 (Including: EUR977,213.57; USD12,770,409.90) (A total of 5 transactions)	7/23/2021-12/16/2021	1/19/2022-8/25/2022	No
Chen Xuehua, Qiu Jinhua . .	Huayou Quzhou	China Zheshang Bank Co., Ltd. Quzhou Branch	Borrowings	50,000,000.00 (A total of 1 transaction)	5/11/2021	4/12/2022	No
			Letters of credit	52,409,334.74 (USD8,220,169.51) (A total of 2 transactions)	12/24/2021	8/29/2022-11/30/2022	No
Chen Xuehua, Qiu Jinhua . .	Huayou Quzhou	China Citic Bank Co., Ltd. Quzhou Branch	Borrowings	64,000,000.00 (A total of 1 transaction)	8/25/2021	8/24/2022	No
			Letters of credit	29,166,753.36 (USD4,574,674.68) (A total of 1 transaction)	9/8/2021	5/14/2022	No
Chen Xuehua, Huayou Holding	Huayou Quzhou	Industrial and Commercial Bank of China Limited Quzhou Quhua Sub-branch	Borrowings	540,000,000.00 (A total of 42 transactions)	5/8/2021-10/18/2021	1/14/2022-10/18/2022	No

Guarantors	Guaranteed parties	Lending financial institutions	Content guaranteed	Amount guaranteed	Commencement date	Maturity date	Whether the guarantee is mature
Chen Xuehua, Huayou Holding . . .	Resource Recycling	Industrial and Commercial Bank of China Limited Quzhou Quhua Sub-branch	Borrowings	120,000,000.00 (A total of 5 transactions)	12/16/2018-1/7/2019	6/25/2022-12/25/2023	No
Chen Xuehua . .	Huayou Quzhou	China Guangfa Bank Co., Ltd. Jiaxing Branch	Letters of credit	83,865,850.09 (USD13,153,983.10) (A total of 3 transactions)	7/27/2021-12/29/2021	3/13/2022-5/30/2022	No
Chen Xuehua, Qiu Jinhua . .	New Energy Quzhou	Shanghai Pudong Development Bank Co., Ltd. Quzhou Sub-branch	Borrowings	120,000,000.00 (A total of 2 transactions)	1/15/2021-12/17/2021	1/14/2022-12/16/2022	No
Chen Xuehua, Qiu Jinhua . .	New Energy Quzhou	China Zheshang Bank Co., Ltd. Quzhou Branch	Borrowings	145,000,000.00 (A total of 2 transactions)	4/28/2021-5/11/2021	4/12/2022-4/18/2022	No
		New Energy Quzhou	Letters of credit	55,735,233.90 (USD8,741,821.90) (A total of 2 transactions)	4/27/2021-5/27/2021	2/10/2022-3/14/2022	No
Chen Xuehua, Qiu Jinhua . .	New Energy Quzhou	China Citic Bank Co., Ltd. Quzhou Branch	Letters of credit	77,057,068.01 (USD12,086,056.12) (A total of 3 transactions)	7/30/2021-12/7/2021	4/13/2022-9/6/2022	No
Chen Xuehua . .	New Energy Quzhou	Huaxia Bank Co., Ltd. Quzhou Branch	Borrowings	89,000,000.00 (A total of 2 transactions)	6/24/2021-6/29/2021	6/24/2022-6/29/2022	No
Chen Xuehua . .	New Energy Quzhou	Bank of Beijing Co., Ltd. Quzhou Branch	Letters of credit	97,999,227.02 (USD15,370,740.00) (A total of 1 transaction)	8/19/2021	6/19/2022	No
			Borrowings	63,000,000.00 (A total of 2 transactions)	7/29/2021	5/21/2022-8/28/2022	No
			Bank acceptance	246,127,418.01 (A total of 29 transactions)	6/25/2021-8/16/2021	2/16/2022-6/25/2022	No
Chen Xuehua . .	Huayue Company	The Export-Import Bank of China Zhejiang Branch	Borrowings	860,292,328.10 (USD134,933,000.00) (A total of 2 transactions)	10/27/2021-11/25/2021	3/21/2024-9/21/2028	No
		China Citic Bank Co., Ltd. Jiaxing Tongxiang Sub-branch		592,461,922.50 (USD92,925,000.00) (A total of 1 transaction)	10/28/2021	3/21/2024-9/21/2028	
		Agricultural Bank of China Limited Tongxiang Sub-branch		296,795,210.70 (USD46,551,000.00) (A total of 1 transaction)	10/29/2021	3/21/2024-9/21/2028	

Guarantors	Guaranteed parties	Lending financial institutions	Content guaranteed	Amount guaranteed	Commencement date	Maturity date	Whether the guarantee is mature
		China Minsheng Banking Corp., Ltd. Shanghai Pilot Free Trade Zone Branch		296,795,210.70 (USD46,551,000.00) (A total of 1 transaction)	10/29/2021	3/21/2024-9/21/2028	
		Ping An Bank Co., Ltd. Hangzhou Branch		150,466,520.00 (USD23,600,000.00) (A total of 1 transaction)	10/29/2021	3/21/2024-9/21/2028	
		China Everbright Bank Co., Ltd. Hangzhou Branch		60,186,608.00 (USD9,440,000.00) (A total of 1 transaction)	11/1/2021	3/21/2024-9/21/2028	
Chen Xuehua . .	Huayuan Copper	Kaifei Investment (Hong Kong) Co., Ltd.	Borrowings	318,785,000.00 (USD50,000,000.00) (A total of 1 transaction)	3/11/2020	3/11/2023	No
Huayou Holding . . .	The Company/ Chengdu B&M [Note]	Industrial and Commercial Bank of China Limited Jintang Sub-branch	Borrowings	94,000,000.00 (A total of 1 transaction)	12/15/2021	12/13/2022	No
		China Construction Bank Corporation Chengdu Jincheng Sub-branch	Borrowings	570,000,000.00 (A total of 5 transactions)	4/23/2021-12/5/2021	12/13/2022-6/28/2026	No
		Cinda Financial Leasing Co., Ltd.	Sale and leaseback	309,515,612.67 (A total of 2 transactions)	9/17/2021-10/18/2021	1/18/2022-10/18/2024	No
Total				11,445,512,587.91			

Note: The Company provides a guarantee for Chengdu B&M, and Huayou Holding provides a counter guarantee for the Company.

4. Call loans between related parties

(1) Year 2021

<u>Related parties</u>	<u>Opening balance</u>	<u>Increase</u>	<u>Decrease [Note]</u>	<u>Closing balance</u>
Call loans from related parties				
Xie Weitong	7,842,828.93		7,842,828.93	
TMA Company	65,249,000.00		65,249,000.00	
Huayou Holding		100,000,000.00	100,000,000.00	
HANAQ Company	5,387,943.50	14,606,013.46	19,993,956.96	
Newstride Technology	9,671,127.61	4,436,139.73		14,107,267.34
Subtotal	88,150,900.04	119,042,153.19	193,085,785.89	14,107,267.34
Call loans to related parties				
IWIP Company	181,261,722.00		4,144,776.00	177,116,946.00
Veinstone	106,799,563.20		2,442,105.60	104,357,457.60
Indonesia Huatuo	3,262,450.00		74,600.00	3,187,850.00
Subtotal	291,323,735.20		6,661,481.60	284,662,253.60

Note: It includes effect from changes in exchange rate in foreign currency translation.

In 2021, the Company should pay fund occupation fees of 260,050.05 yuan, 396,408.89 yuan and 199,375.00 yuan to Xie Weitong, TMA Company and Huayou Holding respectively. As of the end of 2021, the Company has paid interests mentioned above to related parties.

In 2021, the Company should collect fund occupation fees of 9,742,561.82 yuan from IWIP Company. As of the end of 2021, the Company has received interests mentioned above from related parties.

(2) Year 2020

<u>Related parties</u>	<u>Opening balance</u>	<u>Increase</u>	<u>Decrease [Note]</u>	<u>Closing balance</u>
Call loans from related parties				
Xie Weitong	8,385,284.55		542,455.62	7,842,828.93
TMA Company	69,762,000.00		4,513,000.00	65,249,000.00
Huayou Holding Hong Kong	71,614,041.58		71,614,041.58	
Huayou Holding	80,032,139.05	1,350,000,000.00	1,430,032,139.05	
HANAQ Company	3,587,566.66	4,761,363.14	2,960,986.30	5,387,943.50
Huaxing Trading	34,000,000.00		34,000,000.00	
Newstride Technology		9,671,127.61		9,671,127.61
Subtotal	267,381,031.84	1,364,432,490.75	1,543,662,622.55	88,150,900.04
Call loans to related parties				
IWIP Company	102,271,092.00	85,606,688.00	6,616,058.00	181,261,722.00
Veinstone	101,177,754.03	12,167,137.63	6,545,328.46	106,799,563.20
Indonesia Huatuo		3,262,450.00		3,262,450.00
Newstride Technology		74,383,860.00	74,383,860.00	
Subtotal	203,448,846.03	175,420,135.63	87,545,246.46	291,323,735.20

Note: It includes effect from changes in exchange rate in foreign currency translation.

In 2020, the Company should pay fund occupation fees of 369,770.83 yuan, 8,216.67 yuan, 310,484.93 yuan, 2,268,284.98 yuan and 2,985,430.60 yuan to Huayou Holding, Huaxing Trading, Xie Weitong, Huayou Holding Hong Kong and TMA Company respectively. As of the end of 2020, the Company still owed interests of 6,678,167.87 yuan to Xie Weitong and 3,555,798.61 yuan to TMA Company.

(3) Year 2019

<u>Related parties</u>	<u>Opening balance</u>	<u>Increase</u>	<u>Decrease</u>	<u>Closing balance</u>
Call loans from related parties . . .				
Xie Weitong	209,670,629.92	46,177,283.55	247,462,628.92	8,385,284.55
TMA Company		69,762,000.00		69,762,000.00
Huayou Holding Hong Kong		71,614,041.58		71,614,041.58
Huayou Holding		2,110,822,929.05	2,030,790,790.00	80,032,139.05
HANAQ Company	10,984,123.67	14,841,804.90	22,238,361.91	3,587,566.66
Huaxing Trading		34,000,000.00		34,000,000.00
Subtotal	220,654,753.59	2,347,218,059.08	2,300,491,780.83	267,381,031.84
Call loans to related parties				
Huahai Industry Investment		6,805,479.45	6,805,479.45	
IWIP Company		102,271,092.00		102,271,092.00
Veinstone		101,177,754.03		101,177,754.03
			28,247,588.43	
New Minerals	20,290,080.90	7,957,507.53	[Note]	
Subtotal	20,290,080.90	218,211,833.01	35,053,067.88	203,448,846.03

Note: As New Minerals was no longer a related party of the Company since August 15, 2019, other receivables of 28.25 million yuan from New Minerals as of August 2019 are presented there.

In 2019, the Company should pay fund occupation fees of 20,466,261.86 yuan, 879,183.32 yuan, 2,753,912.59 yuan, 1,131,217.13 yuan and 710,710.97 yuan to Huayou Holding, Huaxing Trading, Xie Weitong, Huayou Holding Hong Kong and TMA Company respectively. As of the end of 2019, the Company still owed interests of 599,462.50 yuan, 127,358.33 yuan, 6,819,205.29 yuan, 1,140,453.62 yuan and 716,513.99 yuan respectively. In 2019, the Company has collected fund occupation fees of 484,577.38 yuan from Huahai Industry Investment.

5. *Assets transfer and debt restructuring of the related parties*

<u>Related parties</u>	<u>Content of related party transactions</u>	<u>Year 2021</u>	<u>Year 2020</u>	<u>Year 2019</u>
IWIP Company	Acquisition of land use right	900,101.04		
Guangxi Huayou Construction	Acquisition of long-term assets	674,204.64		
Hangzhou Hongyuan	Acquisition of equity of Tianjin B&M [Note]	1,351,200,000.00		
Huahai New Energy	Sale of long-term assets			38,717.41
Huayou Holding	Sale of long-term assets		24,835.36	3,818.97
	Sales of equipment and materials		40,303,925.64	10,273,350.84

<u>Related parties</u>	<u>Content of related party transactions</u>	<u>Year 2021</u>	<u>Year 2020</u>	<u>Year 2019</u>
	Acquisition of 100% equity of Huachuang International			6.73
Huahai Industry Investment . . .	Acquisition of 99.01% equity of Huahai New Energy			772,741,367.00
Huayou Holding Hong Kong . .	Disposal of 100% equity of Huawei Nickel Industry			6.89
Huayou Holding Hong Kong . .	Acquisition of 40.00% equity of Veinstone			72,601,580.75
Puhua Company	Sale of long-term assets		39,475.24	
Cinda Xinneng	Acquisition of 15.68% equity of Huayou Quzhou		805,000,000.00	
Subtotal		1,352,774,305.68	845,368,236.24	855,658,848.59

Note: Please refer to section VI (I) 1 (2) of notes to the financial statements for details. The Company and Huayou Holding jointly invested in Tianjin B&M after completion of the transaction.

6. Key management's emoluments

Unit: in ten thousand yuan

<u>Items</u>	<u>Year 2021</u>	<u>Year 2020</u>	<u>Year 2019</u>
Key management's emoluments	5,711.48	3,835.62	2,847.92

(III) Balance due to or from related parties

1. Balance due from related parties

Items	Related parties	December 31, 2021		December 31, 2020		December 31, 2019	
		Book balance	Provision for bad debts	Book balance	Provision for bad debts	Book balance	Provision for bad debts
Accounts receivable . . .	TMR Company			1,145,978.44	57,298.92	3,531,417.46	176,570.87
	Tianjin B&M			120,860,714.62	6,043,035.73	83,931,057.92	4,196,552.90
	Chengdu B&M			46,035,996.53	2,301,799.83	738,625.23	36,931.26
	Leyou Company	47,433.04	2,371.65	21,355.23	1,067.76	147,315.85	7,365.79
	Inner Mongolia Hope Ready	162,000.00	162,000.00	162,000.00	162,000.00	162,000.00	162,000.00
	Sichuan Hope Ready	474,200.00	474,200.00	474,200.00	474,200.00	474,200.00	474,200.00
	Huayou Holding	5,006.68	250.33	14,472,864.25	723,643.21		
	Puhua Company	14,679,082.10	733,954.10	37,746,252.90	1,887,312.65		
	Beilinde Company	1,394.96	69.75				
	Times Li-ion Company	174,645.97	8,732.30				
	Indonesia Huafei	157,224.76	7,861.24				
Subtotal		15,700,987.51	1,389,439.37	220,919,361.97	11,650,358.10	88,984,616.46	5,053,620.82
Receivables financing . . .	Tianjin B&M			56,062,750.00		49,295,200.23	
	Huayou Holding			21,171,718.00		8,468,687.20	
	Chengdu B&M			41,553,081.10			
	Inner Mongolia Shengfan	9,000,000.00					
Subtotal		9,000,000.00		118,787,549.10	57,763,887.43		
Other receivables . . .	Indonesia Huatuo	3,187,850.00	637,570.00	3,262,450.00	163,122.50		
	Times Li-ion Company	72,019.20	3,600.96				
Subtotal		3,259,869.20	641,170.96	3,262,450.00	163,122.50		
Long-term receivables . .	IWIP Company	177,116,946.00		181,261,722.00		102,271,092.00	
	Veinstone	104,357,457.60		106,799,563.20		101,177,754.03	
Subtotal		281,474,403.60		288,061,285.20		203,448,846.03	

Note: It refers to employee social insurance premium of Times Li-ion Company paid on behalf, which is not presented as call loans of related parties.

2. Balance due to related parties

Items	Related parties	December 31, 2021	December 31, 2020	December 31, 2019
Accounts payable	IWIP Company	31,602,903.70		237,604.07
	WBE Company	47,517.57		
	Leyou Company	7,439,051.94		
	Shenzhen	55,269.00		
	Phoenicia			
	Minfu Woneng			498,584.08
	Tongling			254,710.53
	Huachuang			
Subtotal		39,144,742.21		990,898.68
Advances received	Indonesia	641,739,400.77		
	Huafei			
	Huayou Holding			3,356,287.76
Subtotal		641,739,400.77		3,356,287.76
Contract liabilities.	Shenzhen	127,370.00		
	Phoenicia			
	Inner Mongolia	49,200.00		—
	Shengfan			
Subtotal		176,570.00		—
Other payables	HANAQ		5,387,943.50	3,587,566.66
	Company			
	TMR Company		100,632.14	120,640.00
	TMA Company		68,804,798.61	70,478,513.99
	Huaxing			34,127,358.33
	Trading			
	Huayou Holding			72,754,495.20
	Hong Kong			
	Xie Weitong		14,520,996.80	15,204,489.84
	Huayou Holding			80,631,601.55
	Newstride	14,107,267.34	9,671,127.61	
	Technology			
Subtotal		14,107,267.34	98,485,498.66	276,904,665.57

XI. Share-based payment

(I) Overall information

Year 2021

Items	The Company	Tianjin B&M
Total equity instruments granted in current period	Restricted shares of 8,491,900 shares	9,424,800 shares
Total equity instruments vested in current period	—	9,424,800 shares
Total equity instruments expired in current period	—	—
The range of exercise prices of share options outstanding at the end of the period and the remaining contractual life	—	—

Items	The Company	Tianjin B&M
The range of exercise prices of other equity instruments at the end of the period and the remaining contractual life	The exercise price of restricted shares initially granted in 2021 is 37.89 yuan per share, which will be unlocked in 3 years from the completion date of registration till 2024; the exercise price of reserved restricted shares granted for the first time in 2021 is 53.84 yuan per share, which will be unlocked in 3 years from the completion date of registration till 2024; the exercise price of reserved restricted shares granted for the second time in 2021 is 58.07 yuan per share, which will be unlocked in 3 years from the completion date of registration till 2025.	—

1. Restricted shares of the Company

Pursuant to the restricted share incentive plan approved by the 14th meeting and 17th meeting of the fifth session of the Board of Directors and the first extraordinary shareholders' meeting of 2021, it is determined that June 17, 2021 will be the grant date, and a total of 6,984,000 restricted shares will be initially granted to 736 incentive objects at a grant price of 37.89 yuan per share. In the process of making payment after the grant date is determined, 7 incentive objects voluntarily gave up subscription for part of restricted shares to be granted due to personal reasons, and 16 incentive objects voluntarily gave up subscription for all restricted shares to be granted due to personal reasons, totaling 154,100 shares. Therefore, the number of incentive objects under such incentive plan was adjusted from 736 to 720, and the number of restricted shares actually granted was adjusted from 6,984,000 shares to 6,829,900 shares.

Pursuant to the restricted share incentive plan approved by the 21st meeting of the fifth session of the Board of Directors and the first extraordinary shareholders' meeting of 2021, it is determined that September 28, 2021 will be the grant date, and a total of 1,643,300 restricted shares will be granted to 288 incentive objects at a grant price of 53.84 yuan per share. In the process of making payment after the grant date is determined, 6 incentive objects voluntarily gave up subscription for part of restricted shares to be granted due to personal reasons, and 33 incentive objects voluntarily gave up subscription for all restricted shares to be granted due to personal reasons, totaling 149,100 shares. Therefore, the number of incentive objects under such incentive plan was adjusted from 288 to 255, and the number of restricted shares actually granted was adjusted from 1,643,300 shares to 1,494,200 shares.

Pursuant to the restricted share incentive plan approved by the 26th meeting of the fifth session of the Board of Directors and the first extraordinary shareholders' meeting of 2021, it is determined that December 29, 2021 will be the grant date, and a total of 191,700 restricted shares will be granted to 42 incentive objects at a grant price of 58.07 yuan per share. In the process of making payment after the grant date is determined, 2 incentive objects voluntarily gave up subscription for part of restricted shares to be granted due to personal reasons, and 5 incentive objects voluntarily gave up subscription for all restricted shares to be granted due to personal reasons, totaling 23,900 shares. Therefore, the number of incentive objects under such incentive plan was adjusted from 42 to 37, and the number of restricted shares actually granted was adjusted from 191,700 shares to 167,800 shares.

2. Equity incentives of the subsidiary Tianjin B&M

Pursuant to the equity incentive plan approved by the resolution of the 22nd meeting of the fifth session of the Board of Directors of the Company and the first extraordinary shareholders' meeting of Tianjin B&M dated September 30, 2021, Tianjin B&M issued 9,424,800 shares to Jiaxing Bada Enterprise Management Partnership (LP), the employee stock ownership platform, at a price of 10 yuan per share. As the cost of equity indirectly acquired by employees is lower than the fair value, the equity-settled share-based payment is recognized in the period to which the grant date belongs.

(II) Equity-settled share-based payment

Year 2021

1. Restricted shares of the Company

Determination method for grant-date fair value of equity instruments	The closing price of the Company's shares on the grant date
Determination method for the number of equity instruments expected to vest	Based on the number of restricted shares granted, as well as a comprehensive consideration of changes in the number of employees eligible to exercise on each balance sheet date, the Company's performance assessment indicators for each exercising year, and the individual performance appraisal of incentive objects.
Reasons for significant difference between the estimates in current period and preceding period	None
Capital reserve accumulated due to equity-settled share-based payment	113,786,486.15
Total expenses incurred due to equity-settled share-based payment	113,786,486.15
Including: Initial restricted share incentive of 2021	103,349,028.92
The first reserved restricted share incentive of 2021	10,411,203.96
The second reserved restricted share incentive of 2021	26,253.27

2. Equity incentive of Tianjin B&M

Determination method for grant-date fair value of equity instruments	[Note]
Determination method for the number of equity instruments expected to vest	The number to be exercised as they can be exercised upon grant
Reasons for significant difference between the estimates in current period and preceding period	—
Capital reserve accumulated due to equity-settled share-based payment	72,382,464.00
Total expenses incurred due to equity-settled share-based payment	72,382,464.00

Note: The grant-date fair value of equity instruments is determined to be 17.68 yuan per share based on the "Assets Appraisal Report on Zhejiang Huayou Cobalt Co., Ltd.'s Proposed Cash Acquisition of Partial Equity of Tianjin B&M Science and Technology Co., Ltd." (Zhe Lian Ping Bao Zi [2021] No. 189) issued by Zhejiang China United Yaoxin Assets Appraisal Co., Ltd., which takes December 31, 2020 as the evaluation benchmark date. The fair value of such equity is 166,630,464.00 yuan, and the total expenses incurred due to equity-settled share-based payment is 72,382,464.00 yuan after deducting the cost for employees to obtain such equity of 94,248,000.00 yuan.

XII. Commitments and contingencies

(I) Significant commitments

Huayue Company, a holding subsidiary of the Company, as the borrower, signed the “Loan Agreement of USD760,000,000” with The Export-Import Bank of China Zhejiang Branch (Mandated Lead Arranger and Lender), China Citic Bank Co., Ltd. Jiaxing Tongxiang Sub-branch (Co-lead Arranger and Lender), Bank of China (Hong Kong) Limited Jakarta Branch (Domestic Security Agent, Domestic Loan Agent and Domestic Opening Bank), Agricultural Bank of China Limited Tongxiang Sub-branch (Lender), China Minsheng Banking Corp., Ltd. Shanghai Pilot Free Trade Zone Branch (Lender), Ping An Bank Co., Ltd. Hangzhou Branch (Lender) and China Everbright Bank Co., Ltd. Hangzhou Branch (Lender) on September 30, 2021.

The loan agreement specifies the following matters in the “post-loan conditions”: 1. within sixty (60) business days after receipt of the land certificate related to the Huayue Project, the Borrower shall ensure that a letter from a land transaction notary is submitted to the Domestic Security Agent in form and substance satisfactory to the Domestic Security Agent, stating that the land mortgage agreement has been duly signed by the parties and has been submitted to relevant land office for registration; within thirty (30) business days after the signing of the land mortgage agreement, the Borrower shall ensure that the Hak Tanggungan (mortgage) certificate in respect of the land mortgage agreement and the land certificate which has been marked with the mortgage as set forth in the land mortgage agreement are submitted to the Domestic Security Agent; 2. prior to the expiration of one year after the Facility Closing Date, the Borrower shall ensure that a letter from a notary office is submitted to the Domestic Security Agent in form and substance satisfactory to the Domestic Security Agent, stating that the “Machinery Trust Guarantee”, the “Inventory Trust Guarantee” and the “Accounts Receivable Trust Guarantee” have been duly signed by the parties and confirmed to be duly filed with relevant trust registry in Indonesia.

In addition, according to the account pledge agreement between Huayue Company and Bank of China (Hong Kong) Limited Jakarta Branch, Huayue Company pledged part of its accounts opened with such bank as security for the Loan Agreement of USD760,000,000. Given that Huayue Company made external payments in accordance with the payment priority stipulated in the loan agreement, the closing balance of the above pledged accounts of 548,550,590.29 yuan was not considered as assets with title or use right restrictions.

(II) Contingencies

As of December 31, 2021, the progress of the land dispute between GENILAND and the subsidiary CDM Company is as follows:

GENILAND sued CDM Company for the encroachment of the mining area corresponding to CDM Company’s Mining Concession No. 527 on its long-term lease concession (land), and claimed compensation for damages of USD22.65 million. According to the judgment rendered by the court of Democratic Republic of the Congo (DRC), CDM Company shall pay damages and penalties totaling USD9,935,084 to GENILAND. CDM Company has filed an appeal against such judgment, and relevant enforcement is currently suspended. According to the “Legal Opinion on the Interests of Zhejiang Huayou Cobalt Co., Ltd. in the Democratic Republic of the Congo” issued by Edmond Cibamba Diata, a lawyer from Emery Mukendi Wafwana & Associés, in August 2020, there is no legal basis to sustain the GENILAND’s claim due to the following reasons:

According to Article 64 of the 2002 Mining Code, the exploitation license entitles its holder to the exclusive right to carry out, within the perimeter over which it has been granted, and during its term of validity, exploration, development, construction and

exploitation works in connection with the mineral substances for which the license has been granted. CDM Company, as the holder of Mining Concession No. 527, has the right to enter the mining area to carry out mining operations. As GENILAND acquired the long-term lease concession (land) on May 25, 2012, later than the date when CDM Company acquired Mining Concession No. 527, GENILAND cannot consider the mining operations or the construction of installations and infrastructures required for mining exploitation conducted by CDM Company within the exploitation perimeter as illegal activities, nor can it claim any compensation on such basis.

GENILAND filed a motion seeking damages of USD22.65 million. However, according to Article 281 of the 2002 Mining Code, the fair compensation for disputes over land occupation between the holder of the mining rights and the holder of the surface rights shall be the value of the land at the time of its occupation plus fifty per cent (50%). Based on the legal opinion issued by the DRC lawyer in September 2020 as well as the investigation conducted by the Land Bureau where the land in question is located, it is confirmed that the land price in the area where the land in question located ranges from USD500 to USD800 per hectare and the land in question is 26.83 hectares, thus the maximum amount of compensation will not exceed USD32,196.00 according to the above-mentioned compensation standard.

In summary, the Company believes that it is not liable for any compensation concerning the above lawsuit and therefore accrues no provisions.

XIII. Events after the balance sheet date

(I) Significant non-adjusting events

1. Pursuant to the “Approval of Zhejiang Huayou Cobalt Co., Ltd.’s Public Offering of Convertible Corporate Bonds” (Zheng Jian Xu Ke [2022] No. 209) by the China Securities Regulatory Commission, the Company was approved to issue convertible corporate bonds with total par value of 7.6 billion yuan to the public and a maturity of 6 years. As of the date of approval for issuing this financial report, a total of 76,000,000 convertible corporate bonds were actually issued at par (each with par value of 100.00 yuan) and the total amount issued was 7,600,000,000.00 yuan, of which, 56,269,510 shares were issued to the original shareholders of the Company on a preferential basis, accounting for 74.04% of the total issuance, 19,427,020 shares were issued to public investors online, accounting for 25.56% of the total issuance, and 303,470 shares were underwritten by the lead underwriter, accounting for 0.40% of the total issuance.
2. Due to the severe epidemic situation of COVID-19 in Quzhou City, the movement of personnel and vehicles was restricted in accordance with the government’s requirements for epidemic prevention and control, resulting in the limitations or disruptions in the raw material supply as well as labor shortage of subsidiaries in Quzhou City. The Company has taken measures to temporarily reduce the production of several cobalt smelting and recycling production lines from March 17, 2022. As of the date of approval for issuing this financial report, the Company has resumed normal production.

(II) Profit distribution after the balance sheet date

Profit or dividend distributed . . . Pursuant to the profit distribution plan of 2021 approved by the Company's shareholders' meeting of 2021, the Company distributed cash dividends of 3 yuan (tax inclusive) for every 10 shares and issued 3 shares for every 10 shares by converting capital reserve to all shareholders after the appropriation of statutory surplus reserve at 10% of net profit generated by the parent company in 2021.

XIV. Other significant events

(I) Segment information

The Company's main business is manufacturing and sales of cobalt products, copper products, nickel products, ternary precursors, cathode materials, etc., with its operating results managed and evaluated on an integral basis. Therefore, the Company is not required to disclose segment information. Please refer to section V (II) 1 of notes to the financial statements for details on the Company's operating revenues and operating costs by products/geographic information.

(II) Leases

1. The Company as lessee

(1) Please refer to section V (I) 15 of notes to the financial statements for details on right-of-use assets.

(2) Short-term leases and low-value asset leases

Please refer to section III (XXIX) of notes to the financial statements for details on the Company's accounting policies on short-term leases and leases for which the underlying asset is of low value. The amounts of short-term leases and low-value asset leases included into profit or loss in the current period are as follows:

Items	Year 2021
Expense relating to short-term leases	3,088,592.10
Expense relating to leases of low-value assets (excluding short-term leases) . .	22,334,877.30
Total	25,423,469.40

(3) Profit or loss and cash flows related to leases

Items	Year 2021
Interest expenses on lease liabilities	3,597,007.25
Total cash outflows related to leases	55,926,401.84

(4) Please refer to section VIII (II) of notes to the financial statements for details on maturity analysis of lease liabilities and related liquidity risk management.

2. *The Company as lessor*

(1) Lease income

Items	Year 2021
Lease income	16,344,693.16
Including: Income relating to variable lease payments not included in the measurement of the lease liabilities.	

(2) Assets leased out under operating leases

Items	December 31, 2021
Fixed assets	12,716,111.26
Subtotal	12,716,111.26

Please refer to section V (I) 13 of notes to the financial statements for details on fixed assets leased out under operating leases.

(3) Undiscounted lease payments to be received arising from non-cancellable leases based on the lease contract signed with lessee

Remaining years	December 31, 2021
Within 1 year	41,666.67
Total	41,666.67

XV. Notes to items of parent company financial statements

(I) Notes to items of parent company balance sheet

1. *Accounts receivable*

(1) Details

(1) Details on categories

Categories	December 31, 2021				Carrying amount
	Book balance		Provision for bad debts		
	Amount	% to total	Amount	Provision proportion (%)	
Receivables with provision made on an individual basis	6,885,027.34	1.83	6,885,027.34	100.00	
Receivables with provision made on a collective basis	368,669,867.08	98.17	8,062,408.23	2.19	360,607,458.85
Total	375,554,894.42	100.00	14,947,435.57	3.98	360,607,458.85

(Continued)

Categories	December 31, 2020				
	Book balance		Provision for bad debts		Carrying amount
	Amount	% to total	Amount	Provision proportion	
(%)					
Receivables with provision made on an individual basis	6,482,979.34	2.54	6,482,979.34	100.00	
Receivables with provision made on a collective basis	249,168,495.97	97.46	9,480,623.88	3.80	239,687,872.09
Total	255,651,475.31	100.00	15,963,603.22	6.24	239,687,872.09

(Continued)

Categories	December 31, 2019				
	Book balance		Provision for bad debts		Carrying amount
	Amount	% to total	Amount	Provision proportion	
(%)					
Receivables with provision made on an individual basis	6,482,979.34	2.00	6,482,979.34	100.00	
Receivables with provision made on a collective basis	318,274,390.58	98.00	11,697,192.26	3.68	306,577,198.32
Total	324,757,369.92	100.00	18,180,171.60	5.60	306,577,198.32

(2) Accounts receivable with provision made on an individual basis

a. December 31, 2021

Debtors	Book balance	Provision for bad debts	Provision proportion	Reasons for provision made
(%)				
Jiangxi Jialong New Material Co., Ltd.	5,717,261.90	5,717,261.90	100.00	Expected to be irrecoverable due to difficulties in the operation of the debtors.
Others	1,167,765.44	1,167,765.44	100.00	
Subtotal	6,885,027.34	6,885,027.34	100.00	

b. December 31, 2020

Debtors	Book balance	Provision for bad debts	Provision proportion (%)	Reasons for provision made
Jiangxi Jialong New Material Co., Ltd.	5,717,261.90	5,717,261.90	100.00	Expected to be irrecoverable due to difficulties in the operation of the debtors.
Others	765,717.44	765,717.44	100.00	
Subtotal	6,482,979.34	6,482,979.34	100.00	

c. December 31, 2019

Debtors	Book balance	Provision for bad debts	Provision proportion (%)	Reasons for provision made
Jiangxi Jialong New Material Co., Ltd.	5,717,261.90	5,717,261.90	100.00	Expected to be irrecoverable due to difficulties in the operation of the debtors.
Others	765,717.44	765,717.44	100.00	
Subtotal	6,482,979.34	6,482,979.34	100.00	

(3) Accounts receivable with provision for bad debts made on a collective basis

a. Accounts receivable with provision for bad debts made on a collective basis

Items	December 31, 2021			December 31, 2020		
	Book balance	Provision for bad debts	Provision proportion (%)	Book balance	Provision for bad debts	Provision proportion (%)
Portfolio grouped with ages	160,699,463.55	8,062,408.23	5.02	185,811,145.38	9,480,623.88	5.10
Portfolio grouped with balances due from related parties within the consolidation scope	207,970,403.53			63,357,350.59		
Subtotal	368,669,867.08	8,062,408.23	2.19	249,168,495.97	9,480,623.88	3.80

(Continued)

Items	December 31, 2019		
	Book balance	Provision for bad debts	Provision proportion (%)
Portfolio grouped with ages	232,737,701.20	11,697,192.26	5.03
Portfolio grouped with balances due from related parties within the consolidation scope	85,536,689.38		
Subtotal	318,274,390.58	11,697,192.26	3.68

b. Accounts receivable with provision made on a collective basis using age analysis method

Ages	December 31, 2021			December 31, 2020		
	Book balance	Provision for bad debts	Provision proportion (%)	Book balance	Provision for bad debts	Provision proportion (%)
Within 1 year . . .	160,638,496.78	8,031,924.84	5.00	185,348,130.61	9,267,406.53	5.00
1-2 years	60,966.77	12,193.35	20.00			
2-3 years	60,966.77	30,483.39	50.00	402,048.00	201,024.00	50.00
Subtotal	160,699,463.55	8,062,408.23	5.02	185,811,145.38	9,480,623.88	5.10

(Continued)

Ages	December 31, 2019		
	Book balance	Provision for bad debts	Provision proportion (%)
Within 1 year	232,335,653.20	11,616,782.66	5.00
1-2 years	402,048.00	80,409.60	20.00
Subtotal	232,737,701.20	11,697,192.26	5.03

(2) *Age analysis*

Ages	Book balance		
	December 31, 2021	December 31, 2020	December 31, 2019
Within 1 year	345,219,145.39	231,781,932.92	315,319,523.45
1-2 years	9,975,517.24	16,984,515.05	2,952,599.17
2-3 years	13,475,204.45	402,048.00	2,267.96
Over 3 years	6,885,027.34	6,482,979.34	6,482,979.34
Total	375,554,894.42	255,651,475.31	324,757,369.92

(3) *Changes in provision for bad debts*

(1) Year 2021

Items	Opening balance	Increase			Decrease			Closing balance
		Accrual	Recovery	Others	Reversal	Write-off	Others	
Receivables with provision made on an individual basis	6,482,979.34	402,048.00						6,885,027.34
Receivables with provision made on a collective basis	9,480,623.88	-1,417,961.16				254.49		8,062,408.23
Total	15,963,603.22	-1,015,913.16				254.49		14,947,435.57

(2) Year 2020

Items	Opening balance	Increase			Decrease			Closing balance
		Accrual	Recovery	Others	Reversal	Write-off	Others	
Receivables with provision made on an individual basis	6,482,979.34							6,482,979.34
Receivables with provision made on a collective basis	11,697,192.26	-2,216,568.38						9,480,623.88
Total	18,180,171.60	-2,216,568.38						15,963,603.22

(3) Year 2019

Items	Opening balance	Increase			Decrease			Closing balance
		Accrual	Recovery	Others	Reversal	Write-off	Others	
Receivables with provision made on an individual basis	6,482,979.34							6,482,979.34
Receivables with provision made on a collective basis	7,597,239.72	4,099,952.54						11,697,192.26
Total	14,080,219.06	4,099,952.54						18,180,171.60

(4) Details of the top 5 debtors with largest balances

Items	December 31, 2021	December 31, 2020	December 31, 2019
Book balance	221,682,278.36	179,442,246.13	245,622,447.28
Proportion to the total balance of accounts receivable (%)	59.03	70.19	75.63
Provision for bad debts	5,087,389.37	6,459,329.91	12,281,122.36

2. Other receivables

(1) Details

(1) Details on categories

Categories	December 31, 2021				
	Book balance		Provision for bad debts		Carrying amount
	Amount	% to total	Amount	Provision proportion (%)	
Receivables with provision made on an individual basis					
Receivables with provision made on a collective basis	3,116,525,269.32	100.00	1,662,449.88	0.05	3,114,862,819.44
Total	3,116,525,269.32	100.00	1,662,449.88	0.05	3,114,862,819.44

(Continued)

Categories	December 31, 2020				
	Book balance		Provision for bad debts		Carrying amount
	Amount	% to total	Amount	Provision proportion	
				(%)	
Receivables with provision made on an individual basis					
Receivables with provision made on a collective basis	286,196,007.46	100.00	2,435,576.81	0.85	283,760,430.65
Total	286,196,007.46	100.00	2,435,576.81	0.85	283,760,430.65

(Continued)

Categories	December 31, 2019				
	Book balance		Provision for bad debts		Carrying amount
	Amount	% to total	Amount	Provision proportion	
				(%)	
Receivables with provision made on an individual basis					
Receivables with provision made on a collective basis	110,553,586.32	100.00	471,405.94	0.43	110,082,180.38
Total	110,553,586.32	100.00	471,405.94	0.43	110,082,180.38

(2) Other receivables with provision made on a collective basis

Portfolios	December 31, 2021			December 31, 2020		
	Book balance	Provision for bad debts	Provision proportion	Book balance	Provision for bad debts	Provision proportion
			(%)			(%)
Portfolio grouped with balances due from related parties within the consolidation scope	3,102,135,963.24			251,467,123.89		
Portfolio grouped with ages	14,389,306.08	1,662,449.88	11.55	34,728,883.57	2,435,576.81	7.01
Including: Within 1 year	9,741,791.04	487,089.55	5.00	32,832,604.78	1,641,630.24	5.00
1-2 years	4,000,000.00	800,000.00	20.00	569,309.43	113,861.89	20.00
2-3 years	544,309.43	272,154.72	50.00	1,293,769.36	646,884.68	50.00
Over 3 years	103,205.61	103,205.61	100.00	33,200.00	33,200.00	100.00
Subtotal	3,116,525,269.32	1,662,449.88	0.05	286,196,007.46	2,435,576.81	0.85

(Continued)

Portfolios	December 31, 2019		
	Book balance	Provision for bad debts	Provision proportion (%)
Portfolio grouped with balances due from related parties within the consolidation scope	106,217,575.57		
Portfolio grouped with ages	4,336,010.75	471,405.94	10.87
Including: Within 1 year	2,779,041.39	138,952.07	5.00
1-2 years	1,523,769.36	304,753.87	20.00
2-3 years	11,000.00	5,500.00	50.00
Over 3 years	22,200.00	22,200.00	100.00
Subtotal	110,553,586.32	471,405.94	0.43

(2) Age analysis

Ages	Book balance		
	December 31, 2021	December 31, 2020	December 31, 2019
Within 1 year	2,901,445,909.94	207,109,406.76	100,796,128.03
1-2 years	145,623,160.18	75,904,818.31	9,724,258.29
2-3 years	67,539,956.56	3,148,582.39	11,000.00
Over 3 years	1,916,242.64	33,200.00	22,200.00
Total	3,116,525,269.32	286,196,007.46	110,553,586.32

(3) Changes in provision for bad debts

(1) Year 2021

Items	Stage 1	Stage 2	Stage 3	Total
	12-month expected credit losses	Lifetime expected credit losses (credit not impaired)	Lifetime expected credit losses (credit impaired)	
Opening balance	1,641,630.24	113,861.89	680,084.68	2,435,576.81
Opening balance in the current period	—	—	—	
— Transferred to stage 2	-200,000.00	200,000.00		
— Transferred to stage 3	-108,861.89	108,861.89		
— Reversed to stage 2				
— Reversed to stage 1				
Provision made in the current period	-722,846.72	595,000.00	-413,586.24	-541,432.96
Provision recovered in the current period				
Provision reversed in the current period				
Provision written off in the current period	231,693.97	231,693.97		
Other changes				
Closing balance	487,089.55	800,000.00	375,360.33	1,662,449.88

(2) Year 2020

Items	Stage 1	Stage 2	Stage 3	Total
	12-month expected credit losses	Lifetime expected credit losses (credit not impaired)	Lifetime expected credit losses (credit impaired)	
Opening balance	138,952.07	304,753.87	27,700.00	471,405.94
Opening balance in the current period	—	—	—	
— Transferred to stage 2	-28,465.47	28,465.47		
— Transferred to stage 3		-258,753.87	258,753.87	
— Reversed to stage 2				
— Reversed to stage 1				
Provision made in the current period	1,531,143.64	39,396.42	393,630.81	1,964,170.87
Provision recovered in the current period				
Provision reversed in the current period				
Provision written off in the current period				
Other changes				
Closing balance	1,641,630.24	113,861.89	680,084.68	2,435,576.81

(3) Year 2019

Items	Stage 1	Stage 2	Stage 3	Total
	12-month expected credit losses	Lifetime expected credit losses (credit not impaired)	Lifetime expected credit losses (credit impaired)	
Opening balance [Note]	339,593.55	201,087.96	228,205.61	768,887.12
Opening balance in the current period	—	—	—	
— Transferred to stage 2	-76,188.47	76,188.47		
— Transferred to stage 3		-2,200.00	2,200.00	
— Reversed to stage 2				
— Reversed to stage 1				
Provision made in the current period	-124,453.01	29,677.44	-202,705.61	-297,481.18
Provision recovered in the current period				
Provision reversed in the current period				
Provision written off in the current period				
Other changes				
Closing balance	138,952.07	304,753.87	27,700.00	471,405.94

Note: Please refer to section III (XXXIII) 3 of notes to the financial statements for details on the difference between the balance as at January 1, 2019 and balance as at December 31, 2018.

(4) Other receivables categorized by nature

Nature of receivables	Book balance		
	December 31, 2021	December 31, 2020	December 31, 2019
Security deposits	10,916,715.99	32,840,372.74	1,277,969.36
Temporary borrowings	3,104,501,272.67	251,832,433.32	106,635,152.08
Petty cash	1,099,000.00	1,523,201.40	906,844.30
Others	8,280.66		1,733,620.58
Total	3,116,525,269.32	286,196,007.46	110,553,586.32

(5) Details of the top 5 debtors with largest balances

(1) December 31, 2021

Debtors	Nature of receivables	Book balance	Ages	Proportion to the total balance of other receivables	Provision for bad debts
				(%)	
Huayou Quzhou	Temporary borrowings	1,278,161,298.13	Within 1 year	41.01	
New Energy Quzhou	Temporary borrowings	410,151,383.82	Within 1 year	13.16	
Tongxiang Huashan	Temporary borrowings	403,824,799.39	Within 1 year	12.96	
Guangxi B&M	Temporary borrowings	239,889,124.65	Within 1 year	7.70	
Wenzhou Huashan	Temporary borrowings	156,908,331.33	Within 1 year	5.03	
Subtotal		2,488,934,937.32		79.86	

(2) December 31, 2020

Debtors	Nature of receivables	Book balance	Ages	Proportion to the total balance of other receivables	Provision for bad debts
				(%)	
Huayou New Energy	Temporary borrowings	132,995,733.00	Within 1 year	46.47	
CDM Company	Temporary borrowings	71,026,778.53	Within 1 year: 7,319,680.26 yuan, 1-2 years: 63,707,098.27 yuan	24.82	
Huayou Recycling	Temporary borrowings	28,577,076.60	Within 1 year: 28,573,190.40 yuan, 1-2 years: 3,886.20 yuan	9.99	
Fuzhou Superchain Supply Chain Management Co., Ltd.	Security deposits	27,563,403.38	Within 1 year	9.63	1,378,170.17
MIKAS Company	Temporary borrowings	12,404,522.20	Within 1 year: 7,391,207.99 yuan, 1-2 years: 5,013,314.21 yuan	4.33	
Subtotal		272,567,513.71		95.24	1,378,170.17

(3) December 31, 2019

<u>Debtors</u>	<u>Nature of receivables</u>	<u>Book balance</u>	<u>Ages</u>	<u>Proportion to the total balance of other receivables</u>	<u>Provision for bad debts</u>
				(%)	
CDM Company	Temporary borrowings	68,449,068.84	Within 1 year	61.91	
Huayue Company	Temporary borrowings	22,270,000.00	Within 1 year: 20,400,000.00 yuan, 1-2 years: 1,870,000.00 yuan	20.14	
MIKAS Company	Temporary borrowings	10,455,048.15	Within 1 year	9.46	
Huayou Mining Hong Kong	Temporary borrowings	1,953,336.00	1-2 years	1.77	
Resource Recycling	Temporary borrowings	1,744,545.32	1-2 years	1.58	
Subtotal		104,871,998.31		94.86	

3. *Long-term equity investments*(1) *Details*

<u>Items</u>	<u>December 31, 2021</u>			<u>December 31, 2020</u>		
	<u>Book balance</u>	<u>Provision for impairment</u>	<u>Carrying amount</u>	<u>Book balance</u>	<u>Provision for impairment</u>	<u>Carrying amount</u>
Investments in subsidiaries	13,038,601,252.16	518,166.20	13,038,083,085.96	8,815,745,535.45	518,166.20	8,815,227,369.25
Investments in associates and joint ventures	598,430,946.19		598,430,946.19	2,844,222.10		2,844,222.10
Total	13,637,032,198.35	518,166.20	13,636,514,032.15	8,818,589,757.55	518,166.20	8,818,071,591.35

(Continued)

<u>Items</u>	<u>December 31, 2019</u>		
	<u>Book balance</u>	<u>Provision for impairment</u>	<u>Carrying amount</u>
Investments in subsidiaries	6,872,116,163.58	518,166.20	6,871,597,997.38
Investments in associates and joint ventures	2,884,932.20		2,884,932.20
Total	6,875,001,095.78	518,166.20	6,874,482,929.58

(2) Investments in subsidiaries

(1) Year 2021

Investees	Opening balance	Increase	Decrease	Closing balance	Provision for impairment made in the current period	Closing balance of provision for impairment
Like Cobalt	33,171,333.03			33,171,333.03		
Huayou Import & Export	100,587,951.00			100,587,951.00		
Huayou Hong Kong	458,040,203.00			458,040,203.00		
CDM Company	480,447,838.92			480,447,838.92		
OIM Company	3,958,802.50			3,958,802.50		
MIKAS Company	263,815,386.00			263,815,386.00		
Huayou Quzhou	2,488,000,000.00			2,488,000,000.00		
SHAD Company						518,166.20
Huayou Mining						
Hong Kong	2,311,505,854.80	1,560,074,116.71		3,871,579,971.51		
New Energy Quzhou	870,000,000.00	900,000,000.00		1,770,000,000.00		
Huayou Recycling	1,100,000,000.00	150,000,000.00		1,250,000,000.00		
Huayou New Energy	700,000,000.00			700,000,000.00		
Youqing Trading	2,850,000.00			2,850,000.00		
Tongxiang Hua'ang	1,140,000.00			1,140,000.00		
Beijing Youhong	1,710,000.00			1,710,000.00		
Guangxi Huayou						
Engineering		50,000,000.00		50,000,000.00		
Guangxi B&M		100,000,000.00		100,000,000.00		
Tongxiang Hualing		18,040,800.00		18,040,800.00		
Tongxiang Huawang		18,040,800.00		18,040,800.00		
Wenzhou Huashan		34,000,000.00	8,500,000.00	25,500,000.00		
Tianjin B&M		1,351,200,000.00		1,351,200,000.00		
Resource Recycling		50,000,000.00		50,000,000.00		
Subtotal	8,815,227,369.25	4,231,355,716.71	8,500,000.00	13,038,083,085.96		518,166.20

(2) Year 2020

Investees	Opening balance	Increase	Decrease	Closing balance	Provision for impairment made in the current period	Closing balance of provision for impairment
Like Cobalt	33,171,333.03			33,171,333.03		
Huayou Import & Export	100,587,951.00			100,587,951.00		
Huayou Hong Kong	458,040,203.00			458,040,203.00		
CDM Company	480,447,838.92			480,447,838.92		
OIM Company	3,958,802.50			3,958,802.50		
MIKAS Company	263,815,386.00			263,815,386.00		
Huayou Quzhou	1,683,000,000.00	805,000,000.00		2,488,000,000.00		
SHAD Company						518,166.20
Huayou Mining						
Hong Kong	1,652,726,482.93	658,779,371.87		2,311,505,854.80		
New Energy Quzhou	870,000,000.00			870,000,000.00		
Huayou Recycling	600,000,000.00	500,000,000.00		1,100,000,000.00		
Huayou Power	23,000,000.00		23,000,000.00			
Huayou New Energy	700,000,000.00			700,000,000.00		
Youqing Trading	2,850,000.00			2,850,000.00		
Tongxiang Hua'ang		1,140,000.00		1,140,000.00		
Beijing Youhong		1,710,000.00		1,710,000.00		
Subtotal	6,871,597,997.38	1,966,629,371.87	23,000,000.00	8,815,227,369.25		518,166.20

(3) Year 2019

Investees	Opening balance	Increase	Decrease	Closing balance	Provision for impairment made in the current period	Closing balance of provision for impairment
Like Cobalt	33,171,333.03			33,171,333.03		
Huayou Import & Export	100,587,951.00			100,587,951.00		
Huayou Hong Kong	458,040,203.00			458,040,203.00		
CDM Company	480,447,838.92			480,447,838.92		
OIM Company	3,958,802.50			3,958,802.50		
MIKAS Company	263,815,386.00			263,815,386.00		
Huayou Quzhou	1,683,000,000.00			1,683,000,000.00		
SHAD Company	518,166.20			518,166.20	518,166.20	518,166.20
Huayou Mining						
Hong Kong	1,106,953,457.40	545,773,025.53		1,652,726,482.93		
New Energy Quzhou	370,000,000.00	500,000,000.00		870,000,000.00		
Huayou Recycling	200,000,000.00	400,000,000.00		600,000,000.00		
Huayou Power	5,000,000.00	18,000,000.00		23,000,000.00		
Huayou New Energy	300,000,000.00	400,000,000.00		700,000,000.00		
Youqing Trading	2,850,000.00			2,850,000.00		
Subtotal	5,005,493,138.05	1,866,623,025.53		6,872,116,163.58	518,166.20	518,166.20

(3) Investments in associates and joint ventures

(1) Year 2021

Investees	Opening balance	Increase/Decrease		Investment income recognized under equity method	Adjustment in other comprehensive income
		Investments increased	Investments decreased		
Associates					
Hanmo New Energy	2,844,222.10			-2,844,222.10	
Quzhou Xinyou		7,800,000.00	7,806,343.53	6,343.53	
Quzhou Anyou		599,000,000.00		-569,053.81	
Total	2,844,222.10	606,800,000.00	7,806,343.53	-3,406,932.38	

(Continued)

Investees	Changes in other equity	Increase/Decrease			Closing balance	Closing balance of provision for impairment
		Cash dividend/ Profit declared for distribution	Provision for impairment	Others		
Associates						
Hanmo New Energy						
Quzhou Xinyou						
Quzhou Anyou				598,430,946.19		
Total				598,430,946.19		

(2) Year 2020

Investees	Opening balance	Increase/Decrease			
		Investments increased	Investments decreased	Investment income recognized under equity method	Adjustment in other comprehensive income
Associates					
Hanmo New Energy	2,884,932.20			-40,710.10	
Total	2,884,932.20			-40,710.10	

(Continued)

Investees	Increase/Decrease					Closing balance of provision for impairment
	Changes in other equity	Cash dividend/ Profit declared for distribution	Provision for impairment	Others	Closing balance	
Associates						
Hanmo New Energy					2,844,222.10	
Total					2,844,222.10	

(3) Year 2019

Investees	Opening balance	Increase/Decrease			
		Investments increased	Investments decreased	Investment income recognized under equity method	Adjustment in other comprehensive income
Associates					
Hanmo New Energy	4,965,347.26			-2,080,415.06	
Total	4,965,347.26			-2,080,415.06	

(Continued)

Investees	Increase/Decrease					Closing balance of provision for impairment
	Changes in other equity	Cash dividend/ Profit declared for distribution	Provision for impairment	Others	Closing balance	
Associates						
Hanmo New Energy					2,884,932.20	
Total					2,884,932.20	

(II) Notes to items of the parent company income statement

1. Operating revenue/Operating cost

(1) Details

Items	Year 2021		Year 2020		Year 2019	
	Revenue	Cost	Revenue	Cost	Revenue	Cost
Main operations	3,214,350,884.78	1,984,069,994.65	2,051,317,316.17	1,221,195,820.67	2,541,060,734.21	2,079,360,923.12
Other operations	122,064,911.41	40,059,139.61	105,482,335.65	59,268,159.27	113,579,295.71	50,666,732.39
Total	3,336,415,796.19	2,024,129,134.26	2,156,799,651.82	1,280,463,979.94	2,654,640,029.92	2,130,027,655.51
Including: Revenue from contracts with customers [Note].	3,329,989,151.85	2,018,947,056.34	2,150,283,269.24	1,274,945,481.26		

Note: The difference with the total operating revenue refers to the lease income in revenue from other operations.

(2) Breakdown of revenue

(1) Breakdown of revenue from contracts with customers by goods or services

Items	Year 2021		Year 2020		Year 2019	
	Revenue	Cost	Revenue	Cost	Revenue	Cost
Cobalt Products	3,086,043,659.84	1,855,641,726.75	2,039,904,837.16	1,214,188,878.08	2,421,706,672.79	1,968,917,388.45
Others	243,945,492.01	163,305,329.59	110,378,432.08	60,756,603.18	232,933,357.13	161,110,267.06
Subtotal	3,329,989,151.85	2,018,947,056.34	2,150,283,269.24	1,274,945,481.26	2,654,640,029.92	2,130,027,655.51

(2) Breakdown of revenue from contracts with customers by operating regions

Items	Year 2021		Year 2020		Year 2019	
	Revenue	Cost	Revenue	Cost	Revenue	Cost
Domestic	2,530,229,591.22	1,525,522,545.78	1,681,470,492.31	970,634,933.94	1,937,101,416.38	1,585,059,095.38
Overseas	799,759,560.63	493,424,510.56	468,812,776.93	304,310,547.32	717,538,613.54	544,968,560.13
Subtotal	3,329,989,151.85	2,018,947,056.34	2,150,283,269.24	1,274,945,481.26	2,654,640,029.92	2,130,027,655.51

(3) Breakdown of revenue from contracts with customers by time of transferring goods or rendering services

Items	Year 2021	Year 2020
Recognized at a point in time	3,329,989,151.85	2,150,283,269.24
Subtotal	3,329,989,151.85	2,150,283,269.24

(3) Contract liabilities carried over to revenue in the reporting period

Items	Year 2021	Year 2020
Operating revenue	200,891,243.91	10,936,545.98
Subtotal	200,891,243.91	10,936,545.98

2. R&D expenses

Items	Year 2021	Year 2020	Year 2019
Employee benefits	52,363,779.16	39,464,102.76	37,591,985.00
Materials consumption	77,470,509.73	58,906,905.23	76,326,454.25
Depreciation and amortization.	3,694,320.91	4,242,687.35	4,311,349.82
Others	2,503,215.30	5,950,380.93	16,660,921.20
Total	136,031,825.10	108,564,076.27	134,890,710.27

3. Investment income

Items	Year 2021	Year 2020	Year 2019
Investment income from long-term equity investments under equity method	-3,406,932.38	-40,710.10	-2,080,415.06
Investment income from long-term equity investments under cost method [Note]	275,447,674.72	96,628,301.60	
Investment income from disposal of long-term equity investments		-19,298,698.88	
Losses on discounting of receivables financing.	-10,627,224.26	-8,606,417.20	-24,859,819.74
Losses on derecognition of accounts receivable.	-7,209,802.76	-7,503,599.99	-609,097.22
Investment income from disposal of held-for-trading financial assets	-5,135,843.92	-14,986,804.39	-3,677,301.76
Interest income from debt investments			26,165,237.89
Interest income from other debt investments	13,969,715.30		
Total	263,037,586.70	46,192,071.04	-5,061,395.89

Note: It refers to dividend income from the subsidiary Huayou Quzhou.

XVI. Other supplementary information

(I) Non-recurring profit or loss

Schedule of non-recurring profit or loss

Items	Amount		
	Year 2021	Year 2020	Year 2019
Gains on disposal of non-current assets, including write-off of provision for impairment	34,671,471.89	-6,751,223.23	73,583.71
Tax refund, credit or exemption approved beyond the power of authorities, without formal documents, or with occasionality			
Government grants included in profit or loss (excluding those closely related to operating activities of the Company, satisfying government policies and regulations, and continuously enjoyed with certain quantity/quota based on certain standards)	52,675,901.86	63,289,163.19	85,996,830.52
Fund possession charge from non-financial entities and included in profit or loss	9,742,561.82		7,363,237.34

Items	Amount		
	Year 2021	Year 2020	Year 2019
Gains on acquisition of subsidiaries, joint ventures and associates due to the surplus of acquisition-date fair value of net identifiable assets in acquiree over the acquisition cost			
Gains on non-cash assets exchange			
Gains on assets consigned to the third party for investment or management . . .			
Assets impairment loss incurred due to force majeure such as natural disasters . .			
Gains on debt restructuring			
Entity restructuring expenses, such as staffing and integrating expenses			
Gains on transactions with unfair value . . .			
Net profit on subsidiaries acquired through business combination under common control from the beginning of the period to the combination date			
Contingent gains on non-operating activities			
Gains or losses on changes in fair value of held-for-trading financial assets, derivative financial assets, held-for-trading financial liabilities and derivative financial liabilities, and investment income from disposal of held-for-trading financial assets, derivative financial assets, held-for-trading financial liabilities, derivative financial liabilities and other debt investments, excluding those arising from hedging business related to operating activities	-36,817,583.77	-8,271,064.14	-28,897,804.94
The reversed provision for impairment of receivables and contract assets based on impairment testing on an individual basis			7,344,000.00
Gains on designated loans			
Gains on changes in fair value of investment properties with subsequent measurement at the fair value mode			
Gains on reconciliation of current period profit or loss following legal and regulative requirements on taxation, accounting, etc.			
Management charges for consigned operations			
Other non-operating revenue or expenditures	-10,167,448.45	-9,815,771.47	3,299,892.01
Other profit or loss satisfying the definition of non-recurring profit or loss			
Subtotal	50,104,903.35	38,451,104.35	75,179,738.64
Less: Enterprise income tax affected	-3,545,066.16	9,458,101.50	15,226,945.81
Non-controlling interest affected (after tax)	9,639,155.47	-11,871,339.23	8,578,057.61
Net non-recurring profit or loss attributable to shareholders of the parent company	44,010,814.04	40,864,342.08	51,374,735.22

(II) ROE and EPS

1. Details

(1) ROE

Profit of the reporting period	Weighted average ROE (%)		
	Year 2021	Year 2020	Year 2019
Net profit attributable to shareholders of ordinary shares	23.49	12.73	1.56
Net profit attributable to shareholders of ordinary shares after deducting non-recurring profit or loss	23.22	12.29	0.89

(2) EPS

Profit of the reporting period	EPS (yuan/share)					
	Basic EPS			Diluted EPS		
	Year 2021	Year 2021	Year 2020	Year 2020	Year 2019	Year 2019
Net profit attributable to shareholders of ordinary shares	3.25	1.03	0.11	3.24	1.03	0.11
Net profit attributable to shareholders of ordinary shares after deducting non-recurring profit or loss.	3.21	1.00	0.06	3.21	1.00	0.06

2. Calculation process of weighted average ROE

Items	Symbols	Year 2021	Year 2020	Year 2019
Net profit attributable to shareholders of ordinary shares	A	3,897,503,525.74	1,164,842,854.12	119,534,808.82
Non-recurring profit or loss	B	44,010,814.04	40,864,342.08	51,374,735.22
Net profit attributable to shareholders of ordinary shares after deducting non-recurring profit or loss	C=A-B	3,853,492,711.70	1,123,978,512.04	68,160,073.60
Opening balance of net assets attributable to shareholders of ordinary shares	D	9,922,119,109.93	7,747,750,020.53	7,600,754,136.52
Net assets attributable to shareholders of ordinary shares increased due to offering of new shares or conversion of debts into shares	E1		805,000,000.00	
Offering of shares to acquire non-controlling interest of Huayou Quzhou	F1			10
Number of months counting from the next month when the net assets were increased to the end of the reporting period	E2	5,955,003,654.14	781,153,434.49	
Non-public offering of shares	F2		10	8
Number of months counting from the next month when the net assets were increased to the end of the reporting period	G	242,580,876.60		82,974,728.50
Net assets attributable to shareholders of ordinary shares decreased due to share repurchase or cash dividends appropriation				

Items	Symbols	Year 2021	Year 2020	Year 2019
Number of months counting from the next month when the net assets were decreased to the end of the reporting period	H	8		8
Others				
Translation reserve	I1	-228,936,532.63	-241,523,980.13	121,734,864.57
Number of months counting from the next month when the net assets were increased or decreased to the end of the reporting period	J1	6	6	6
Adjustment of other comprehensive income due to changes in fair value of other equity instrument investments	I2	-4,103,575.00	-16,276,517.52	-28,688,489.24
Number of months counting from the next month when the net assets were increased or decreased to the end of the reporting period	J2	6	6	6
Proportionate share in other comprehensive income of the investees to be reclassified subsequently to profit or loss under equity method	I3	-40,330,076.10	-63,418,820.75	5,075,457.94
Number of months counting from the next month when the net assets were increased or decreased to the end of the reporting period	J3	6	6	6
Equity-settled share-based payment expenses recognized for restricted share incentives (initial grant)	I4	103,349,028.92		
Number of months counting from the next month when the net assets were increased or decreased to the end of the reporting period	J4	6		
Equity-settled share-based payment expenses recognized for restricted share incentives (reserved shares granted for the first time).	I5	10,411,203.96		
Number of months counting from the next month when the net assets were increased or decreased to the end of the reporting period	J5	3		

Items	Symbols	Year 2021	Year 2020	Year 2019
Equity-settled share-based payment expenses recognized for restricted share incentives (reserved shares granted for the second time)	I6	26,253.27		
Number of months counting from the next month when the net assets were increased or decreased to the end of the reporting period	J6			
Income tax effect on the excess of the pre-tax deductible amount of employee restricted shares over recognized related expenses (initial grant) . . .	I7	6,593,305.99		
Number of months counting from the next month when the net assets were increased or decreased to the end of the reporting period	J7		6	
Income tax effect on the excess of the pre-tax deductible amount of employee restricted shares over recognized related expenses (reserved shares granted for the first time)	I8	153,707.53		
Number of months counting from the next month when the net assets were increased or decreased to the end of the reporting period	J8		3	
Income tax effect on the excess of the pre-tax deductible amount of employee restricted shares over recognized related expenses (reserved shares granted for the second time)	I9	38.82		
Number of months counting from the next month when the net assets were increased or decreased to the end of the reporting period	J9			

Items	Symbols	Year 2021	Year 2020	Year 2019
Adjustment of capital reserve (capital premium) due to changes in holding proportion over the subsidiary Tianjin B&M and share-based payment	I10	12,206,546.48		
Number of months counting from the next month when the net assets were increased or decreased to the end of the reporting period	J10		1	
Adjustment of capital reserve (capital premium) due to transfer of equity of Jiangsu Huayou	I11	-621,489.48		
Number of months counting from the next month when the net assets were increased or decreased to the end of the reporting period	J11		10	
Adjustment of capital reserve (capital premium) due to acquisition of non-controlling interest of SESA Company	I12	-8,088,340.85		
Number of months counting from the next month when the net assets were increased or decreased to the end of the reporting period	J12		2	
Adjustment of capital reserve (capital premium) due to changes in holding proportion over the subsidiary Beijing Huashan	I13	-17,566.99		
Number of months counting from the next month when the net assets were increased or decreased to the end of the reporting period	J13		4	
Adjustment of capital reserve (capital premium) due to changes in holding proportion over the subsidiary Tongxiang Huashan	I14	313,655.60		

Items	Symbols	Year 2021	Year 2020	Year 2019
Number of months counting from the next month when the net assets were increased or decreased to the end of the reporting period	J14	4		
Adjustment of capital reserve (capital premium) due to changes in holding proportion over the subsidiary Wenzhou Huashan	I15	2,300.60		
Number of months counting from the next month when the net assets were increased or decreased to the end of the reporting period	J15	4		
Adjustment of capital reserve (capital premium) due to acquisition of non-controlling interest of Huayou Quzhou	I16		-253,198,896.29	
Number of months counting from the next month when the net assets were increased or decreased to the end of the reporting period	J16			10
Adjustment of capital reserve (capital premium) due to changes in holding proportion over the subsidiary Huayue Company	I17		63,268.42	
Number of months counting from the next month when the net assets were increased or decreased to the end of the reporting period	J17			8
Adjustment of capital reserve (capital premium) due to acquisition of non-controlling interest of Huayou America	I18		322,809.36	
Number of months counting from the next month when the net assets were increased or decreased to the end of the reporting period	J18			2

Items	Symbols	Year 2021	Year 2020	Year 2019
Adjustment of capital reserve (capital premium) due to capital contribution at premium from non-controlling shareholder of the subsidiary Jiangsu Huayou	I19		2,000,000.00	
Number of months counting from the next month when the net assets were increased or decreased to the end of the reporting period	J19		8	
Adjustment of capital reserve (capital premium) due to acquisition of non-controlling interest of Jiangsu Huayou	I20		290,736.62	
Number of months counting from the next month when the net assets were increased or decreased to the end of the reporting period	J20			
Adjustment of capital reserve (capital premium) due to changes in holding proportion over the subsidiary Huayou New Energy.	I21			8,513,186.76
Number of months counting from the next month when the net assets were increased or decreased to the end of the reporting period	J21			7
Special reserve	I22	587,051.22	-4,885,798.92	3,800,783.66
Number of months counting from the next month when the net assets were increased or decreased to the end of the reporting period	J22	6	6	6
Number of months in the reporting period	K	12	12	12
Weighted average net assets	$L = \frac{D+A}{2} + \frac{E \times F}{K} - \frac{G \times H}{K} \pm \frac{I \times J}{K}$	16,592,124,873.16	9,149,151,412.18	7,661,132,389.34
Weighted average ROE	$M = \frac{A}{L}$	23.49	12.73	1.56
Weighted average ROE after deducting non-recurring profit or loss	$N = \frac{C}{L}$	23.22	12.29	0.89

3. Calculation process of basic EPS and diluted EPS

(1) Calculation process of basic EPS

Items	Symbols	Year 2021	Year 2020	Year 2019
Net profit attributable to shareholders of ordinary shares	A	3,897,503,525.74	1,164,842,854.12	119,534,808.82
Non-recurring profit or loss	B	44,010,814.04	40,864,342.08	51,374,735.22
Net profit attributable to shareholders of ordinary shares after deducting non-recurring profit or loss	C=A-B	3,853,492,711.70	1,123,978,512.04	68,160,073.60
Opening balance of total shares	D	1,141,261,526.00	1,078,671,471.00	829,747,285.00
Number of shares increased due to conversion of reserve to share capital or share dividend appropriation	E			248,924,186.00
Number of shares increased due to offering of new shares or conversion of debts into shares	F1	71,642,857.00	34,110,169.00	
Number of months counting from the next month when the share was increased to the end of the reporting period	G1	10	10	
Number of shares increased due to offering of new shares or conversion of debts into shares	F2		28,479,886.00	
Number of months counting from the next month when the share was increased to the end of the reporting period	G2		8	
Number of shares decreased due to share repurchase	H			
Number of months counting from the next month when the share was decreased to the end of the reporting period	I			
Number of shares decreased in the reporting period	J			
Number of months in the reporting period	K	12	12	12
Weighted average of outstanding ordinary shares	$L = \frac{D+E+F \times G}{K-H \times I / K-J}$	1,200,963,906.83	1,126,083,202.50	1,078,671,471.00
Basic EPS	$M = A/L$	3.25	1.03	0.11
Basic EPS after deducting non-recurring profit or loss	$N = C/L$	3.21	1.00	0.06

(2) Calculation process of diluted EPS

Items	Symbols	Year 2021	Year 2020	Year 2019
Net profit attributable to shareholders of ordinary shares	A	3,897,503,525.74	1,164,842,854.12	119,534,808.82
Net profit affected by dilutive potential ordinary shares	B			
Diluted net profit attributable to shareholders of ordinary shares . . .	C=A-B	3,897,503,525.74	1,164,842,854.12	119,534,808.82
Non-recurring profit or loss	D	44,010,814.04	40,864,342.08	51,374,735.22
Diluted net profit attributable to shareholders of ordinary shares after deducting non-recurring profit or loss	E=C-D	3,853,492,711.70	1,123,978,512.04	68,160,073.60
Weighted average of outstanding ordinary shares	F	1,200,963,906.83	1,126,083,202.50	1,078,671,471.00
Weighted average of ordinary shares increased due to warrant, share options, convertible bonds, etc. . . .	G	809,260.34		
Weighted average of diluted outstanding ordinary shares	H=F+G	1,201,773,167.17	1,126,083,202.50	1,078,671,471.00
Diluted EPS	M=C/H	3.24	1.03	0.11
Diluted EPS after deducting non-recurring profit or loss	N=E/H	3.21	1.00	0.06

Zhejiang Huayou Cobalt Co., Ltd.
October 28, 2022